

January 29, 2021

Ms. Tina Andersen  
T&B Planning, Inc.  
3200 El Camino Real, Suite 100  
Irvine, CA 92602

**SUBJECT:      WEST GROVE CENTER AIR QUALITY, GREENHOUSE GAS, AND ENERGY TECHNICAL ASSESSMENT**

Dear Ms. Tina Andersen:

Urban Crossroads, Inc. is pleased to provide the following Air Quality, Greenhouse Gas, and Energy Technical Assessment Analysis for the West Grove Center Project ("Project").

### **SITE LOCATION**

The proposed West Grove Center Project is located at 12141 Valley View Street in the City of Garden Grove as shown on Exhibit 1-A. There are existing commercial uses north of the Project site, including the 251-seat 4 Star Cinemas, which is attached to the northern side of the vacant bowling alley building, and multi-family residential uses to the west. Previously approved redevelopment activities on the parcels to the north of the Project site were recently completed, including a drive-thru restaurant (Jack in the box), and an automatic car wash. There are multi-family residential uses to the southwest of the Project site. A church is located east of the Project site across Valley View Street, commercial uses are located to the northeast, and senior apartments are located to the southeast. Orange County Fire Authority (OCFA) Fire Station 84 is located south of the Project site, south of the alley.

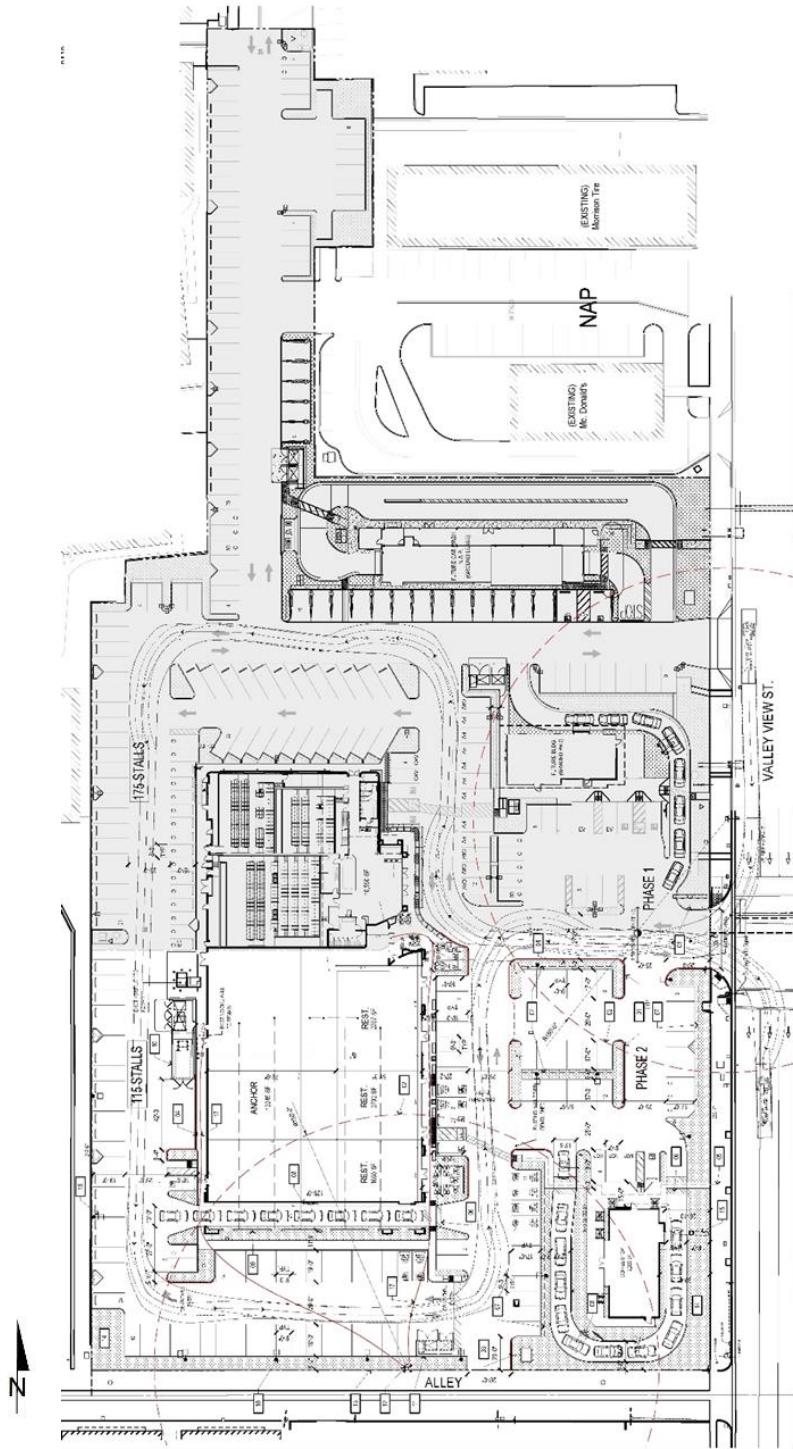
### **SITE LOCATION**

The Project involves repurposing the former 33,375 sf bowling alley building to accommodate commercial uses and the construction of a new 2,000 sf drive-thru coffee shop in the southeastern portion of the Project site. As shown on Exhibit 1-B, the repurposed bowling alley building would accommodate a 12,082-sf anchor tenant, a 1,665-sf restaurant with drive-thru, a 2,792-sf restaurant, and a 2,757-sf restaurant. Exhibit 1-B also depicts the site plan for the commercial development to the north, which was recently redeveloped in accordance with PUD-104-73 Rev. 2018 (approved by the City in 2018).

**EXHIBIT 1-A: LOCATION MAP**



**EXHIBIT 1-B: SITE PLAN**



## SUMMARY OF FINDINGS

Results of the Memo indicate the construction and operations of the Project would result in less than significant impacts associated with air quality (AQ), greenhouse gas (GHG) emissions, and energy demand.

### **CONSTRUCTION AND OPERATIONAL-SOURCE MITIGATION MEASURES**

As shown in the analysis below, the Project would not result in an exceedance of any localized or regional construction-source or operational-source emissions thresholds. As such, the Project would not result in any significant impacts and no mitigation measures are required.

### **STANDARD REGULATORY REQUIREMENTS/BEST AVAILABLE CONTROL MEASURES (BACMs)**

South Coast Air Quality Management District (SCAQMD) Rules that are currently applicable during construction activity for this Project include but are not limited to Rule 403 (Fugitive Dust) (1), Rule 1113 (Architectural Coatings) (2), and Rule 1403 (Asbestos Removal). Implementation of these rules are required pursuant to existing law and therefore is considered part of the Project.

#### ***BACM AQ-1***

All applicable measures included in Rule 403, shall be incorporated into Project plans and specifications as implementation of Rule 403, which include but are not limited to (1):

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 miles per hour or less.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.

#### ***BACM AQ-2***

The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1113 to ensure compliance with building envelope coating requirements (2):

- Only “Low-Volatile Organic Compounds (VOC)” paints (no more than 50 gram/liter of VOC) consistent with SCAQMD Rule 1113 shall be used.

#### ***BACM AQ-3***

If asbestos is found in the existing structure, the following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1403 (3):

- Rule 1403 governs asbestos emissions from demolition and renovation activities.

## **CALIFORNIA EMISSIONS ESTIMATOR MODEL™ EMPLOYED TO ESTIMATE AQ EMISSIONS**

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod) v2016.3.2. The purpose of this model is to more accurately calculate construction-source and operational-source criteria pollutant (Nitrogen Oxides (NO<sub>x</sub>), VOC, Particulate Matter less than 10 microns (PM<sub>10</sub>), Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>), Sulfur Oxides (SO<sub>x</sub>), and Carbon Monoxide (CO)) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational impacts related to the Project. Outputs from the model runs are provided in Attachment A.

## **AIR QUALITY**

### **REGIONAL EMISSIONS**

#### **CONSTRUCTION**

The duration of construction activity was based on construction start and end dates provided by the project applicant. The default number of days in CalEEMod were adjusted based on the start and end date for construction and are shown on Table 1. Equipment employed for Project construction activities are based on CalEEMod defaults for each subphase of activity, as shown on Table 2. The construction schedule utilized in the analysis, shown in Table 3-4, represents a “worst-case” analysis scenario. Should construction occur any time after the respective dates, impacts would be reduced since emission factors for construction decrease as time passes due to emission regulations becoming more stringent<sup>1</sup>. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (4).

The Project is anticipated to include demolition of existing structures currently occupying the Project site. It is estimated that the existing approximately 18,000 square feet of building space will be demolished and hauled off-site. If asbestos is found in the existing structure, the Project plans and specifications will incorporate the implementation of SCAQMD Rule 1403 which governs asbestos remediation during demolition and renovation activities.

Due to the level topography of the Project site, it is expected that only minor amounts of surficial grading would be needed, as well as shallow excavation for building foundations. There would be no import or export of soil from the Project site.

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<sup>1</sup> As shown in the CalEEMod User’s Guide Version 2016.3.2, Section 4.3 “OFFROAD Equipment” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

**TABLE 1: CONSTRUCTION DURATION**

| Phase Name            | Start Date | End Date   | Days |
|-----------------------|------------|------------|------|
| Demolition            | 06/01/2021 | 08/22/2021 | 59   |
| Grading               | 08/23/2021 | 08/30/2021 | 6    |
| Building Construction | 08/31/2021 | 02/01/2022 | 111  |
| Architectural Coating | 10/01/2021 | 02/17/2022 | 100  |
| Paving                | 12/01/2021 | 01/25/2022 | 40   |

**TABLE 2: CONSTRUCTION EQUIPMENT**

| Activity              | Equipment                | Amount | Hours Per Day |
|-----------------------|--------------------------|--------|---------------|
| Demolition            | Concrete/Industrial Saw  | 1      | 8             |
|                       | Rubber Tired Dozer       | 1      | 8             |
|                       | Tractor/Loader/Backhoe   | 3      | 8             |
| Grading               | Graders                  | 1      | 8             |
|                       | Rubber Tired Dozer       | 1      | 8             |
|                       | Crawler Tractor          | 2      | 8             |
| Building Construction | Cranes                   | 1      | 8             |
|                       | Forklifts                | 2      | 7             |
|                       | Generator Sets           | 1      | 8             |
|                       | Tractor/Loader/Backhoe   | 1      | 6             |
|                       | Welders                  | 3      | 8             |
| Architectural Coating | Air Compressors          | 1      | 6             |
| Paving                | Cement and Mortar Mixers | 1      | 8             |
|                       | Pavers                   | 1      | 8             |
|                       | Paving Equipment         | 1      | 8             |
|                       | Rollers                  | 2      | 8             |
|                       | Tractor/Loader/Backhoe   | 1      | 8             |

#### REGIONAL CONSTRUCTION EMISSIONS SUMMARY

The estimated maximum daily construction emissions without mitigation are summarized in Table 3. Detailed construction model outputs are presented in Attachment A. Under the assumed construction modeling scenario discussed above, emissions resulting from Project construction would not exceed criteria pollutant thresholds established by the SCAQMD for emissions of any criteria pollutant, and accordingly will not 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. Thus, a less than significant impact would occur for regional Project-related construction-source emissions and no mitigation is required.

**TABLE 3: PROJECT CONSTRUCTION EMISSIONS AND REGIONAL THRESHOLDS**

|                                | Emissions (lbs/day) |              |              |             |                  |                   |
|--------------------------------|---------------------|--------------|--------------|-------------|------------------|-------------------|
|                                | VOC                 | NOx          | CO           | SOx         | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Maximum Daily Emissions</b> | <b>5.90</b>         | <b>30.86</b> | <b>30.85</b> | <b>0.06</b> | <b>4.33</b>      | <b>2.53</b>       |
| SCAQMD Regional Threshold      | 75                  | 100          | 550          | 150         | 150              | 55                |
| <b>Threshold Exceeded?</b>     | <b>NO</b>           | <b>NO</b>    | <b>NO</b>    | <b>NO</b>   | <b>NO</b>        | <b>NO</b>         |

lbs/day = Pounds Per Day

#### OPERATIONS

Operational activities associated with the Project would result in emissions of CO, VOCs, NOx, SOx, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational related emissions are expected from the following primary sources: area source emissions, energy source emissions, mobile source emissions, and on-site equipment emissions.

##### ***Area Source Emissions***

*Architectural Coatings* – Over a period of time, the buildings that are part of this Project will generate emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using the CalEEMod.

*Consumer Products* – Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

*Landscape Maintenance Equipment* – Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain

the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

### ***Energy Source Emissions***

*Combustion Emissions Associated with Natural Gas and Electricity* – Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using CalEEMod.

### ***Mobile Source Emissions***

Project mobile source air quality emissions are primarily dependent on overall daily vehicle trip generation. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project, as summarized in the *Westgrove Center Project Traffic Study & Parking Analysis*, prepared by RK Engineering Group, Inc. (5).

### **REGIONAL OPERATIONAL EMISSIONS SUMMARY**

Table 4 summarizes the Project's daily regional emissions from on-going operations. Detailed operational model outputs are presented in Attachment A. During operational activity, the Project will not exceed any of the thresholds of significance, and accordingly will not 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. Thus, a less than significant impact would occur for regional Project-related operation-sources emissions, and no mitigation is required.

**TABLE 4: PEAK PROJECT OPERATIONAL EMISSIONS AND REGIONAL THRESHOLDS**

| Operational Activities               | Emissions (lbs/day) |                 |              |                 |                  |                   |
|--------------------------------------|---------------------|-----------------|--------------|-----------------|------------------|-------------------|
|                                      | VOC                 | NO <sub>x</sub> | CO           | SO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Area Source                          | 0.51                | <0.01           | 0.01         | <0.01           | <0.01            | <0.01             |
| Energy Source                        | 0.08                | 0.71            | 0.60         | <0.01           | 0.05             | 0.05              |
| Mobile                               | 9.73                | 41.99           | 63.93        | 0.18            | 12.35            | 3.41              |
| <b>Total Maximum Daily Emissions</b> | <b>10.32</b>        | <b>42.71</b>    | <b>64.54</b> | <b>0.19</b>     | <b>12.41</b>     | <b>3.46</b>       |
| SCAQMD Regional Threshold            | 55                  | 55              | 550          | 150             | 150              | 55                |
| <b>Threshold Exceeded?</b>           | <b>NO</b>           | <b>NO</b>       | <b>NO</b>    | <b>NO</b>       | <b>NO</b>        | <b>NO</b>         |

## LOCALIZED EMISSIONS

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (6). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4<sup>2</sup>. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses (6).

### ***Sensitive Receptors***

Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities. This Memorandum analyzes localized construction emissions impacts at the nearest sensitive receptors.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors"; they are also known to be locations where an individual can remain for 24 hours.

### ***Project-related Sensitive Receptors***

Sensitive receptors in the Project study area include existing residential homes. The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual and cumulatively significant impact. To assess the potential for localized impacts, adjacent sensitive receptor locations were identified as representative locations for analytical purposes, as shown on Exhibit 1-C, there are several homes immediately adjacent to the Project's anticipated construction activities.

The *LST Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters* (6)." As the residential home are located immediately adjacent to the Project's anticipated construction activities (e.g., less than 25-meters from the construction activities), a 25-meter receptor distance has been utilized to determine localized impacts.

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<sup>2</sup>The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

**EXHIBIT 1-C: CONSTRUCTION ACTIVITY**



**LEGEND:**

|  |                                       |  |                    |  |                                   |
|--|---------------------------------------|--|--------------------|--|-----------------------------------|
|  | Building Demolition                   |  | Paving Replacement |  | Existing Barrier                  |
|  | Building Construction & Arch. Coating |  |                    |  | Existing Barrier Height (in feet) |

#### **LOCALIZED CONSTRUCTION EMISSIONS SUMMARY**

Table 5 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Outputs from the model runs for construction LSTs are provided in Attachment A. Under the assumed construction modeling scenario (as previously discussed), emissions resulting from the Project construction will not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant, accordingly the Project's construction will not expose sensitive receptors to substantial pollutant concentrations. Thus, a less than significant impact related to sensitive receptors exposure to pollutants concentrations from Project construction would occur and no mitigation is required.

**TABLE 5: LOCALIZED SIGNIFICANCE SUMMARY OF CONSTRUCTION (WITHOUT MITIGATION)**

| On-Site Demolition Emissions  | Emissions (lbs/day) |              |                  |                   |
|---|---------------------|--------------|------------------|-------------------|
|   | NO <sub>x</sub>     | CO           | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Maximum Daily Emissions</b>  | <b>19.69</b>        | <b>14.49</b> | <b>1.16</b>      | <b>0.99</b>       |
| SCAQMD Localized Threshold  | 115                 | 715          | 6                | 4                 |
| <b>Threshold Exceeded?</b>  | <b>NO</b>           | <b>NO</b>    | <b>NO</b>        | <b>NO</b>         |
| On-Site Site Grading Emissions  | Emissions (lbs/day) |              |                  |                   |
|   | NO <sub>x</sub>     | CO           | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Maximum Daily Emissions</b>  | <b>30.83</b>        | <b>10.68</b> | <b>4.21</b>      | <b>2.50</b>       |
| SCAQMD Localized Threshold  | 115                 | 715          | 6                | 4                 |
| <b>Threshold Exceeded?</b>  | <b>NO</b>           | <b>NO</b>    | <b>NO</b>        | <b>NO</b>         |
| On-Site Building Construction + Architectural Coating + Paving Emissions                  | Emissions (lbs/day) |              |                  |                   |
|   | NO <sub>x</sub>     | CO           | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Maximum Daily Emissions</b>  | <b>28.21</b>        | <b>26.16</b> | <b>1.49</b>      | <b>1.41</b>       |
| SCAQMD Localized Threshold  | 115                 | 715          | 6                | 4                 |
| <b>Threshold Exceeded?</b>  | <b>NO</b>           | <b>NO</b>    | <b>NO</b>        | <b>NO</b>         |
| SCAQMD Threshold for a 2-acre disturbance at 25 meters for Source Receptor Area (SRA) 17. |                     |              |                  |                   |

#### **CO "HOT SPOT" ANALYSIS**

As discussed below, the Project would not result in potentially adverse CO concentrations or "hot spots." At the time of the 1993 Handbook, the South Coast Air Basin (SCAB) was designated nonattainment under the CAAQS and NAAQS for CO (7).

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in

the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO “hot spot” analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards, as shown on Table 6.

**TABLE 6: CO MODEL RESULTS**

| Intersection Location          | CO Concentrations (ppm) |                  |        |
|--------------------------------|-------------------------|------------------|--------|
|                                | Morning 1-hour          | Afternoon 1-hour | 8-hour |
| Wilshire Blvd./Veteran Ave.    | 4.6                     | 3.5              | 3.7    |
| Sunset Blvd./Highland Ave.     | 4                       | 4.5              | 3.5    |
| La Cienega Blvd./Century Blvd. | 3.7                     | 3.1              | 5.2    |
| Long Beach Blvd./Imperial Hwy. | 3                       | 3.1              | 8.4    |

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 9.3 ppm 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the “hot spot” analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 8.6 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (8). In contrast, an adverse CO concentration, known as a “hot spot”, would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 4.7 ppm and 3.5 ppm, respectively (data from South Central Los Angeles County Monitoring Station for 2018). Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO “hot spot” at any study area intersections.

The traffic volumes generating the CO concentrations for the “hot spot” analysis, are shown on Table 7. The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume

increase four times to 400,000 vehicles per day, CO concentrations ( $4.6 \text{ ppm} \times 4 = 18.4 \text{ ppm}$ ) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).<sup>3</sup>

At buildout of the Project, the highest daily traffic volumes would occur on Valley View St, south of Cerulean Av., at this location, there would be a maximum of 54,606 vehicles per day (5). As such, all the roadways within the vicinity of the Project are expected to generate less than the highest daily traffic volumes generated at the busiest intersection in the CO “hot spot” analysis prepared by SCAQMD. As such, the Project would not exceed the most stringent 1-hour CO standard and a less than significant impact is expected.

**TABLE 7: TRAFFIC VOLUMES**

| Intersection Location          | Peak Traffic Volumes (vph) |                      |                       |                       |                  |
|--------------------------------|----------------------------|----------------------|-----------------------|-----------------------|------------------|
|                                | Eastbound<br>(AM/PM)       | Westbound<br>(AM/PM) | Southbound<br>(AM/PM) | Northbound<br>(AM/PM) | Total<br>(AM/PM) |
| Wilshire Blvd./Veteran Ave.    | 4,954/2,069                | 1,830/3,317          | 721/1,400             | 560/933               | 8,062/7,719      |
| Sunset Blvd./Highland Ave.     | 1,417/1,764                | 1,342/1,540          | 2,304/1,832           | 1,551/2,238           | 6,614/5,374      |
| La Cienega Blvd./Century Blvd. | 2,540/2,243                | 1,890/2,728          | 1,384/2,029           | 821/1,674             | 6,634/8,674      |
| Long Beach Blvd./Imperial Hwy. | 1,217/2,020                | 1,760/1,400          | 479/944               | 756/1,150             | 4,212/5,514      |

### **AIR QUALITY MANAGEMENT PLANNING**

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMP) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

The 2016 AQMP evaluates integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a

<sup>3</sup> Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

strategy with fair-share reductions at the federal, state, and local levels (9). Similar to previous AQMPs, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal Clean Air Act requirements (10). The Project's consistency with the AQMP will be determined as follows.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's California Environmental Quality Act (CEQA) Air Quality Handbook (1993) (11). The Air Quality Handbook refers to the following criteria: *Consistency Criteria 1 refers to a proposed project's potential for resulting in an increase in the frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation and Consistency Criteria 2 refers to a proposed project's potential for exceeding the assumptions included in the AQMP or other regional growth projections relevant to the AQMP's implementation.*

In terms of Criteria 1, the proposed project's long-term (operational) airborne emissions will be below levels that the SCAQMD considers to be a significant impact (refer to the analysis included in the next section where the long-term stationary and mobile emissions for the proposed project are summarized in Table 3-2). In addition, the project's operational emissions will be well within the emissions projections identified in the most recent AQMP. As shown in Table 3-5 of the Final 2016 AQMP, the future 2031 daily operational emissions with the estimated population, employment, and mobile source growth projections are estimated to be: 345 tons per day of VOCs; 214 tons per day of NOx; 1,188 tons per day of CO; 18 tons per day of SOx; and 65 tons per day of PM2.5.

The proposed project will also conform to Consistency Criteria 2 since it will not significantly affect any regional population, housing, and employment projections prepared for the City of Garden Grove. Projects that are consistent with the projections of employment and population forecasts identified in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG are considered consistent with the AQMP growth projections, since the RTP/SCS forms the basis of the land use and transportation control portions of the AQMP. According to the Growth Forecast Appendix prepared by SCAG for the 2016-2040 RTP/SCS, the City of Garden Grove is projected to add a total of 6,800 new residents through the year 2040<sup>4</sup>. The project's implementation could result in an employment increase of 68 new employees based on the City's General Plan EIR employment generation for Commercial uses (see Table 5.2-3 of the General Plan EIR). The projected number of new employees is well within SCAG's projections for the City of Garden Grove and the proposed project will not violate Consistency Criteria 2.

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<sup>4</sup> Southern California Association of Governments. Regional Transportation Plan/Sustainable Communities Strategy 2016- 2040. Demographics & Growth Forecast. April 2016.

Additionally, as noted in the *Westgrove Center Project Traffic Study & Parking Analysis*, prepared by RK Engineering Group, Inc. (5), the Project is considered local serving with less than significant VMT impacts, and would reduce VMT by providing a use in proximity to existing patrons in the City.

#### *AQMP Consistency Conclusion*

Since the proposed project will not be in violation of either Consistency Criteria, the project's potential impacts are considered to be less than significant.

#### **ODORS**

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not contain land uses typically associated with objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required (12).

Based on an aerial review of the Proposed Project vicinity none of the uses listed above associated with odor complaints are not located in the immediate vicinity of the Project, nor does the Project propose any of the uses listed above therefore the Project would not be subject to or result in any substantive

odor impacts.

### **CUMULATIVE IMPACTS**

The CAAQS designate the area in which the Project site is located as nonattainment for O<sub>3</sub> PM<sub>10</sub>, and PM<sub>2.5</sub> while the NAAQS designates the area in which the Project site is located as nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> (13).

The SAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (14). In this report the SAQMD clearly states (Page D-3):

*...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*

*Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

### **Construction Impacts**

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, Project construction-source emissions would be considered less than significant on a project-specific and cumulative basis.

### Operational Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project operational-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, Project operational-source emissions would be considered less than significant on a project-specific and cumulative basis.

### **TOXIC AIR CONTAMINANT EMISSIONS**

Project's that generate or attract a substantial number of diesel truck trips per day (e.g. more than 100), may generate diesel particulate matter (DPM) which would necessitate evaluation of a project's potential impacts associated with Toxic Air Contaminants (TACs). The Project is proposed with a use that is not anticipated to generate a substantive number of diesel trucks, therefore impacts from DPM and associated TACs is presumed to be less than significant.

### **GREENHOUSE GAS EMISSIONS**

A common greenhouse gas (GHG) emissions threshold utilized throughout southern California is 3,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year (MT CO<sub>2</sub>e/year). The 3,000 MT CO<sub>2</sub>e/year threshold is based on substantial evidence from the South Coast Air Quality Management District (SCAQMD). SCAQMD established this level of emissions as a quantitative threshold based on market capture. In other words, this threshold was derived to ensure capture of 90 percent or more of likely future discretionary developments. The objective was to set the emission threshold low enough to capture a substantial fraction of future residential and non-residential development that will be constructed to accommodate future statewide population and job growth, while setting the emissions threshold high enough to exclude small development projects that will contribute a relatively small amount of cumulative statewide GHG emissions. While this methodology could exclude up to 10 percent of new development, the capture of 90 percent of new development would establish a strong basis for demonstrating that cumulative reductions are being achieved across the state through uniform CEQA review (15).

The SCAQMD's draft threshold uses the Executive Order S-3-05 Year 2050 goal as the basis for the screening threshold. Achieving the Executive Order's objective would contribute to worldwide effort to cap CO<sub>2</sub> concentrations at 450 parts per million, thus stabilizing global climate. Specifically, the threshold was set at levels that capture 90 percent of the GHG emissions from development projects, consistent with the Executive Order S-3-05 target of reducing GHGs to 80 percent below 1990 levels by 2050. Lastly, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions (16).

#### EMISSIONS SUMMARY

The annual GHG emissions associated with construction and operation of the proposed Project are estimated to be 2,682.41 MTCO<sub>2</sub>e per year as summarized in Table 8 (see Attachment B for model outputs). Direct and indirect operational emissions associated with the Project are compared with the SCAQMD's threshold of significance of 3,000 MTCO<sub>2</sub>e per year. As shown, the proposed Project would result in a less than significant impact with respect to GHG emissions.

Further, the Project will comply with all applicable regulations intended to reduce GHG-emissions. Finally, the Project is consistent with the general goals and objectives identified in SCAG's Sustainable Community Strategy/ Regional Transportation Plan, which pursuant to SB 375 calls for the integration of transportation, land-use and housing policies to plan for achievement of the GHG-emissions target for the region. Thus, a less than significant impact related to GHG emissions from Project construction and operation would occur and no mitigation is required.

**TABLE 8: TOTAL PROJECT GHG EMISSIONS (ANNUAL)**

| Emission Source   | Emissions (CO <sub>2</sub> e Metric Tons per year) |
|---|--|
| Annual construction-related emissions amortized over 30 years | 9.55   |
| Area  | <0.01  |
| Energy  | 405.97   |
| Mobile Sources  | 2,154.16   |
| Waste   | 88.12  |
| Water Usage   | 24.60  |
| <b>Total CO<sub>2</sub>e (All Sources)</b>                    | <b>2,682.41</b>                                    |
| <b>Screening Threshold (CO<sub>2</sub>e)</b>                  | <b>3,000</b>                                       |
| <b>Threshold Exceeded?</b>                                    | <b>NO</b>  |

#### ENERGY

Title 24 of the California Code of Regulations establishes energy conservation standards for new construction. These standards relate to insulation requirements, glazing, lighting, shading, and water and space heating systems. The Garden Grove Municipal Code (GGMC) incorporates these state requirements. Construction-related energy consumption will consist largely of temporary power consumption related to the use of power tools, more specialized equipment (welding equipment, elevators, cranes, etc.), and lighting. A second major source of energy consumption will be related to temporary lighting used for both work and security. Security lighting would likely be required for the site during the course of the construction period. For purposes of this analysis, the entire construction period

was assumed to be approximately 9 months. The construction-related electrical consumption rate will be minimal in comparison to the operational consumption once the building is occupied. In addition, construction-related activities do not require the use of natural gas.

Table 9 below provides an estimate of electrical and natural gas consumption for the proposed project. As indicated in the table, the project is estimated to consume approximately 39,108 kilowatt (kWh) per year (or 3,259 kWh per month) of electricity and 1,938 therms of natural gas.

**TABLE 9: ESTIMATED ANNUAL ENERGY CONSUMPTION**

| Energy Source           | Total Project Consumption |
|-------------------------|---------------------------|
| Electrical Consumption  | 2,641,013 kBtu/year       |
| Natural Gas Consumption | 826,249 kWh/year          |

It is important to note that the project will include energy efficient fixtures such as energy efficient lighting, appliances, windows, roofing materials, air conditioning, and insulation. In addition, the energy consumption rates do not reflect the more stringent 2019 California Building and Green Building Code requirements. Title 24, Part 6 contains energy requirements for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. These energy requirements include the use of energy efficient appliances and fixtures such as air conditioning units and lighting. The purpose of the California Green Building Code (Title 24, Part 11) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. Title 24, Part 6 requirements have been incorporated into the California Green Building Code. These California Green Building Code requirements include the use of energy and water efficient appliances and fixtures such as double paned windows, insulation, low flow faucets, and stormwater treatment appurtenances. Furthermore, depending on when the construction plans are submitted to the City for plan check, the project would be subject to, at a minimum, the 2019 California Building Standards Code and the 2019 Building Energy Efficiency Standards or any subsequently adopted code in effect at the time which would likely be more stringent than the 2019 code. As a result, the Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operations nor would the Project conflict with or obstruct a state plan for renewable energy or energy efficiency and a less than significant impacts will occur. The City of Garden Grove does not have a local energy plan.

Ms. Tina Andersen  
T&B Planning, Inc.  
January 29, 2021  
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If you have any questions, please contact me directly at (949) 336-5987.

Respectfully submitted,

URBAN CROSSROADS, INC.



Haseeb Qureshi,  
Associate Principal

Ms. Tina Andersen

T&B Planning, Inc.

January 29, 2021

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**ATTACHMENT A:**

**CALEEMOD DAILY SUMMER AND WINTER EMISSIONS MODEL OUTPUTS**

## West Grove Center - South Coast AQMD Air District, Summer

**West Grove Center**  
**South Coast AQMD Air District, Summer**

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                            | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------------------------|--------|----------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces           | 0.55   | Acre     | 0.55        | 23,958.00          | 0          |
| Parking Lot                          | 123.00 | Space    | 1.11        | 49,200.00          | 0          |
| Fast Food Restaurant w/o Drive Thru  | 5.55   | 1000sqft | 0.13        | 5,549.00           | 0          |
| Fast Food Restaurant with Drive Thru | 3.67   | 1000sqft | 0.08        | 3,665.00           | 0          |
| Supermarket                          | 12.25  | 1000sqft | 0.28        | 12,245.00          | 0          |

**1.2 Other Project Characteristics**

|                            |                            |                            |       |                            |       |
|----------------------------|----------------------------|----------------------------|-------|----------------------------|-------|
| Urbanization               | Urban                      | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 31    |
| Climate Zone               | 8                          |                            |       | Operational Year           | 2022  |
| Utility Company            | Southern California Edison |                            |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 702.44                     | CH4 Intensity<br>(lb/MWhr) | 0.029 | N2O Intensity<br>(lb/MWhr) | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

## West Grove Center - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use -

Construction Phase - Approximate 9 month construction schedule.

Off-road Equipment -

Off-road Equipment - Crawler Tractors Used in Lieu of Tractor/Loaders/Backhoes as a conservative measure.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Demolition -

Vehicle Trips - ITE Trip Generation Rates from Traffic Study and ITE 10th Edition

Construction Off-road Equipment Mitigation -

| Table Name           | Column Name    | Default Value | New Value |
|----------------------|----------------|---------------|-----------|
| tblConstructionPhase | NumDays        | 20.00         | 59.00     |
| tblConstructionPhase | NumDays        | 220.00        | 111.00    |
| tblConstructionPhase | NumDays        | 10.00         | 100.00    |
| tblConstructionPhase | NumDays        | 10.00         | 40.00     |
| tblConstructionPhase | PhaseEndDate   | 6/28/2021     | 8/22/2021 |
| tblConstructionPhase | PhaseEndDate   | 7/6/2021      | 8/30/2021 |
| tblConstructionPhase | PhaseEndDate   | 5/10/2022     | 2/1/2022  |
| tblConstructionPhase | PhaseEndDate   | 6/7/2022      | 2/17/2022 |
| tblConstructionPhase | PhaseEndDate   | 5/24/2022     | 1/25/2022 |
| tblConstructionPhase | PhaseStartDate | 6/29/2021     | 8/23/2021 |
| tblConstructionPhase | PhaseStartDate | 7/7/2021      | 8/31/2021 |
| tblConstructionPhase | PhaseStartDate | 5/25/2022     | 10/1/2021 |
| tblConstructionPhase | PhaseStartDate | 5/11/2022     | 12/1/2021 |

## West Grove Center - South Coast AQMD Air District, Summer

| tblOffRoadEquipment | OffRoadEquipmentType       |        | Crawler Tractors |
|---------------------|----------------------------|--------|------------------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00   | 0.00             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.30             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | ST_TR                      | 722.03 | 661.66           |
| tblVehicleTrips     | ST_TR                      | 177.59 | 177.62           |
| tblVehicleTrips     | SU_TR                      | 542.72 | 661.66           |
| tblVehicleTrips     | SU_TR                      | 166.44 | 166.47           |
| tblVehicleTrips     | WD_TR                      | 716.00 | 346.23           |
| tblVehicleTrips     | WD_TR                      | 496.12 | 661.66           |
| tblVehicleTrips     | WD_TR                      | 102.24 | 106.78           |

**2.0 Emissions Summary**

---

## West Grove Center - South Coast AQMD Air District, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2021    | 5.8989 | 30.8594 | 30.8539 | 0.0568 | 7.7246        | 1.5021       | 8.9699     | 3.5116         | 1.4219        | 4.6573      | 0.0000   | 5,401.985<br>9 | 5,401.985<br>9 | 1.0561 | 0.0000 | 5,428.389<br>2 |
| 2022    | 5.5539 | 26.9465 | 30.3659 | 0.0565 | 0.7954        | 1.2794       | 2.0748     | 0.2133         | 1.2119        | 1.4252      | 0.0000   | 5,374.502<br>0 | 5,374.502<br>0 | 1.0439 | 0.0000 | 5,400.600<br>0 |
| Maximum | 5.8989 | 30.8594 | 30.8539 | 0.0568 | 7.7246        | 1.5021       | 8.9699     | 3.5116         | 1.4219        | 4.6573      | 0.0000   | 5,401.985<br>9 | 5,401.985<br>9 | 1.0561 | 0.0000 | 5,428.389<br>2 |

**Mitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2021    | 5.8989 | 30.8594 | 30.8539 | 0.0568 | 3.0808        | 1.5021       | 4.3261     | 1.3876         | 1.4219        | 2.5333      | 0.0000   | 5,401.985<br>9 | 5,401.985<br>9 | 1.0561 | 0.0000 | 5,428.389<br>2 |
| 2022    | 5.5539 | 26.9465 | 30.3659 | 0.0565 | 0.7954        | 1.2794       | 2.0748     | 0.2133         | 1.2119        | 1.4252      | 0.0000   | 5,374.502<br>0 | 5,374.502<br>0 | 1.0439 | 0.0000 | 5,400.600<br>0 |
| Maximum | 5.8989 | 30.8594 | 30.8539 | 0.0568 | 3.0808        | 1.5021       | 4.3261     | 1.3876         | 1.4219        | 2.5333      | 0.0000   | 5,401.985<br>9 | 5,401.985<br>9 | 1.0561 | 0.0000 | 5,428.389<br>2 |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 54.50         | 0.00         | 42.05      | 57.02          | 0.00          | 34.92       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## West Grove Center - South Coast AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

|              | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2                | NBio- CO2               | Total CO2     | CH4           | N2O                     | CO2e            |  |
|--------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|-----------------|--|
| Category     | lb/day         |                |                |               |                |               |                |                |               |               |                         | lb/day                  |               |               |                         |                 |  |
| Area         | 0.5123         | 1.4000e-004    | 0.0148         | 0.0000        |                | 5.0000e-005   | 5.0000e-005    |                | 5.0000e-005   | 5.0000e-005   | 0.0317                  | 0.0317                  | 8.0000e-005   |               |                         | 0.0338          |  |
| Energy       | 0.0780         | 0.7094         | 0.5959         | 4.2600e-003   |                | 0.0539        | 0.0539         |                | 0.0539        | 0.0539        | 851.2520                | 851.2520                | 0.0163        | 0.0156        |                         | 856.3105        |  |
| Mobile       | 9.7314         | 41.9991        | 61.9197        | 0.1840        | 12.1991        | 0.1521        | 12.3512        | 3.2640         | 0.1416        | 3.4056        | 18,831.24<br>11         | 18,831.24<br>11         | 1.2134        |               |                         | 18,861.57<br>63 |  |
| <b>Total</b> | <b>10.3216</b> | <b>42.7086</b> | <b>62.5305</b> | <b>0.1883</b> | <b>12.1991</b> | <b>0.2060</b> | <b>12.4051</b> | <b>3.2640</b>  | <b>0.1956</b> | <b>3.4596</b> | <b>19,682.52<br/>48</b> | <b>19,682.52<br/>48</b> | <b>1.2298</b> | <b>0.0156</b> | <b>19,717.92<br/>07</b> |                 |  |

**Mitigated Operational**

|              | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2                | NBio- CO2               | Total CO2     | CH4           | N2O                     | CO2e            |  |
|--------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|-----------------|--|
| Category     | lb/day         |                |                |               |                |               |                |                |               |               |                         | lb/day                  |               |               |                         |                 |  |
| Area         | 0.5123         | 1.4000e-004    | 0.0148         | 0.0000        |                | 5.0000e-005   | 5.0000e-005    |                | 5.0000e-005   | 5.0000e-005   | 0.0317                  | 0.0317                  | 8.0000e-005   |               |                         | 0.0338          |  |
| Energy       | 0.0780         | 0.7094         | 0.5959         | 4.2600e-003   |                | 0.0539        | 0.0539         |                | 0.0539        | 0.0539        | 851.2520                | 851.2520                | 0.0163        | 0.0156        |                         | 856.3105        |  |
| Mobile       | 9.7314         | 41.9991        | 61.9197        | 0.1840        | 12.1991        | 0.1521        | 12.3512        | 3.2640         | 0.1416        | 3.4056        | 18,831.24<br>11         | 18,831.24<br>11         | 1.2134        |               |                         | 18,861.57<br>63 |  |
| <b>Total</b> | <b>10.3216</b> | <b>42.7086</b> | <b>62.5305</b> | <b>0.1883</b> | <b>12.1991</b> | <b>0.2060</b> | <b>12.4051</b> | <b>3.2640</b>  | <b>0.1956</b> | <b>3.4596</b> | <b>19,682.52<br/>48</b> | <b>19,682.52<br/>48</b> | <b>1.2298</b> | <b>0.0156</b> | <b>19,717.92<br/>07</b> |                 |  |

## West Grove Center - South Coast AQMD Air District, Summer

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 6/1/2021   | 8/22/2021 | 5             | 59       |                   |
| 2            | Grading               | Grading               | 8/23/2021  | 8/30/2021 | 5             | 6        |                   |
| 3            | Building Construction | Building Construction | 8/31/2021  | 2/1/2022  | 5             | 111      |                   |
| 4            | Architectural Coating | Architectural Coating | 10/1/2021  | 2/17/2022 | 5             | 100      |                   |
| 5            | Paving                | Paving                | 12/1/2021  | 1/25/2022 | 5             | 40       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 9

Acres of Paving: 1.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,189; Non-Residential Outdoor: 10,730; Striped Parking Area: 4,389 (Architectural Coating – sqft)

#### OffRoad Equipment

## West Grove Center - South Coast AQMD Air District, Summer

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |
| Paving                | Cement and Mortar Mixers  | 1      | 8.00        | 9           | 0.56        |
| Demolition            | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Building Construction | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 2      | 7.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Paving                | Pavers                    | 1      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 1      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Demolition            | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Building Construction | Tractors/Loaders/Backhoes | 1      | 6.00        | 97          | 0.37        |
| Demolition            | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading               | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Paving                | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |
| Building Construction | Welders                   | 3      | 8.00        | 46          | 0.45        |
| Grading               | Crawler Tractors          | 2      | 8.00        | 212         | 0.43        |

Trips and VMT

## West Grove Center - South Coast AQMD Air District, Summer

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 5                       | 13.00              | 0.00               | 82.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 4                       | 10.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 8                       | 39.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 8.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Demolition - 2021****Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2       | NBio- CO2      | Total CO2 | CH4 | N2O | CO2e           |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|-----------|-----|-----|----------------|
| Category      | lb/day |         |         |        |               |              |            |                |               |             | lb/day         |                |           |     |     |                |
| Fugitive Dust |        |         |         |        | 0.3003        | 0.0000       | 0.3003     | 0.0455         | 0.0000        | 0.0455      |                |                | 0.0000    |     |     | 0.0000         |
| Off-Road      | 1.9930 | 19.6966 | 14.4925 | 0.0241 |               | 1.0409       | 1.0409     |                | 0.9715        | 0.9715      | 2,322.717<br>1 | 2,322.717<br>1 | 0.5940    |     |     | 2,337.565<br>8 |
| Total         | 1.9930 | 19.6966 | 14.4925 | 0.0241 | 0.3003        | 1.0409       | 1.3412     | 0.0455         | 0.9715        | 1.0169      | 2,322.717<br>1 | 2,322.717<br>1 | 0.5940    |     |     | 2,337.565<br>8 |

## West Grove Center - South Coast AQMD Air District, Summer

**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O    | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|--------|-----------------|--|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |               |        |                 |  |
| Hauling      | 0.0101        | 0.3516        | 0.0744        | 1.0700e-003        | 0.0243        | 1.0900e-003        | 0.0254        | 6.6600e-003    | 1.0400e-003        | 7.7000e-003   | 115.2919 | 115.2919        | 7.6900e-003     |               |        | 115.4842        |  |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000 | 0.0000          |  |
| Worker       | 0.0549        | 0.0356        | 0.4897        | 1.4400e-003        | 0.1453        | 1.0700e-003        | 0.1464        | 0.0385         | 9.9000e-004        | 0.0395        | 143.9624 | 143.9624        | 3.8700e-003     |               |        | 144.0592        |  |
| <b>Total</b> | <b>0.0650</b> | <b>0.3872</b> | <b>0.5642</b> | <b>2.5100e-003</b> | <b>0.1696</b> | <b>2.1600e-003</b> | <b>0.1718</b> | <b>0.0452</b>  | <b>2.0300e-003</b> | <b>0.0472</b> |          | <b>259.2544</b> | <b>259.2544</b> | <b>0.0116</b> |        | <b>259.5434</b> |  |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.1171        | 0.0000        | 0.1171        | 0.0177         | 0.0000        | 0.0177        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.9930        | 19.6966        | 14.4925        | 0.0241        |               | 1.0409        | 1.0409        |                | 0.9715        | 0.9715        | 0.0000        | 2,322.7171        | 2,322.7171        | 0.5940        |     | 2,337.5658        |
| <b>Total</b>  | <b>1.9930</b> | <b>19.6966</b> | <b>14.4925</b> | <b>0.0241</b> | <b>0.1171</b> | <b>1.0409</b> | <b>1.1580</b> | <b>0.0177</b>  | <b>0.9715</b> | <b>0.9892</b> | <b>0.0000</b> | <b>2,322.7171</b> | <b>2,322.7171</b> | <b>0.5940</b> |     | <b>2,337.5658</b> |

## West Grove Center - South Coast AQMD Air District, Summer

**3.2 Demolition - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4    | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|--------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |        |        |          |  |
| Hauling  | 0.0101 | 0.3516 | 0.0744 | 1.0700e-003 | 0.0243        | 1.0900e-003  | 0.0254     | 6.6600e-003    | 1.0400e-003   | 7.7000e-003 | 115.2919 | 115.2919  | 7.6900e-003 |        |        | 115.4842 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000 | 0.0000 | 0.0000   |  |
| Worker   | 0.0549 | 0.0356 | 0.4897 | 1.4400e-003 | 0.1453        | 1.0700e-003  | 0.1464     | 0.0385         | 9.9000e-004   | 0.0395      | 143.9624 | 143.9624  | 3.8700e-003 |        |        | 144.0592 |  |
| Total    | 0.0650 | 0.3872 | 0.5642 | 2.5100e-003 | 0.1696        | 2.1600e-003  | 0.1718     | 0.0452         | 2.0300e-003   | 0.0472      |          | 259.2544  | 259.2544    | 0.0116 |        | 259.5434 |  |

**3.3 Grading - 2021****Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2       | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|----------------|--------|-----|----------------|
| Category      | lb/day |         |         |        |               |              |            |                |               |             | lb/day         |                |                |        |     |                |
| Fugitive Dust |        |         |         |        | 7.6128        | 0.0000       | 7.6128     | 3.4820         | 0.0000        | 3.4820      |                |                | 0.0000         |        |     | 0.0000         |
| Off-Road      | 2.6012 | 30.8320 | 10.6751 | 0.0309 |               | 1.2445       | 1.2445     |                | 1.1449        | 1.1449      | 2,989.760<br>4 | 2,989.760<br>4 | 0.9670         |        |     | 3,013.934<br>1 |
| Total         | 2.6012 | 30.8320 | 10.6751 | 0.0309 | 7.6128        | 1.2445       | 8.8573     | 3.4820         | 1.1449        | 4.6269      |                | 2,989.760<br>4 | 2,989.760<br>4 | 0.9670 |     | 3,013.934<br>1 |

## West Grove Center - South Coast AQMD Air District, Summer

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O    | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |        |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Worker   | 0.0422        | 0.0274        | 0.3767        | 1.1100e-003        | 0.1118        | 8.2000e-004        | 0.1126        | 0.0296         | 7.6000e-004        | 0.0304        | 110.7403 | 110.7403        | 2.9800e-003     |                    |        | 110.8148        |  |
| Total    | <b>0.0422</b> | <b>0.0274</b> | <b>0.3767</b> | <b>1.1100e-003</b> | <b>0.1118</b> | <b>8.2000e-004</b> | <b>0.1126</b> | <b>0.0296</b>  | <b>7.6000e-004</b> | <b>0.0304</b> |          | <b>110.7403</b> | <b>110.7403</b> | <b>2.9800e-003</b> |        | <b>110.8148</b> |  |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2        | Total CO2        | CH4           | N2O    | CO2e             |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------|------------------|---------------|--------|------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                  |                  |               |        |                  |
| Fugitive Dust |               |                |                |               | 2.9690        | 0.0000        | 2.9690        | 1.3580         | 0.0000        | 1.3580        | 0.0000        | 0.0000           | 2.989.760        | 0.9670        | 0.0000 | 0.0000           |
| Off-Road      | 2.6012        | 30.8320        | 10.6751        | 0.0309        |               | 1.2445        | 1.2445        |                | 1.1449        | 1.1449        | 0.0000        | 2,989.760        | 2,989.760        | 0.9670        |        | 3,013.934        |
| Total         | <b>2.6012</b> | <b>30.8320</b> | <b>10.6751</b> | <b>0.0309</b> | <b>2.9690</b> | <b>1.2445</b> | <b>4.2135</b> | <b>1.3580</b>  | <b>1.1449</b> | <b>2.5029</b> | <b>0.0000</b> | <b>2,989.760</b> | <b>2,989.760</b> | <b>0.9670</b> |        | <b>3,013.934</b> |

## West Grove Center - South Coast AQMD Air District, Summer

**3.3 Grading - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4         | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|-------------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |             |        |          |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000 | 0.0000   |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000 | 0.0000   |  |
| Worker   | 0.0422 | 0.0274 | 0.3767 | 1.1100e-003 | 0.1118        | 8.2000e-004  | 0.1126     | 0.0296         | 7.6000e-004   | 0.0304      | 110.7403 | 110.7403  | 2.9800e-003 |             |        | 110.8148 |  |
| Total    | 0.0422 | 0.0274 | 0.3767 | 1.1100e-003 | 0.1118        | 8.2000e-004  | 0.1126     | 0.0296         | 7.6000e-004   | 0.0304      |          | 110.7403  | 110.7403    | 2.9800e-003 |        | 110.8148 |  |

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2       | NBio- CO2      | Total CO2 | CH4 | N2O | CO2e           |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|-----------|-----|-----|----------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |                | lb/day         |           |     |     |                |  |
| Off-Road | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 2,288.935<br>5 | 2,288.935<br>5 | 0.4503    |     |     | 2,300.193<br>5 |  |
| Total    | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 2,288.935<br>5 | 2,288.935<br>5 | 0.4503    |     |     | 2,300.193<br>5 |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4      | N2O    | CO2e   |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|--------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |          |        |        |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000   | 0.0000 | 0.0000 |  |
| Vendor   | 0.0445 | 1.5260 | 0.3621 | 4.0800e-003 | 0.1024        | 3.0700e-003  | 0.1055     | 0.0295         | 2.9400e-003   | 0.0324      | 435.9016 | 435.9016  | 0.0264    | 436.5608 |        |        |  |
| Worker   | 0.1646 | 0.1068 | 1.4692 | 4.3300e-003 | 0.4359        | 3.2100e-003  | 0.4391     | 0.1156         | 2.9600e-003   | 0.1186      | 431.8873 | 431.8873  | 0.0116    | 432.1776 |        |        |  |
| Total    | 0.2092 | 1.6328 | 1.8313 | 8.4100e-003 | 0.5383        | 6.2800e-003  | 0.5446     | 0.1451         | 5.9000e-003   | 0.1510      | 867.7888 | 867.7888  | 0.0380    | 868.7384 |        |        |  |

**Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          | lb/day     |            |        |     |            |  |
| Off-Road | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 0.0000   | 2,288.9355 | 2,288.9355 | 0.4503 |     | 2,300.1935 |  |
| Total    | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 0.0000   | 2,288.9355 | 2,288.9355 | 0.4503 |     | 2,300.1935 |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4      | N2O    | CO2e   |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|--------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |          |        |        |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000   | 0.0000 | 0.0000 |  |
| Vendor   | 0.0445 | 1.5260 | 0.3621 | 4.0800e-003 | 0.1024        | 3.0700e-003  | 0.1055     | 0.0295         | 2.9400e-003   | 0.0324      | 435.9016 | 435.9016  | 0.0264    | 436.5608 |        |        |  |
| Worker   | 0.1646 | 0.1068 | 1.4692 | 4.3300e-003 | 0.4359        | 3.2100e-003  | 0.4391     | 0.1156         | 2.9600e-003   | 0.1186      | 431.8873 | 431.8873  | 0.0116    | 432.1776 |        |        |  |
| Total    | 0.2092 | 1.6328 | 1.8313 | 8.4100e-003 | 0.5383        | 6.2800e-003  | 0.5446     | 0.1451         | 5.9000e-003   | 0.1510      | 867.7888 | 867.7888  | 0.0380    | 868.7384 |        |        |  |

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2   | NBio- CO2  | Total CO2 | CH4        | N2O | CO2e |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|------------|------------|-----------|------------|-----|------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |            | lb/day     |           |            |     |      |  |
| Off-Road | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 2,289.2813 | 2,289.2813 | 0.4417    | 2,300.3230 |     |      |  |
| Total    | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 2,289.2813 | 2,289.2813 | 0.4417    | 2,300.3230 |     |      |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4      | N2O    | CO2e   |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|--------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |          |        |        |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000   | 0.0000 | 0.0000 |  |
| Vendor   | 0.0418 | 1.4485 | 0.3422 | 4.0400e-003 | 0.1024        | 2.6600e-003  | 0.1051     | 0.0295         | 2.5500e-003   | 0.0320      | 432.0946 | 432.0946  | 0.0254    | 432.7292 |        |        |  |
| Worker   | 0.1544 | 0.0965 | 1.3586 | 4.1800e-003 | 0.4359        | 3.1200e-003  | 0.4391     | 0.1156         | 2.8700e-003   | 0.1185      | 416.4123 | 416.4123  | 0.0105    | 416.6748 |        |        |  |
| Total    | 0.1962 | 1.5450 | 1.7008 | 8.2200e-003 | 0.5383        | 5.7800e-003  | 0.5441     | 0.1451         | 5.4200e-003   | 0.1505      | 848.5069 | 848.5069  | 0.0359    | 849.4040 |        |        |  |

**Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          | lb/day     |            |        |     |            |  |
| Off-Road | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 0.0000   | 2,289.2813 | 2,289.2813 | 0.4417 |     | 2,300.3230 |  |
| Total    | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 0.0000   | 2,289.2813 | 2,289.2813 | 0.4417 |     | 2,300.3230 |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4      | N2O    | CO2e   |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|--------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |          |        |        |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000   | 0.0000 | 0.0000 |  |
| Vendor   | 0.0418 | 1.4485 | 0.3422 | 4.0400e-003 | 0.1024        | 2.6600e-003  | 0.1051     | 0.0295         | 2.5500e-003   | 0.0320      | 432.0946 | 432.0946  | 0.0254    | 432.7292 |        |        |  |
| Worker   | 0.1544 | 0.0965 | 1.3586 | 4.1800e-003 | 0.4359        | 3.1200e-003  | 0.4391     | 0.1156         | 2.8700e-003   | 0.1185      | 416.4123 | 416.4123  | 0.0105    | 416.6748 |        |        |  |
| Total    | 0.1962 | 1.5450 | 1.7008 | 8.2200e-003 | 0.5383        | 5.7800e-003  | 0.5441     | 0.1451         | 5.4200e-003   | 0.1505      | 848.5069 | 848.5069  | 0.0359    | 849.4040 |        |        |  |

**3.5 Architectural Coating - 2021****Unmitigated Construction On-Site**

|                 | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |  |
|-----------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|--|
| Category        | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |        |     |          |  |
| Archit. Coating | 2.1927 |        |        |             |               |              | 0.0000     | 0.0000         |               | 0.0000      | 0.0000   |           | 0.0000    |        |     | 0.0000   |  |
| Off-Road        | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 |               | 0.0941       | 0.0941     |                | 0.0941        | 0.0941      |          | 281.4481  | 281.4481  | 0.0193 |     | 281.9309 |  |
| Total           | 2.4116 | 1.5268 | 1.8176 | 2.9700e-003 |               | 0.0941       | 0.0941     |                | 0.0941        | 0.0941      |          | 281.4481  | 281.4481  | 0.0193 |     | 281.9309 |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.5 Architectural Coating - 2021****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2      | Total CO2      | CH4                | N2O | CO2e           |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day         |                |                    |     |                |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |  |
| Worker   | 0.0338        | 0.0219        | 0.3014        | 8.9000e-004        | 0.0894        | 6.6000e-004        | 0.0901        | 0.0237         | 6.1000e-004        | 0.0243        |          | 88.5923        | 88.5923        | 2.3800e-003        |     | 88.6518        |  |
| Total    | <b>0.0338</b> | <b>0.0219</b> | <b>0.3014</b> | <b>8.9000e-004</b> | <b>0.0894</b> | <b>6.6000e-004</b> | <b>0.0901</b> | <b>0.0237</b>  | <b>6.1000e-004</b> | <b>0.0243</b> |          | <b>88.5923</b> | <b>88.5923</b> | <b>2.3800e-003</b> |     | <b>88.6518</b> |  |

**Mitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |  |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|--|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               |               | lb/day          |                 |               |     |                 |  |
| Archit. Coating | 2.1927        |               |               |                    |               |               | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |                 | 0.0000          |               |     | 0.0000          |  |
| Off-Road        | 0.2189        | 1.5268        | 1.8176        | 2.9700e-003        |               | 0.0941        | 0.0941        |                | 0.0941        | 0.0941        | 0.0000        | 281.4481        | 281.4481        | 0.0193        |     | 281.9309        |  |
| Total           | <b>2.4116</b> | <b>1.5268</b> | <b>1.8176</b> | <b>2.9700e-003</b> |               | <b>0.0941</b> | <b>0.0941</b> |                | <b>0.0941</b> | <b>0.0941</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0193</b> |     | <b>281.9309</b> |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.5 Architectural Coating - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |             |     |         |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Worker   | 0.0338 | 0.0219 | 0.3014 | 8.9000e-004 | 0.0894        | 6.6000e-004  | 0.0901     | 0.0237         | 6.1000e-004   | 0.0243      |          | 88.5923   | 88.5923   | 2.3800e-003 |     | 88.6518 |  |
| Total    | 0.0338 | 0.0219 | 0.3014 | 8.9000e-004 | 0.0894        | 6.6000e-004  | 0.0901     | 0.0237         | 6.1000e-004   | 0.0243      |          | 88.5923   | 88.5923   | 2.3800e-003 |     | 88.6518 |  |

**3.5 Architectural Coating - 2022****Unmitigated Construction On-Site**

|                 | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |  |
|-----------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|--|
| Category        | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |        |     |          |  |
| Archit. Coating | 2.1927 |        |        |             |               |              | 0.0000     | 0.0000         |               | 0.0000      | 0.0000   |           | 0.0000    |        |     | 0.0000   |  |
| Off-Road        | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 |               | 0.0817       | 0.0817     |                | 0.0817        | 0.0817      |          | 281.4481  | 281.4481  | 0.0183 |     | 281.9062 |  |
| Total           | 2.3973 | 1.4085 | 1.8136 | 2.9700e-003 |               | 0.0817       | 0.0817     |                | 0.0817        | 0.0817      |          | 281.4481  | 281.4481  | 0.0183 |     | 281.9062 |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.5 Architectural Coating - 2022****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2      | Total CO2      | CH4                | N2O | CO2e           |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day         |                |                    |     |                |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |  |
| Worker   | 0.0317        | 0.0198        | 0.2787        | 8.6000e-004        | 0.0894        | 6.4000e-004        | 0.0901        | 0.0237         | 5.9000e-004        | 0.0243        |          | 85.4179        | 85.4179        | 2.1500e-003        |     | 85.4717        |  |
| Total    | <b>0.0317</b> | <b>0.0198</b> | <b>0.2787</b> | <b>8.6000e-004</b> | <b>0.0894</b> | <b>6.4000e-004</b> | <b>0.0901</b> | <b>0.0237</b>  | <b>5.9000e-004</b> | <b>0.0243</b> |          | <b>85.4179</b> | <b>85.4179</b> | <b>2.1500e-003</b> |     | <b>85.4717</b> |  |

**Mitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |  |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|--|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               |               | lb/day          |                 |               |     |                 |  |
| Archit. Coating | 2.1927        |               |               |                    |               |               | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |                 | 0.0000          |               |     | 0.0000          |  |
| Off-Road        | 0.2045        | 1.4085        | 1.8136        | 2.9700e-003        |               | 0.0817        | 0.0817        |                | 0.0817        | 0.0817        | 0.0000        | 281.4481        | 281.4481        | 0.0183        |     | 281.9062        |  |
| Total           | <b>2.3973</b> | <b>1.4085</b> | <b>1.8136</b> | <b>2.9700e-003</b> |               | <b>0.0817</b> | <b>0.0817</b> |                | <b>0.0817</b> | <b>0.0817</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0183</b> |     | <b>281.9062</b> |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.5 Architectural Coating - 2022****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |             |     |         |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Worker   | 0.0317 | 0.0198 | 0.2787 | 8.6000e-004 | 0.0894        | 6.4000e-004  | 0.0901     | 0.0237         | 5.9000e-004   | 0.0243      |          | 85.4179   | 85.4179   | 2.1500e-003 |     | 85.4717 |  |
| Total    | 0.0317 | 0.0198 | 0.2787 | 8.6000e-004 | 0.0894        | 6.4000e-004  | 0.0901     | 0.0237         | 5.9000e-004   | 0.0243      |          | 85.4179   | 85.4179   | 2.1500e-003 |     | 85.4717 |  |

**3.6 Paving - 2021****Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|-----|----------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          | lb/day         |                |        |     |                |  |
| Off-Road | 1.0633 | 10.6478 | 11.7756 | 0.0178 |               | 0.5826       | 0.5826     |                | 0.5371        | 0.5371      |          | 1,709.110<br>7 | 1,709.110<br>7 | 0.5417 |     | 1,722.652<br>4 |  |
| Paving   | 0.0727 |         |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |                | 0.0000         |        |     | 0.0000         |  |
| Total    | 1.1360 | 10.6478 | 11.7756 | 0.0178 |               | 0.5826       | 0.5826     |                | 0.5371        | 0.5371      |          | 1,709.110<br>7 | 1,709.110<br>7 | 0.5417 |     | 1,722.652<br>4 |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.6 Paving - 2021****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |     |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Worker   | 0.0633        | 0.0411        | 0.5651        | 1.6700e-003        | 0.1677        | 1.2300e-003        | 0.1689        | 0.0445         | 1.1400e-003        | 0.0456        |          | 166.1105        | 166.1105        | 4.4700e-003        |     | 166.2222        |  |
| Total    | <b>0.0633</b> | <b>0.0411</b> | <b>0.5651</b> | <b>1.6700e-003</b> | <b>0.1677</b> | <b>1.2300e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1400e-003</b> | <b>0.0456</b> |          | <b>166.1105</b> | <b>166.1105</b> | <b>4.4700e-003</b> |     | <b>166.2222</b> |  |

**Mitigated Construction On-Site**

|          | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |  |
|----------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|--|
| Category | lb/day        |                |                |               |               |               |               |                |               |               |               | lb/day            |                   |               |     |                   |  |
| Off-Road | 1.0633        | 10.6478        | 11.7756        | 0.0178        |               | 0.5826        | 0.5826        |                | 0.5371        | 0.5371        | 0.0000        | 1,709.1107        | 1,709.1107        | 0.5417        |     | 1,722.6524        |  |
| Paving   | 0.0727        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               | 0.0000            | 0.0000            |               |     | 0.0000            |  |
| Total    | <b>1.1360</b> | <b>10.6478</b> | <b>11.7756</b> | <b>0.0178</b> |               | <b>0.5826</b> | <b>0.5826</b> |                | <b>0.5371</b> | <b>0.5371</b> | <b>0.0000</b> | <b>1,709.1107</b> | <b>1,709.1107</b> | <b>0.5417</b> |     | <b>1,722.6524</b> |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.6 Paving - 2021****Mitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |     |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Worker   | 0.0633        | 0.0411        | 0.5651        | 1.6700e-003        | 0.1677        | 1.2300e-003        | 0.1689        | 0.0445         | 1.1400e-003        | 0.0456        |          | 166.1105        | 166.1105        | 4.4700e-003        |     | 166.2222        |  |
| Total    | <b>0.0633</b> | <b>0.0411</b> | <b>0.5651</b> | <b>1.6700e-003</b> | <b>0.1677</b> | <b>1.2300e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1400e-003</b> | <b>0.0456</b> |          | <b>166.1105</b> | <b>166.1105</b> | <b>4.4700e-003</b> |     | <b>166.2222</b> |  |

**3.6 Paving - 2022****Unmitigated Construction On-Site**

|          | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|----------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road | 0.9412        | 9.3322        | 11.6970        | 0.0179        |               | 0.4879        | 0.4879        |                | 0.4500        | 0.4500        |          | 1,709.6892        | 1,709.6892        | 0.5419        |     | 1,723.2356        |
| Paving   | 0.0727        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            |               |     | 0.0000            |
| Total    | <b>1.0139</b> | <b>9.3322</b> | <b>11.6970</b> | <b>0.0179</b> |               | <b>0.4879</b> | <b>0.4879</b> |                | <b>0.4500</b> | <b>0.4500</b> |          | <b>1,709.6892</b> | <b>1,709.6892</b> | <b>0.5419</b> |     | <b>1,723.2356</b> |

## West Grove Center - South Coast AQMD Air District, Summer

**3.6 Paving - 2022****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|--|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |     |                 |  |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Worker       | 0.0594        | 0.0371        | 0.5225        | 1.6100e-003        | 0.1677        | 1.2000e-003        | 0.1689        | 0.0445         | 1.1000e-003        | 0.0456        |          | 160.1586        | 160.1586        | 4.0400e-003        |     | 160.2595        |  |
| <b>Total</b> | <b>0.0594</b> | <b>0.0371</b> | <b>0.5225</b> | <b>1.6100e-003</b> | <b>0.1677</b> | <b>1.2000e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1000e-003</b> | <b>0.0456</b> |          | <b>160.1586</b> | <b>160.1586</b> | <b>4.0400e-003</b> |     | <b>160.2595</b> |  |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |  |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|--|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               |               | lb/day            |                   |               |     |                   |  |
| Off-Road     | 0.9412        | 9.3322        | 11.6970        | 0.0179        |               | 0.4879        | 0.4879        |                | 0.4500        | 0.4500        | 0.0000        | 1,709.6892        | 1,709.6892        | 0.5419        |     | 1,723.2356        |  |
| Paving       | 0.0727        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               | 0.0000            | 0.0000            |               |     | 0.0000            |  |
| <b>Total</b> | <b>1.0139</b> | <b>9.3322</b> | <b>11.6970</b> | <b>0.0179</b> |               | <b>0.4879</b> | <b>0.4879</b> |                | <b>0.4500</b> | <b>0.4500</b> | <b>0.0000</b> | <b>1,709.6892</b> | <b>1,709.6892</b> | <b>0.5419</b> |     | <b>1,723.2356</b> |  |

## West Grove Center - South Coast AQMD Air District, Summer

**3.6 Paving - 2022****Mitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O    | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |        |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Worker   | 0.0594        | 0.0371        | 0.5225        | 1.6100e-003        | 0.1677        | 1.2000e-003        | 0.1689        | 0.0445         | 1.1000e-003        | 0.0456        | 160.1586 | 160.1586        | 4.0400e-003     |                    |        | 160.2595        |  |
| Total    | <b>0.0594</b> | <b>0.0371</b> | <b>0.5225</b> | <b>1.6100e-003</b> | <b>0.1677</b> | <b>1.2000e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1000e-003</b> | <b>0.0456</b> |          | <b>160.1586</b> | <b>160.1586</b> | <b>4.0400e-003</b> |        | <b>160.2595</b> |  |

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## West Grove Center - South Coast AQMD Air District, Summer

|             | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2        | NBio- CO2       | Total CO2 | CH4 | N2O             | CO2e |  |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------------|-----------------|-----------|-----|-----------------|------|--|
| Category    | lb/day |         |         |        |               |              |            |                |               |             |                 |                 | lb/day    |     |                 |      |  |
| Mitigated   | 9.7314 | 41.9991 | 61.9197 | 0.1840 | 12.1991       | 0.1521       | 12.3512    | 3.2640         | 0.1416        | 3.4056      | 18,831.24<br>11 | 18,831.24<br>11 | 1.2134    |     | 18,861.57<br>63 |      |  |
| Unmitigated | 9.7314 | 41.9991 | 61.9197 | 0.1840 | 12.1991       | 0.1521       | 12.3512    | 3.2640         | 0.1416        | 3.4056      | 18,831.24<br>11 | 18,831.24<br>11 | 1.2134    |     | 18,861.57<br>63 |      |  |

**4.2 Trip Summary Information**

| Land Use                             | Average Daily Trip Rate |          |          | Unmitigated |            | Mitigated  |            |
|--------------------------------------|-------------------------|----------|----------|-------------|------------|------------|------------|
|                                      | Weekday                 | Saturday | Sunday   | Annual VMT  | Annual VMT | Annual VMT | Annual VMT |
| Fast Food Restaurant w/o Drive Thru  | 1,921.23                | 3,862.10 | 2774.50  | 1,819,987   |            | 1,819,987  |            |
| Fast Food Restaurant with Drive Thru | 2,424.98                | 2,424.98 | 2424.98  | 1,218,961   |            | 1,218,961  |            |
| Other Non-Asphalt Surfaces           | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Parking Lot                          | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Supermarket                          | 1,307.52                | 2,174.96 | 2038.43  | 1,051,394   |            | 1,051,394  |            |
| Total                                | 5,653.74                | 8,462.04 | 7,237.91 | 4,090,342   |            | 4,090,342  |            |

**4.3 Trip Type Information**

| Land Use                        | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|---------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                 | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Fast Food Restaurant w/o Drive  | 16.60      | 3.30       | 3.60        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| Fast Food Restaurant with Drive | 16.60      | 3.60       | 3.60        | 2.20       | 78.80      | 19.00       | 29             | 21       | 50      |
| Other Non-Asphalt Surfaces      | 16.60      | 3.60       | 3.60        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Parking Lot                     | 16.60      | 3.60       | 3.60        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Supermarket                     | 16.60      | 3.60       | 3.60        | 6.50       | 74.50      | 19.00       | 34             | 30       | 36      |

## West Grove Center - South Coast AQMD Air District, Summer

**4.4 Fleet Mix**

| Land Use                             | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Fast Food Restaurant w/o Drive Thru  | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Fast Food Restaurant with Drive Thru | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Other Non-Asphalt Surfaces           | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Parking Lot                          | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Supermarket                          | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                        | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O      | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|----------|------|
| Category               | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |          |      |
| NaturalGas Mitigated   | 0.0780 | 0.7094 | 0.5959 | 4.2600e-003 |               | 0.0539       | 0.0539     |                | 0.0539        | 0.0539      | 851.2520 | 851.2520  | 0.0163    | 0.0156 | 856.3105 |      |
| NaturalGas Unmitigated | 0.0780 | 0.7094 | 0.5959 | 4.2600e-003 |               | 0.0539       | 0.0539     |                | 0.0539        | 0.0539      | 851.2520 | 851.2520  | 0.0163    | 0.0156 | 856.3105 |      |

## West Grove Center - South Coast AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

|                                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use                             | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Fast Food Restaurant w/o Drive Thru  | 3942.37        | 0.0425        | 0.3865        | 0.3247        | 2.3200e-003        |               | 0.0294        | 0.0294        |                | 0.0294        | 0.0294        | 463.8088 | 463.8088        | 8.8900e-003     | 8.5000e-003   | 466.5649      |                 |
| Fast Food Restaurant with Drive Thru | 2603.86        | 0.0281        | 0.2553        | 0.2144        | 1.5300e-003        |               | 0.0194        | 0.0194        |                | 0.0194        | 0.0194        | 306.3361 | 306.3361        | 5.8700e-003     | 5.6200e-003   | 308.1565      |                 |
| Other Non-Asphalt Surfaces           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000        |                 |
| Parking Lot                          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000        |                 |
| Supermarket                          | 689.41         | 7.4300e-003   | 0.0676        | 0.0568        | 4.1000e-004        |               | 5.1400e-003   | 5.1400e-003   |                | 5.1400e-003   | 5.1400e-003   | 81.1071  | 81.1071         | 1.5500e-003     | 1.4900e-003   | 81.5891       |                 |
| <b>Total</b>                         |                | <b>0.0780</b> | <b>0.7094</b> | <b>0.5959</b> | <b>4.2600e-003</b> |               | <b>0.0539</b> | <b>0.0539</b> |                | <b>0.0539</b> | <b>0.0539</b> |          | <b>851.2520</b> | <b>851.2520</b> | <b>0.0163</b> | <b>0.0156</b> | <b>856.3105</b> |

## West Grove Center - South Coast AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas****Mitigated**

|                                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use                             | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Fast Food Restaurant w/o Drive Thru  | 3.94237        | 0.0425        | 0.3865        | 0.3247        | 2.3200e-003        |               | 0.0294        | 0.0294        |                | 0.0294        | 0.0294        | 463.8088 | 463.8088        | 8.8900e-003     | 8.5000e-003   | 466.5649      |                 |
| Fast Food Restaurant with Drive Thru | 2.60386        | 0.0281        | 0.2553        | 0.2144        | 1.5300e-003        |               | 0.0194        | 0.0194        |                | 0.0194        | 0.0194        | 306.3361 | 306.3361        | 5.8700e-003     | 5.6200e-003   | 308.1565      |                 |
| Other Non-Asphalt Surfaces           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000        |                 |
| Parking Lot                          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000        |                 |
| Supermarket                          | 0.68941        | 7.4300e-003   | 0.0676        | 0.0568        | 4.1000e-004        |               | 5.1400e-003   | 5.1400e-003   |                | 5.1400e-003   | 5.1400e-003   | 81.1071  | 81.1071         | 1.5500e-003     | 1.4900e-003   | 81.5891       |                 |
| <b>Total</b>                         |                | <b>0.0780</b> | <b>0.7094</b> | <b>0.5959</b> | <b>4.2600e-003</b> |               | <b>0.0539</b> | <b>0.0539</b> |                | <b>0.0539</b> | <b>0.0539</b> |          | <b>851.2520</b> | <b>851.2520</b> | <b>0.0163</b> | <b>0.0156</b> | <b>856.3105</b> |

**6.0 Area Detail****6.1 Mitigation Measures Area**

## West Grove Center - South Coast AQMD Air District, Summer

|             | ROG    | NOx         | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e   |  |
|-------------|--------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|--|
| Category    | lb/day |             |        |        |               |              |             |                |               |             |          | lb/day    |           |             |     |        |  |
| Mitigated   | 0.5123 | 1.4000e-004 | 0.0148 | 0.0000 |               | 5.0000e-005  | 5.0000e-005 |                | 5.0000e-005   | 5.0000e-005 |          | 0.0317    | 0.0317    | 8.0000e-005 |     | 0.0338 |  |
| Unmitigated | 0.5123 | 1.4000e-004 | 0.0148 | 0.0000 |               | 5.0000e-005  | 5.0000e-005 |                | 5.0000e-005   | 5.0000e-005 |          | 0.0317    | 0.0317    | 8.0000e-005 |     | 0.0338 |  |

**6.2 Area by SubCategory****Unmitigated**

|                       | ROG           | NOx                | CO            | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O | CO2e          |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory           | lb/day        |                    |               |               |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |     |               |
| Architectural Coating | 0.0601        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 0.4508        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 1.3800e-003   | 1.4000e-004        | 0.0148        | 0.0000        |               | 5.0000e-005        | 5.0000e-005        |                | 5.0000e-005        | 5.0000e-005        |          | 0.0317        | 0.0317        | 8.0000e-005        |     | 0.0338        |
| <b>Total</b>          | <b>0.5123</b> | <b>1.4000e-004</b> | <b>0.0148</b> | <b>0.0000</b> |               | <b>5.0000e-005</b> | <b>5.0000e-005</b> |                | <b>5.0000e-005</b> | <b>5.0000e-005</b> |          | <b>0.0317</b> | <b>0.0317</b> | <b>8.0000e-005</b> |     | <b>0.0338</b> |

## West Grove Center - South Coast AQMD Air District, Summer

**6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx                | CO            | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O | CO2e          |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory           | lb/day        |                    |               |               |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |     |               |
| Architectural Coating | 0.0601        |                    |               |               |               |                    | 0.0000             | 0.0000         |                    | 0.0000             | 0.0000   |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 0.4508        |                    |               |               |               |                    | 0.0000             | 0.0000         |                    | 0.0000             | 0.0000   |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 1.3800e-003   | 1.4000e-004        | 0.0148        | 0.0000        |               | 5.0000e-005        | 5.0000e-005        |                | 5.0000e-005        | 5.0000e-005        |          | 0.0317        | 0.0317        | 8.0000e-005        |     | 0.0338        |
| <b>Total</b>          | <b>0.5123</b> | <b>1.4000e-004</b> | <b>0.0148</b> | <b>0.0000</b> |               | <b>5.0000e-005</b> | <b>5.0000e-005</b> |                | <b>5.0000e-005</b> | <b>5.0000e-005</b> |          | <b>0.0317</b> | <b>0.0317</b> | <b>8.0000e-005</b> |     | <b>0.0338</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## West Grove Center - South Coast AQMD Air District, Summer

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

**User Defined Equipment**

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

**11.0 Vegetation**

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## West Grove Center - South Coast AQMD Air District, Winter

**West Grove Center**  
**South Coast AQMD Air District, Winter**

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                            | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------------------------|--------|----------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces           | 0.55   | Acre     | 0.55        | 23,958.00          | 0          |
| Parking Lot                          | 123.00 | Space    | 1.11        | 49,200.00          | 0          |
| Fast Food Restaurant w/o Drive Thru  | 5.55   | 1000sqft | 0.13        | 5,549.00           | 0          |
| Fast Food Restaurant with Drive Thru | 3.67   | 1000sqft | 0.08        | 3,665.00           | 0          |
| Supermarket                          | 12.25  | 1000sqft | 0.28        | 12,245.00          | 0          |

**1.2 Other Project Characteristics**

|                            |                            |                            |       |                            |       |
|----------------------------|----------------------------|----------------------------|-------|----------------------------|-------|
| Urbanization               | Urban                      | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 31    |
| Climate Zone               | 8                          |                            |       | Operational Year           | 2022  |
| Utility Company            | Southern California Edison |                            |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 702.44                     | CH4 Intensity<br>(lb/MWhr) | 0.029 | N2O Intensity<br>(lb/MWhr) | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

## West Grove Center - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use -

Construction Phase - Approximate 9 month construction schedule.

Off-road Equipment -

Off-road Equipment - Crawler Tractors Used in Lieu of Tractor/Loaders/Backhoes as a conservative measure.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Demolition -

Vehicle Trips - ITE Trip Generation Rates from Traffic Study and ITE 10th Edition

Construction Off-road Equipment Mitigation -

| Table Name           | Column Name    | Default Value | New Value |
|----------------------|----------------|---------------|-----------|
| tblConstructionPhase | NumDays        | 20.00         | 59.00     |
| tblConstructionPhase | NumDays        | 220.00        | 111.00    |
| tblConstructionPhase | NumDays        | 10.00         | 100.00    |
| tblConstructionPhase | NumDays        | 10.00         | 40.00     |
| tblConstructionPhase | PhaseEndDate   | 6/28/2021     | 8/22/2021 |
| tblConstructionPhase | PhaseEndDate   | 7/6/2021      | 8/30/2021 |
| tblConstructionPhase | PhaseEndDate   | 5/10/2022     | 2/1/2022  |
| tblConstructionPhase | PhaseEndDate   | 6/7/2022      | 2/17/2022 |
| tblConstructionPhase | PhaseEndDate   | 5/24/2022     | 1/25/2022 |
| tblConstructionPhase | PhaseStartDate | 6/29/2021     | 8/23/2021 |
| tblConstructionPhase | PhaseStartDate | 7/7/2021      | 8/31/2021 |
| tblConstructionPhase | PhaseStartDate | 5/25/2022     | 10/1/2021 |
| tblConstructionPhase | PhaseStartDate | 5/11/2022     | 12/1/2021 |

## West Grove Center - South Coast AQMD Air District, Winter

| tblOffRoadEquipment | OffRoadEquipmentType       |        | Crawler Tractors |
|---------------------|----------------------------|--------|------------------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00   | 0.00             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.30             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | ST_TR                      | 722.03 | 661.66           |
| tblVehicleTrips     | ST_TR                      | 177.59 | 177.62           |
| tblVehicleTrips     | SU_TR                      | 542.72 | 661.66           |
| tblVehicleTrips     | SU_TR                      | 166.44 | 166.47           |
| tblVehicleTrips     | WD_TR                      | 716.00 | 346.23           |
| tblVehicleTrips     | WD_TR                      | 496.12 | 661.66           |
| tblVehicleTrips     | WD_TR                      | 102.24 | 106.78           |

**2.0 Emissions Summary**

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## West Grove Center - South Coast AQMD Air District, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2021    | 5.9255 | 30.8620 | 30.6603 | 0.0562 | 7.7246        | 1.5022       | 8.9699     | 3.5116         | 1.4220        | 4.6573      | 0.0000   | 5,344.888<br>7 | 5,344.888<br>7 | 1.0568 | 0.0000 | 5,371.309<br>5 |
| 2022    | 5.5795 | 26.9552 | 30.1844 | 0.0560 | 0.7954        | 1.2795       | 2.0749     | 0.2133         | 1.2120        | 1.4252      | 0.0000   | 5,319.022<br>0 | 5,319.022<br>0 | 1.0446 | 0.0000 | 5,345.137<br>8 |
| Maximum | 5.9255 | 30.8620 | 30.6603 | 0.0562 | 7.7246        | 1.5022       | 8.9699     | 3.5116         | 1.4220        | 4.6573      | 0.0000   | 5,344.888<br>7 | 5,344.888<br>7 | 1.0568 | 0.0000 | 5,371.309<br>5 |

**Mitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2021    | 5.9255 | 30.8620 | 30.6603 | 0.0562 | 3.0808        | 1.5022       | 4.3261     | 1.3876         | 1.4220        | 2.5333      | 0.0000   | 5,344.888<br>7 | 5,344.888<br>7 | 1.0568 | 0.0000 | 5,371.309<br>5 |
| 2022    | 5.5795 | 26.9552 | 30.1844 | 0.0560 | 0.7954        | 1.2795       | 2.0749     | 0.2133         | 1.2120        | 1.4252      | 0.0000   | 5,319.022<br>0 | 5,319.022<br>0 | 1.0446 | 0.0000 | 5,345.137<br>8 |
| Maximum | 5.9255 | 30.8620 | 30.6603 | 0.0562 | 3.0808        | 1.5022       | 4.3261     | 1.3876         | 1.4220        | 2.5333      | 0.0000   | 5,344.888<br>7 | 5,344.888<br>7 | 1.0568 | 0.0000 | 5,371.309<br>5 |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 54.50         | 0.00         | 42.05      | 57.02          | 0.00          | 34.92       | 0.00     | 0.00      | 0.00      | 0.00 | 0.00 | 0.00 |

## West Grove Center - South Coast AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2                | NBio- CO2               | Total CO2     | CH4           | N2O                     | CO2e            |  |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|-----------------|--|
| Category     | lb/day        |                |                |               |                |               |                |                |               |               |                         | lb/day                  |               |               |                         |                 |  |
| Area         | 0.5123        | 1.4000e-004    | 0.0148         | 0.0000        |                | 5.0000e-005   | 5.0000e-005    |                | 5.0000e-005   | 5.0000e-005   | 0.0317                  | 0.0317                  | 8.0000e-005   |               |                         | 0.0338          |  |
| Energy       | 0.0780        | 0.7094         | 0.5959         | 4.2600e-003   |                | 0.0539        | 0.0539         |                | 0.0539        | 0.0539        | 851.2520                | 851.2520                | 0.0163        | 0.0156        |                         | 856.3105        |  |
| Mobile       | 9.1486        | 41.6000        | 63.9292        | 0.1728        | 12.1991        | 0.1553        | 12.3543        | 3.2640         | 0.1447        | 3.4087        | 17,669.64<br>04         | 17,669.64<br>04         | 1.2815        |               |                         | 17,701.67<br>69 |  |
| <b>Total</b> | <b>9.7388</b> | <b>42.3095</b> | <b>64.5399</b> | <b>0.1770</b> | <b>12.1991</b> | <b>0.2092</b> | <b>12.4083</b> | <b>3.2640</b>  | <b>0.1986</b> | <b>3.4626</b> | <b>18,520.92<br/>41</b> | <b>18,520.92<br/>41</b> | <b>1.2979</b> | <b>0.0156</b> | <b>18,558.02<br/>13</b> |                 |  |

**Mitigated Operational**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2                | NBio- CO2               | Total CO2     | CH4           | N2O                     | CO2e            |  |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|-----------------|--|
| Category     | lb/day        |                |                |               |                |               |                |                |               |               |                         | lb/day                  |               |               |                         |                 |  |
| Area         | 0.5123        | 1.4000e-004    | 0.0148         | 0.0000        |                | 5.0000e-005   | 5.0000e-005    |                | 5.0000e-005   | 5.0000e-005   | 0.0317                  | 0.0317                  | 8.0000e-005   |               |                         | 0.0338          |  |
| Energy       | 0.0780        | 0.7094         | 0.5959         | 4.2600e-003   |                | 0.0539        | 0.0539         |                | 0.0539        | 0.0539        | 851.2520                | 851.2520                | 0.0163        | 0.0156        |                         | 856.3105        |  |
| Mobile       | 9.1486        | 41.6000        | 63.9292        | 0.1728        | 12.1991        | 0.1553        | 12.3543        | 3.2640         | 0.1447        | 3.4087        | 17,669.64<br>04         | 17,669.64<br>04         | 1.2815        |               |                         | 17,701.67<br>69 |  |
| <b>Total</b> | <b>9.7388</b> | <b>42.3095</b> | <b>64.5399</b> | <b>0.1770</b> | <b>12.1991</b> | <b>0.2092</b> | <b>12.4083</b> | <b>3.2640</b>  | <b>0.1986</b> | <b>3.4626</b> | <b>18,520.92<br/>41</b> | <b>18,520.92<br/>41</b> | <b>1.2979</b> | <b>0.0156</b> | <b>18,558.02<br/>13</b> |                 |  |

## West Grove Center - South Coast AQMD Air District, Winter

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 6/1/2021   | 8/22/2021 | 5             | 59       |                   |
| 2            | Grading               | Grading               | 8/23/2021  | 8/30/2021 | 5             | 6        |                   |
| 3            | Building Construction | Building Construction | 8/31/2021  | 2/1/2022  | 5             | 111      |                   |
| 4            | Architectural Coating | Architectural Coating | 10/1/2021  | 2/17/2022 | 5             | 100      |                   |
| 5            | Paving                | Paving                | 12/1/2021  | 1/25/2022 | 5             | 40       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 9

Acres of Paving: 1.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,189; Non-Residential Outdoor: 10,730; Striped Parking Area: 4,389 (Architectural Coating – sqft)

#### OffRoad Equipment

## West Grove Center - South Coast AQMD Air District, Winter

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |
| Paving                | Cement and Mortar Mixers  | 1      | 8.00        | 9           | 0.56        |
| Demolition            | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Building Construction | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 2      | 7.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Paving                | Pavers                    | 1      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 1      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Demolition            | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Building Construction | Tractors/Loaders/Backhoes | 1      | 6.00        | 97          | 0.37        |
| Demolition            | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading               | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Paving                | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |
| Building Construction | Welders                   | 3      | 8.00        | 46          | 0.45        |
| Grading               | Crawler Tractors          | 2      | 8.00        | 212         | 0.43        |

Trips and VMT

## West Grove Center - South Coast AQMD Air District, Winter

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 5                       | 13.00              | 0.00               | 82.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 4                       | 10.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 8                       | 39.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 8.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Demolition - 2021****Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2       | NBio- CO2      | Total CO2 | CH4 | N2O | CO2e           |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|-----------|-----|-----|----------------|
| Category      | lb/day |         |         |        |               |              |            |                |               |             | lb/day         |                |           |     |     |                |
| Fugitive Dust |        |         |         |        | 0.3003        | 0.0000       | 0.3003     | 0.0455         | 0.0000        | 0.0455      |                |                | 0.0000    |     |     | 0.0000         |
| Off-Road      | 1.9930 | 19.6966 | 14.4925 | 0.0241 |               | 1.0409       | 1.0409     |                | 0.9715        | 0.9715      | 2,322.717<br>1 | 2,322.717<br>1 | 0.5940    |     |     | 2,337.565<br>8 |
| Total         | 1.9930 | 19.6966 | 14.4925 | 0.0241 | 0.3003        | 1.0409       | 1.3412     | 0.0455         | 0.9715        | 1.0169      | 2,322.717<br>1 | 2,322.717<br>1 | 0.5940    |     |     | 2,337.565<br>8 |

## West Grove Center - South Coast AQMD Air District, Winter

**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O    | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|--------|-----------------|--|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |               |        |                 |  |
| Hauling      | 0.0104        | 0.3558        | 0.0799        | 1.0500e-003        | 0.0243        | 1.1100e-003        | 0.0254        | 6.6600e-003    | 1.0600e-003        | 7.7100e-003   | 113.1594 | 113.1594        | 8.0200e-003     |               |        | 113.3598        |  |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000 | 0.0000          |  |
| Worker       | 0.0600        | 0.0390        | 0.4401        | 1.3500e-003        | 0.1453        | 1.0700e-003        | 0.1464        | 0.0385         | 9.9000e-004        | 0.0395        | 134.6368 | 134.6368        | 3.6100e-003     |               |        | 134.7270        |  |
| <b>Total</b> | <b>0.0703</b> | <b>0.3948</b> | <b>0.5200</b> | <b>2.4000e-003</b> | <b>0.1696</b> | <b>2.1800e-003</b> | <b>0.1718</b> | <b>0.0452</b>  | <b>2.0500e-003</b> | <b>0.0472</b> |          | <b>247.7962</b> | <b>247.7962</b> | <b>0.0116</b> |        | <b>248.0868</b> |  |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.1171        | 0.0000        | 0.1171        | 0.0177         | 0.0000        | 0.0177        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.9930        | 19.6966        | 14.4925        | 0.0241        |               | 1.0409        | 1.0409        |                | 0.9715        | 0.9715        | 0.0000        | 2,322.7171        | 2,322.7171        | 0.5940        |     | 2,337.5658        |
| <b>Total</b>  | <b>1.9930</b> | <b>19.6966</b> | <b>14.4925</b> | <b>0.0241</b> | <b>0.1171</b> | <b>1.0409</b> | <b>1.1580</b> | <b>0.0177</b>  | <b>0.9715</b> | <b>0.9892</b> | <b>0.0000</b> | <b>2,322.7171</b> | <b>2,322.7171</b> | <b>0.5940</b> |     | <b>2,337.5658</b> |

## West Grove Center - South Coast AQMD Air District, Winter

**3.2 Demolition - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4    | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|--------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |        |        |          |  |
| Hauling  | 0.0104 | 0.3558 | 0.0799 | 1.0500e-003 | 0.0243        | 1.1100e-003  | 0.0254     | 6.6600e-003    | 1.0600e-003   | 7.7100e-003 | 113.1594 | 113.1594  | 8.0200e-003 |        |        | 113.3598 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000 | 0.0000 | 0.0000   |  |
| Worker   | 0.0600 | 0.0390 | 0.4401 | 1.3500e-003 | 0.1453        | 1.0700e-003  | 0.1464     | 0.0385         | 9.9000e-004   | 0.0395      | 134.6368 | 134.6368  | 3.6100e-003 |        |        | 134.7270 |  |
| Total    | 0.0703 | 0.3948 | 0.5200 | 2.4000e-003 | 0.1696        | 2.1800e-003  | 0.1718     | 0.0452         | 2.0500e-003   | 0.0472      |          | 247.7962  | 247.7962    | 0.0116 |        | 248.0868 |  |

**3.3 Grading - 2021****Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2       | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|----------------|--------|-----|----------------|
| Category      | lb/day |         |         |        |               |              |            |                |               |             | lb/day         |                |                |        |     |                |
| Fugitive Dust |        |         |         |        | 7.6128        | 0.0000       | 7.6128     | 3.4820         | 0.0000        | 3.4820      |                | 0.0000         |                |        |     | 0.0000         |
| Off-Road      | 2.6012 | 30.8320 | 10.6751 | 0.0309 |               | 1.2445       | 1.2445     |                | 1.1449        | 1.1449      | 2,989.760<br>4 | 2,989.760<br>4 | 0.9670         |        |     | 3,013.934<br>1 |
| Total         | 2.6012 | 30.8320 | 10.6751 | 0.0309 | 7.6128        | 1.2445       | 8.8573     | 3.4820         | 1.1449        | 4.6269      |                | 2,989.760<br>4 | 2,989.760<br>4 | 0.9670 |     | 3,013.934<br>1 |

## West Grove Center - South Coast AQMD Air District, Winter

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |     |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Worker   | 0.0461        | 0.0300        | 0.3385        | 1.0400e-003        | 0.1118        | 8.2000e-004        | 0.1126        | 0.0296         | 7.6000e-004        | 0.0304        |          | 103.5668        | 103.5668        | 2.7800e-003        |     | 103.6362        |  |
| Total    | <b>0.0461</b> | <b>0.0300</b> | <b>0.3385</b> | <b>1.0400e-003</b> | <b>0.1118</b> | <b>8.2000e-004</b> | <b>0.1126</b> | <b>0.0296</b>  | <b>7.6000e-004</b> | <b>0.0304</b> |          | <b>103.5668</b> | <b>103.5668</b> | <b>2.7800e-003</b> |     | <b>103.6362</b> |  |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |  |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|--|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               |               | lb/day            |                   |               |     |                   |  |
| Fugitive Dust |               |                |                |               | 2.9690        | 0.0000        | 2.9690        | 1.3580         | 0.0000        | 1.3580        |               | 0.0000            |                   |               |     | 0.0000            |  |
| Off-Road      | 2.6012        | 30.8320        | 10.6751        | 0.0309        |               | 1.2445        | 1.2445        |                | 1.1449        | 1.1449        | 0.0000        | 2,989.7604        | 2,989.7604        | 0.9670        |     | 3,013.9341        |  |
| Total         | <b>2.6012</b> | <b>30.8320</b> | <b>10.6751</b> | <b>0.0309</b> | <b>2.9690</b> | <b>1.2445</b> | <b>4.2135</b> | <b>1.3580</b>  | <b>1.1449</b> | <b>2.5029</b> | <b>0.0000</b> | <b>2,989.7604</b> | <b>2,989.7604</b> | <b>0.9670</b> |     | <b>3,013.9341</b> |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.3 Grading - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4         | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|-------------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |             |        |          |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000 | 0.0000   |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000 | 0.0000   |  |
| Worker   | 0.0461 | 0.0300 | 0.3385 | 1.0400e-003 | 0.1118        | 8.2000e-004  | 0.1126     | 0.0296         | 7.6000e-004   | 0.0304      | 103.5668 | 103.5668  | 2.7800e-003 | 103.6362    |        |          |  |
| Total    | 0.0461 | 0.0300 | 0.3385 | 1.0400e-003 | 0.1118        | 8.2000e-004  | 0.1126     | 0.0296         | 7.6000e-004   | 0.0304      |          | 103.5668  | 103.5668    | 2.7800e-003 |        | 103.6362 |  |

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2       | NBio- CO2      | Total CO2 | CH4 | N2O | CO2e           |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|-----------|-----|-----|----------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |                | lb/day         |           |     |     |                |  |
| Off-Road | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 2,288.935<br>5 | 2,288.935<br>5 | 0.4503    |     |     | 2,300.193<br>5 |  |
| Total    | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 2,288.935<br>5 | 2,288.935<br>5 | 0.4503    |     |     | 2,300.193<br>5 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4      | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |          |        |          |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000   | 0.0000 | 0.0000   |  |
| Vendor   | 0.0469 | 1.5212 | 0.4052 | 3.9700e-003 | 0.1024        | 3.1700e-003  | 0.1056     | 0.0295         | 3.0300e-003   | 0.0325      | 423.2803 | 423.2803  | 0.0283    | 423.9883 |        |          |  |
| Worker   | 0.1799 | 0.1169 | 1.3203 | 4.0500e-003 | 0.4359        | 3.2100e-003  | 0.4391     | 0.1156         | 2.9600e-003   | 0.1186      | 403.9105 | 403.9105  | 0.0108    | 404.1811 |        |          |  |
| Total    | 0.2267 | 1.6381 | 1.7255 | 8.0200e-003 | 0.5383        | 6.3800e-003  | 0.5447     | 0.1451         | 5.9900e-003   | 0.1511      |          | 827.1908  | 827.1908  | 0.0391   |        | 828.1694 |  |

**Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          | lb/day     |            |        |     |            |  |
| Off-Road | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 0.0000   | 2,288.9355 | 2,288.9355 | 0.4503 |     | 2,300.1935 |  |
| Total    | 2.0451 | 16.0275 | 14.5629 | 0.0250 |               | 0.8173       | 0.8173     |                | 0.7831        | 0.7831      | 0.0000   | 2,288.9355 | 2,288.9355 | 0.4503 |     | 2,300.1935 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4      | N2O    | CO2e   |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|--------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |          |        |        |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000   | 0.0000 | 0.0000 |  |
| Vendor   | 0.0469 | 1.5212 | 0.4052 | 3.9700e-003 | 0.1024        | 3.1700e-003  | 0.1056     | 0.0295         | 3.0300e-003   | 0.0325      | 423.2803 | 423.2803  | 0.0283    | 423.9883 |        |        |  |
| Worker   | 0.1799 | 0.1169 | 1.3203 | 4.0500e-003 | 0.4359        | 3.2100e-003  | 0.4391     | 0.1156         | 2.9600e-003   | 0.1186      | 403.9105 | 403.9105  | 0.0108    | 404.1811 |        |        |  |
| Total    | 0.2267 | 1.6381 | 1.7255 | 8.0200e-003 | 0.5383        | 6.3800e-003  | 0.5447     | 0.1451         | 5.9900e-003   | 0.1511      | 827.1908 | 827.1908  | 0.0391    | 828.1694 |        |        |  |

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2   | NBio- CO2  | Total CO2 | CH4        | N2O | CO2e |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|------------|------------|-----------|------------|-----|------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |            | lb/day     |           |            |     |      |  |
| Off-Road | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 2,289.2813 | 2,289.2813 | 0.4417    | 2,300.3230 |     |      |  |
| Total    | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 2,289.2813 | 2,289.2813 | 0.4417    | 2,300.3230 |     |      |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4      | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|----------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |          |        |          |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000   | 0.0000 | 0.0000   |  |
| Vendor   | 0.0440 | 1.4427 | 0.3832 | 3.9300e-003 | 0.1024        | 2.7500e-003  | 0.1052     | 0.0295         | 2.6300e-003   | 0.0321      | 419.5108 | 419.5108  | 0.0272      | 420.1919 |        |          |  |
| Worker   | 0.1692 | 0.1056 | 1.2187 | 3.9100e-003 | 0.4359        | 3.1200e-003  | 0.4391     | 0.1156         | 2.8700e-003   | 0.1185      | 389.4292 | 389.4292  | 9.7800e-003 | 389.6736 |        |          |  |
| Total    | 0.2131 | 1.5483 | 1.6018 | 7.8400e-003 | 0.5383        | 5.8700e-003  | 0.5442     | 0.1451         | 5.5000e-003   | 0.1506      | 808.9400 | 808.9400  | 0.0370      |          |        | 809.8655 |  |

**Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          | lb/day     |            |        |     |            |  |
| Off-Road | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 0.0000   | 2,289.2813 | 2,289.2813 | 0.4417 |     | 2,300.3230 |  |
| Total    | 1.8555 | 14.6040 | 14.3533 | 0.0250 |               | 0.7022       | 0.7022     |                | 0.6731        | 0.6731      | 0.0000   | 2,289.2813 | 2,289.2813 | 0.4417 |     | 2,300.3230 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4      | N2O    | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|----------|--------|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |          |        |          |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000   | 0.0000 | 0.0000   |  |
| Vendor   | 0.0440 | 1.4427 | 0.3832 | 3.9300e-003 | 0.1024        | 2.7500e-003  | 0.1052     | 0.0295         | 2.6300e-003   | 0.0321      | 419.5108 | 419.5108  | 0.0272      | 420.1919 |        |          |  |
| Worker   | 0.1692 | 0.1056 | 1.2187 | 3.9100e-003 | 0.4359        | 3.1200e-003  | 0.4391     | 0.1156         | 2.8700e-003   | 0.1185      | 389.4292 | 389.4292  | 9.7800e-003 | 389.6736 |        |          |  |
| Total    | 0.2131 | 1.5483 | 1.6018 | 7.8400e-003 | 0.5383        | 5.8700e-003  | 0.5442     | 0.1451         | 5.5000e-003   | 0.1506      | 808.9400 | 808.9400  | 0.0370      |          |        | 809.8655 |  |

**3.5 Architectural Coating - 2021****Unmitigated Construction On-Site**

|                 | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e     |  |
|-----------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-----|-----|----------|--|
| Category        | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |     |     |          |  |
| Archit. Coating | 2.1927 |        |        |             |               |              | 0.0000     | 0.0000         |               | 0.0000      | 0.0000   | 0.0000    | 0.0000    |     |     | 0.0000   |  |
| Off-Road        | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 |               | 0.0941       | 0.0941     |                | 0.0941        | 0.0941      | 281.4481 | 281.4481  | 0.0193    |     |     | 281.9309 |  |
| Total           | 2.4116 | 1.5268 | 1.8176 | 2.9700e-003 |               | 0.0941       | 0.0941     |                | 0.0941        | 0.0941      | 281.4481 | 281.4481  | 0.0193    |     |     | 281.9309 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.5 Architectural Coating - 2021****Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2   | CH4     | N2O    | CO2e   |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-------------|---------|--------|--------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |             |         |        |        |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000  | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000  | 0.0000 | 0.0000 |  |
| Worker   | 0.0369 | 0.0240 | 0.2708 | 8.3000e-004 | 0.0894        | 6.6000e-004  | 0.0901     | 0.0237         | 6.1000e-004   | 0.0243      | 82.8534  | 82.8534   | 2.2200e-003 | 82.9089 |        |        |  |
| Total    | 0.0369 | 0.0240 | 0.2708 | 8.3000e-004 | 0.0894        | 6.6000e-004  | 0.0901     | 0.0237         | 6.1000e-004   | 0.0243      | 82.8534  | 82.8534   | 2.2200e-003 | 82.9089 |        |        |  |

**Mitigated Construction On-Site**

|                 | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |  |
|-----------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|--|
| Category        | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |        |     |          |  |
| Archit. Coating | 2.1927 |        |        |             |               |              | 0.0000     | 0.0000         |               | 0.0000      | 0.0000   | 0.0000    | 0.0000    |        |     | 0.0000   |  |
| Off-Road        | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 |               | 0.0941       | 0.0941     |                | 0.0941        | 0.0941      | 0.0000   | 281.4481  | 281.4481  | 0.0193 |     | 281.9309 |  |
| Total           | 2.4116 | 1.5268 | 1.8176 | 2.9700e-003 |               | 0.0941       | 0.0941     |                | 0.0941        | 0.0941      | 0.0000   | 281.4481  | 281.4481  | 0.0193 |     | 281.9309 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.5 Architectural Coating - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |             |     |         |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Worker   | 0.0369 | 0.0240 | 0.2708 | 8.3000e-004 | 0.0894        | 6.6000e-004  | 0.0901     | 0.0237         | 6.1000e-004   | 0.0243      |          | 82.8534   | 82.8534   | 2.2200e-003 |     | 82.9089 |  |
| Total    | 0.0369 | 0.0240 | 0.2708 | 8.3000e-004 | 0.0894        | 6.6000e-004  | 0.0901     | 0.0237         | 6.1000e-004   | 0.0243      |          | 82.8534   | 82.8534   | 2.2200e-003 |     | 82.9089 |  |

**3.5 Architectural Coating - 2022****Unmitigated Construction On-Site**

|                 | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |  |
|-----------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|--|
| Category        | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |        |     |          |  |
| Archit. Coating | 2.1927 |        |        |             |               |              | 0.0000     | 0.0000         |               | 0.0000      | 0.0000   |           | 0.0000    |        |     | 0.0000   |  |
| Off-Road        | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 |               | 0.0817       | 0.0817     |                | 0.0817        | 0.0817      |          | 281.4481  | 281.4481  | 0.0183 |     | 281.9062 |  |
| Total           | 2.3973 | 1.4085 | 1.8136 | 2.9700e-003 |               | 0.0817       | 0.0817     |                | 0.0817        | 0.0817      |          | 281.4481  | 281.4481  | 0.0183 |     | 281.9062 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.5 Architectural Coating - 2022****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2      | Total CO2      | CH4                | N2O | CO2e           |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|----------------|----------------|--------------------|-----|----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day         |                |                    |     |                |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000         | 0.0000         | 0.0000             |     | 0.0000         |  |
| Worker   | 0.0347        | 0.0217        | 0.2500        | 8.0000e-004        | 0.0894        | 6.4000e-004        | 0.0901        | 0.0237         | 5.9000e-004        | 0.0243        |          | 79.8829        | 79.8829        | 2.0100e-003        |     | 79.9331        |  |
| Total    | <b>0.0347</b> | <b>0.0217</b> | <b>0.2500</b> | <b>8.0000e-004</b> | <b>0.0894</b> | <b>6.4000e-004</b> | <b>0.0901</b> | <b>0.0237</b>  | <b>5.9000e-004</b> | <b>0.0243</b> |          | <b>79.8829</b> | <b>79.8829</b> | <b>2.0100e-003</b> |     | <b>79.9331</b> |  |

**Mitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |  |
|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|--|
| Category        | lb/day        |               |               |                    |               |               |               |                |               |               |               | lb/day          |                 |               |     |                 |  |
| Archit. Coating | 2.1927        |               |               |                    |               |               | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |                 | 0.0000          |               |     | 0.0000          |  |
| Off-Road        | 0.2045        | 1.4085        | 1.8136        | 2.9700e-003        |               | 0.0817        | 0.0817        |                | 0.0817        | 0.0817        | 0.0000        | 281.4481        | 281.4481        | 0.0183        |     | 281.9062        |  |
| Total           | <b>2.3973</b> | <b>1.4085</b> | <b>1.8136</b> | <b>2.9700e-003</b> |               | <b>0.0817</b> | <b>0.0817</b> |                | <b>0.0817</b> | <b>0.0817</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0183</b> |     | <b>281.9062</b> |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.5 Architectural Coating - 2022****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e    |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|---------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |             |     |         |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000  |  |
| Worker   | 0.0347 | 0.0217 | 0.2500 | 8.0000e-004 | 0.0894        | 6.4000e-004  | 0.0901     | 0.0237         | 5.9000e-004   | 0.0243      |          | 79.8829   | 79.8829   | 2.0100e-003 |     | 79.9331 |  |
| Total    | 0.0347 | 0.0217 | 0.2500 | 8.0000e-004 | 0.0894        | 6.4000e-004  | 0.0901     | 0.0237         | 5.9000e-004   | 0.0243      |          | 79.8829   | 79.8829   | 2.0100e-003 |     | 79.9331 |  |

**3.6 Paving - 2021****Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|-----|----------------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          | lb/day         |                |        |     |                |  |
| Off-Road | 1.0633 | 10.6478 | 11.7756 | 0.0178 |               | 0.5826       | 0.5826     |                | 0.5371        | 0.5371      |          | 1,709.110<br>7 | 1,709.110<br>7 | 0.5417 |     | 1,722.652<br>4 |  |
| Paving   | 0.0727 |         |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |                | 0.0000         |        |     | 0.0000         |  |
| Total    | 1.1360 | 10.6478 | 11.7756 | 0.0178 |               | 0.5826       | 0.5826     |                | 0.5371        | 0.5371      |          | 1,709.110<br>7 | 1,709.110<br>7 | 0.5417 |     | 1,722.652<br>4 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.6 Paving - 2021****Unmitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O    | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |        |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Worker   | 0.0692        | 0.0450        | 0.5078        | 1.5600e-003        | 0.1677        | 1.2300e-003        | 0.1689        | 0.0445         | 1.1400e-003        | 0.0456        | 155.3502 | 155.3502        | 4.1600e-003     | 155.4543           |        |                 |  |
| Total    | <b>0.0692</b> | <b>0.0450</b> | <b>0.5078</b> | <b>1.5600e-003</b> | <b>0.1677</b> | <b>1.2300e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1400e-003</b> | <b>0.0456</b> |          | <b>155.3502</b> | <b>155.3502</b> | <b>4.1600e-003</b> |        | <b>155.4543</b> |  |

**Mitigated Construction On-Site**

|          | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |  |
|----------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|--|
| Category | lb/day        |                |                |               |               |               |               |                |               |               |               | lb/day                 |                        |               |     |                        |  |
| Off-Road | 1.0633        | 10.6478        | 11.7756        | 0.0178        |               | 0.5826        | 0.5826        |                | 0.5371        | 0.5371        | 0.0000        | 1,709.110<br>7         | 1,709.110<br>7         | 0.5417        |     | 1,722.652<br>4         |  |
| Paving   | 0.0727        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                        | 0.0000                 |               |     | 0.0000                 |  |
| Total    | <b>1.1360</b> | <b>10.6478</b> | <b>11.7756</b> | <b>0.0178</b> |               | <b>0.5826</b> | <b>0.5826</b> |                | <b>0.5371</b> | <b>0.5371</b> | <b>0.0000</b> | <b>1,709.110<br/>7</b> | <b>1,709.110<br/>7</b> | <b>0.5417</b> |     | <b>1,722.652<br/>4</b> |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.6 Paving - 2021****Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e     |  |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|--|
| Category | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |             |     |          |  |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000      |     | 0.0000   |  |
| Worker   | 0.0692 | 0.0450 | 0.5078 | 1.5600e-003 | 0.1677        | 1.2300e-003  | 0.1689     | 0.0445         | 1.1400e-003   | 0.0456      |          | 155.3502  | 155.3502  | 4.1600e-003 |     | 155.4543 |  |
| Total    | 0.0692 | 0.0450 | 0.5078 | 1.5600e-003 | 0.1677        | 1.2300e-003  | 0.1689     | 0.0445         | 1.1400e-003   | 0.0456      |          | 155.3502  | 155.3502  | 4.1600e-003 |     | 155.4543 |  |

**3.6 Paving - 2022****Unmitigated Construction On-Site**

|          | ROG    | NOx    | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |  |
|----------|--------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|-----|----------------|--|
| Category | lb/day |        |         |        |               |              |            |                |               |             |          | lb/day         |                |        |     |                |  |
| Off-Road | 0.9412 | 9.3322 | 11.6970 | 0.0179 |               | 0.4879       | 0.4879     |                | 0.4500        | 0.4500      |          | 1,709.689<br>2 | 1,709.689<br>2 | 0.5419 |     | 1,723.235<br>6 |  |
| Paving   | 0.0727 |        |         |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          |                | 0.0000         |        |     | 0.0000         |  |
| Total    | 1.0139 | 9.3322 | 11.6970 | 0.0179 |               | 0.4879       | 0.4879     |                | 0.4500        | 0.4500      |          | 1,709.689<br>2 | 1,709.689<br>2 | 0.5419 |     | 1,723.235<br>6 |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.6 Paving - 2022****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|--|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |     |                 |  |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             |     | 0.0000          |  |
| Worker       | 0.0651        | 0.0406        | 0.4687        | 1.5000e-003        | 0.1677        | 1.2000e-003        | 0.1689        | 0.0445         | 1.1000e-003        | 0.0456        |          | 149.7805        | 149.7805        | 3.7600e-003        |     | 149.8745        |  |
| <b>Total</b> | <b>0.0651</b> | <b>0.0406</b> | <b>0.4687</b> | <b>1.5000e-003</b> | <b>0.1677</b> | <b>1.2000e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1000e-003</b> | <b>0.0456</b> |          | <b>149.7805</b> | <b>149.7805</b> | <b>3.7600e-003</b> |     | <b>149.8745</b> |  |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |  |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|--|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               |               | lb/day            |                   |               |     |                   |  |
| Off-Road     | 0.9412        | 9.3322        | 11.6970        | 0.0179        |               | 0.4879        | 0.4879        |                | 0.4500        | 0.4500        | 0.0000        | 1,709.6892        | 1,709.6892        | 0.5419        |     | 1,723.2356        |  |
| Paving       | 0.0727        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               | 0.0000            | 0.0000            |               |     | 0.0000            |  |
| <b>Total</b> | <b>1.0139</b> | <b>9.3322</b> | <b>11.6970</b> | <b>0.0179</b> |               | <b>0.4879</b> | <b>0.4879</b> |                | <b>0.4500</b> | <b>0.4500</b> | <b>0.0000</b> | <b>1,709.6892</b> | <b>1,709.6892</b> | <b>0.5419</b> |     | <b>1,723.2356</b> |  |

## West Grove Center - South Coast AQMD Air District, Winter

**3.6 Paving - 2022****Mitigated Construction Off-Site**

|          | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O    | CO2e            |  |
|----------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------|-----------------|--|
| Category | lb/day        |               |               |                    |               |                    |               |                |                    |               |          | lb/day          |                 |                    |        |                 |  |
| Hauling  | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Vendor   | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000 | 0.0000          |  |
| Worker   | 0.0651        | 0.0406        | 0.4687        | 1.5000e-003        | 0.1677        | 1.2000e-003        | 0.1689        | 0.0445         | 1.1000e-003        | 0.0456        | 149.7805 | 149.7805        | 3.7600e-003     |                    |        | 149.8745        |  |
| Total    | <b>0.0651</b> | <b>0.0406</b> | <b>0.4687</b> | <b>1.5000e-003</b> | <b>0.1677</b> | <b>1.2000e-003</b> | <b>0.1689</b> | <b>0.0445</b>  | <b>1.1000e-003</b> | <b>0.0456</b> |          | <b>149.7805</b> | <b>149.7805</b> | <b>3.7600e-003</b> |        | <b>149.8745</b> |  |

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## West Grove Center - South Coast AQMD Air District, Winter

|             | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2        | NBio- CO2       | Total CO2 | CH4 | N2O             | CO2e |  |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------------|-----------------|-----------|-----|-----------------|------|--|
| Category    | lb/day |         |         |        |               |              |            |                |               |             |                 |                 | lb/day    |     |                 |      |  |
| Mitigated   | 9.1486 | 41.6000 | 63.9292 | 0.1728 | 12.1991       | 0.1553       | 12.3543    | 3.2640         | 0.1447        | 3.4087      | 17,669.64<br>04 | 17,669.64<br>04 | 1.2815    |     | 17,701.67<br>69 |      |  |
| Unmitigated | 9.1486 | 41.6000 | 63.9292 | 0.1728 | 12.1991       | 0.1553       | 12.3543    | 3.2640         | 0.1447        | 3.4087      | 17,669.64<br>04 | 17,669.64<br>04 | 1.2815    |     | 17,701.67<br>69 |      |  |

**4.2 Trip Summary Information**

| Land Use                             | Average Daily Trip Rate |          |          | Unmitigated |            | Mitigated  |            |
|--------------------------------------|-------------------------|----------|----------|-------------|------------|------------|------------|
|                                      | Weekday                 | Saturday | Sunday   | Annual VMT  | Annual VMT | Annual VMT | Annual VMT |
| Fast Food Restaurant w/o Drive Thru  | 1,921.23                | 3,862.10 | 2774.50  | 1,819,987   |            | 1,819,987  |            |
| Fast Food Restaurant with Drive Thru | 2,424.98                | 2,424.98 | 2424.98  | 1,218,961   |            | 1,218,961  |            |
| Other Non-Asphalt Surfaces           | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Parking Lot                          | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Supermarket                          | 1,307.52                | 2,174.96 | 2038.43  | 1,051,394   |            | 1,051,394  |            |
| Total                                | 5,653.74                | 8,462.04 | 7,237.91 | 4,090,342   |            | 4,090,342  |            |

**4.3 Trip Type Information**

| Land Use                        | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|---------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                 | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Fast Food Restaurant w/o Drive  | 16.60      | 3.30       | 3.60        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| Fast Food Restaurant with Drive | 16.60      | 3.60       | 3.60        | 2.20       | 78.80      | 19.00       | 29             | 21       | 50      |
| Other Non-Asphalt Surfaces      | 16.60      | 3.60       | 3.60        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Parking Lot                     | 16.60      | 3.60       | 3.60        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Supermarket                     | 16.60      | 3.60       | 3.60        | 6.50       | 74.50      | 19.00       | 34             | 30       | 36      |

## West Grove Center - South Coast AQMD Air District, Winter

**4.4 Fleet Mix**

| Land Use                             | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Fast Food Restaurant w/o Drive Thru  | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Fast Food Restaurant with Drive Thru | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Other Non-Asphalt Surfaces           | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Parking Lot                          | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Supermarket                          | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                        | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O      | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|----------|------|
| Category               | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |          |      |
| NaturalGas Mitigated   | 0.0780 | 0.7094 | 0.5959 | 4.2600e-003 |               | 0.0539       | 0.0539     |                | 0.0539        | 0.0539      | 851.2520 | 851.2520  | 0.0163    | 0.0156 | 856.3105 |      |
| NaturalGas Unmitigated | 0.0780 | 0.7094 | 0.5959 | 4.2600e-003 |               | 0.0539       | 0.0539     |                | 0.0539        | 0.0539      | 851.2520 | 851.2520  | 0.0163    | 0.0156 | 856.3105 |      |

## West Grove Center - South Coast AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

|                                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use                             | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Fast Food Restaurant w/o Drive Thru  | 3942.37        | 0.0425        | 0.3865        | 0.3247        | 2.3200e-003        |               | 0.0294        | 0.0294        |                | 0.0294        | 0.0294        | 463.8088 | 463.8088        | 8.8900e-003     | 8.5000e-003   | 466.5649      |                 |
| Fast Food Restaurant with Drive Thru | 2603.86        | 0.0281        | 0.2553        | 0.2144        | 1.5300e-003        |               | 0.0194        | 0.0194        |                | 0.0194        | 0.0194        | 306.3361 | 306.3361        | 5.8700e-003     | 5.6200e-003   | 308.1565      |                 |
| Other Non-Asphalt Surfaces           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000        |                 |
| Parking Lot                          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000        | 0.0000        |                 |
| Supermarket                          | 689.41         | 7.4300e-003   | 0.0676        | 0.0568        | 4.1000e-004        |               | 5.1400e-003   | 5.1400e-003   |                | 5.1400e-003   | 5.1400e-003   | 81.1071  | 81.1071         | 1.5500e-003     | 1.4900e-003   | 81.5891       |                 |
| <b>Total</b>                         |                | <b>0.0780</b> | <b>0.7094</b> | <b>0.5959</b> | <b>4.2600e-003</b> |               | <b>0.0539</b> | <b>0.0539</b> |                | <b>0.0539</b> | <b>0.0539</b> |          | <b>851.2520</b> | <b>851.2520</b> | <b>0.0163</b> | <b>0.0156</b> | <b>856.3105</b> |

## West Grove Center - South Coast AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Mitigated**

|                                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2        | NBio- CO2       | Total CO2     | CH4           | N2O             | CO2e |
|--------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|------|
| Land Use                             | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day          |                 |               |               |                 |      |
| Fast Food Restaurant w/o Drive Thru  | 3.94237        | 0.0425        | 0.3865        | 0.3247        | 2.3200e-003        |               | 0.0294        | 0.0294        |                | 0.0294        | 0.0294        | 463.8088        | 463.8088        | 8.8900e-003   | 8.5000e-003   | 466.5649        |      |
| Fast Food Restaurant with Drive Thru | 2.60386        | 0.0281        | 0.2553        | 0.2144        | 1.5300e-003        |               | 0.0194        | 0.0194        |                | 0.0194        | 0.0194        | 306.3361        | 306.3361        | 5.8700e-003   | 5.6200e-003   | 308.1565        |      |
| Other Non-Asphalt Surfaces           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |      |
| Parking Lot                          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |      |
| Supermarket                          | 0.68941        | 7.4300e-003   | 0.0676        | 0.0568        | 4.1000e-004        |               | 5.1400e-003   | 5.1400e-003   |                | 5.1400e-003   | 5.1400e-003   | 81.1071         | 81.1071         | 1.5500e-003   | 1.4900e-003   | 81.5891         |      |
| <b>Total</b>                         |                | <b>0.0780</b> | <b>0.7094</b> | <b>0.5959</b> | <b>4.2600e-003</b> |               | <b>0.0539</b> | <b>0.0539</b> |                | <b>0.0539</b> | <b>0.0539</b> | <b>851.2520</b> | <b>851.2520</b> | <b>0.0163</b> | <b>0.0156</b> | <b>856.3105</b> |      |

**6.0 Area Detail****6.1 Mitigation Measures Area**

## West Grove Center - South Coast AQMD Air District, Winter

|             | ROG    | NOx         | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O | CO2e   |  |
|-------------|--------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|--|
| Category    | lb/day |             |        |        |               |              |             |                |               |             |          | lb/day    |           |             |     |        |  |
| Mitigated   | 0.5123 | 1.4000e-004 | 0.0148 | 0.0000 |               | 5.0000e-005  | 5.0000e-005 |                | 5.0000e-005   | 5.0000e-005 |          | 0.0317    | 0.0317    | 8.0000e-005 |     | 0.0338 |  |
| Unmitigated | 0.5123 | 1.4000e-004 | 0.0148 | 0.0000 |               | 5.0000e-005  | 5.0000e-005 |                | 5.0000e-005   | 5.0000e-005 |          | 0.0317    | 0.0317    | 8.0000e-005 |     | 0.0338 |  |

**6.2 Area by SubCategory****Unmitigated**

|                       | ROG           | NOx                | CO            | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O | CO2e          |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory           | lb/day        |                    |               |               |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |     |               |
| Architectural Coating | 0.0601        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 0.4508        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 1.3800e-003   | 1.4000e-004        | 0.0148        | 0.0000        |               | 5.0000e-005        | 5.0000e-005        |                | 5.0000e-005        | 5.0000e-005        |          | 0.0317        | 0.0317        | 8.0000e-005        |     | 0.0338        |
| <b>Total</b>          | <b>0.5123</b> | <b>1.4000e-004</b> | <b>0.0148</b> | <b>0.0000</b> |               | <b>5.0000e-005</b> | <b>5.0000e-005</b> |                | <b>5.0000e-005</b> | <b>5.0000e-005</b> |          | <b>0.0317</b> | <b>0.0317</b> | <b>8.0000e-005</b> |     | <b>0.0338</b> |

## West Grove Center - South Coast AQMD Air District, Winter

**6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx                | CO            | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2 | NBio- CO2     | Total CO2     | CH4                | N2O | CO2e          |
|-----------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| SubCategory           | lb/day        |                    |               |               |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |     |               |
| Architectural Coating | 0.0601        |                    |               |               |               |                    | 0.0000             | 0.0000         |                    | 0.0000             | 0.0000   |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 0.4508        |                    |               |               |               |                    | 0.0000             | 0.0000         |                    | 0.0000             | 0.0000   |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 1.3800e-003   | 1.4000e-004        | 0.0148        | 0.0000        |               | 5.0000e-005        | 5.0000e-005        |                | 5.0000e-005        | 5.0000e-005        |          | 0.0317        | 0.0317        | 8.0000e-005        |     | 0.0338        |
| <b>Total</b>          | <b>0.5123</b> | <b>1.4000e-004</b> | <b>0.0148</b> | <b>0.0000</b> |               | <b>5.0000e-005</b> | <b>5.0000e-005</b> |                | <b>5.0000e-005</b> | <b>5.0000e-005</b> |          | <b>0.0317</b> | <b>0.0317</b> | <b>8.0000e-005</b> |     | <b>0.0338</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## West Grove Center - South Coast AQMD Air District, Winter

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

**User Defined Equipment**

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

**11.0 Vegetation**

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**ATTACHMENT B:**

**CALEEMOD ANNUAL EMISSIONS MODEL OUTPUTS**

## West Grove Center - South Coast AQMD Air District, Annual

**West Grove Center**  
**South Coast AQMD Air District, Annual**

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                            | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------------------------|--------|----------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces           | 0.55   | Acre     | 0.55        | 23,958.00          | 0          |
| Parking Lot                          | 123.00 | Space    | 1.11        | 49,200.00          | 0          |
| Fast Food Restaurant w/o Drive Thru  | 5.55   | 1000sqft | 0.13        | 5,549.00           | 0          |
| Fast Food Restaurant with Drive Thru | 3.67   | 1000sqft | 0.08        | 3,665.00           | 0          |
| Supermarket                          | 12.25  | 1000sqft | 0.28        | 12,245.00          | 0          |

**1.2 Other Project Characteristics**

|                            |                            |                            |       |                            |       |
|----------------------------|----------------------------|----------------------------|-------|----------------------------|-------|
| Urbanization               | Urban                      | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 31    |
| Climate Zone               | 8                          |                            |       | Operational Year           | 2022  |
| Utility Company            | Southern California Edison |                            |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 702.44                     | CH4 Intensity<br>(lb/MWhr) | 0.029 | N2O Intensity<br>(lb/MWhr) | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

## West Grove Center - South Coast AQMD Air District, Annual

Project Characteristics -

Land Use -

Construction Phase - Approximate 9 month construction schedule.

Off-road Equipment -

Off-road Equipment - Crawler Tractors Used in Lieu of Tractor/Loaders/Backhoes as a conservative measure.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Demolition -

Vehicle Trips - ITE Trip Generation Rates from Traffic Study and ITE 10th Edition

Construction Off-road Equipment Mitigation -

| Table Name           | Column Name    | Default Value | New Value |
|----------------------|----------------|---------------|-----------|
| tblConstructionPhase | NumDays        | 20.00         | 59.00     |
| tblConstructionPhase | NumDays        | 220.00        | 111.00    |
| tblConstructionPhase | NumDays        | 10.00         | 100.00    |
| tblConstructionPhase | NumDays        | 10.00         | 40.00     |
| tblConstructionPhase | PhaseEndDate   | 6/28/2021     | 8/22/2021 |
| tblConstructionPhase | PhaseEndDate   | 7/6/2021      | 8/30/2021 |
| tblConstructionPhase | PhaseEndDate   | 5/10/2022     | 2/1/2022  |
| tblConstructionPhase | PhaseEndDate   | 6/7/2022      | 2/17/2022 |
| tblConstructionPhase | PhaseEndDate   | 5/24/2022     | 1/25/2022 |
| tblConstructionPhase | PhaseStartDate | 6/29/2021     | 8/23/2021 |
| tblConstructionPhase | PhaseStartDate | 7/7/2021      | 8/31/2021 |
| tblConstructionPhase | PhaseStartDate | 5/25/2022     | 10/1/2021 |
| tblConstructionPhase | PhaseStartDate | 5/11/2022     | 12/1/2021 |

## West Grove Center - South Coast AQMD Air District, Annual

| tblOffRoadEquipment | OffRoadEquipmentType       |        | Crawler Tractors |
|---------------------|----------------------------|--------|------------------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00   | 0.00             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.30             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CC_TL                      | 8.40   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | CNW_TL                     | 6.90   | 3.60             |
| tblVehicleTrips     | ST_TR                      | 722.03 | 661.66           |
| tblVehicleTrips     | ST_TR                      | 177.59 | 177.62           |
| tblVehicleTrips     | SU_TR                      | 542.72 | 661.66           |
| tblVehicleTrips     | SU_TR                      | 166.44 | 166.47           |
| tblVehicleTrips     | WD_TR                      | 716.00 | 346.23           |
| tblVehicleTrips     | WD_TR                      | 496.12 | 661.66           |
| tblVehicleTrips     | WD_TR                      | 102.24 | 106.78           |

**2.0 Emissions Summary**

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## West Grove Center - South Coast AQMD Air District, Annual

**2.1 Overall Construction****Unmitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e     |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|----------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |        |          |
| 2021    | 0.2634  | 1.6472 | 1.4125 | 2.7000e-003 | 0.0653        | 0.0810       | 0.1463     | 0.0208         | 0.0766        | 0.0974      | 0.0000   | 234.1105  | 234.1105  | 0.0449      | 0.0000 | 235.2331 |
| 2022    | 0.0730  | 0.2820 | 0.3144 | 5.9000e-004 | 8.7100e-003   | 0.0133       | 0.0221     | 2.3400e-003    | 0.0127        | 0.0150      | 0.0000   | 51.0087   | 51.0087   | 9.2900e-003 | 0.0000 | 51.2410  |
| Maximum | 0.2634  | 1.6472 | 1.4125 | 2.7000e-003 | 0.0653        | 0.0810       | 0.1463     | 0.0208         | 0.0766        | 0.0974      | 0.0000   | 234.1105  | 234.1105  | 0.0449      | 0.0000 | 235.2331 |

**Mitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e     |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|----------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |        |          |
| 2021    | 0.2634  | 1.6472 | 1.4125 | 2.7000e-003 | 0.0459        | 0.0810       | 0.1269     | 0.0136         | 0.0766        | 0.0902      | 0.0000   | 234.1102  | 234.1102  | 0.0449      | 0.0000 | 235.2329 |
| 2022    | 0.0730  | 0.2820 | 0.3144 | 5.9000e-004 | 8.7100e-003   | 0.0133       | 0.0221     | 2.3400e-003    | 0.0127        | 0.0150      | 0.0000   | 51.0087   | 51.0087   | 9.2900e-003 | 0.0000 | 51.2409  |
| Maximum | 0.2634  | 1.6472 | 1.4125 | 2.7000e-003 | 0.0459        | 0.0810       | 0.1269     | 0.0136         | 0.0766        | 0.0902      | 0.0000   | 234.1102  | 234.1102  | 0.0449      | 0.0000 | 235.2329 |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 26.15         | 0.00         | 11.49      | 31.06          | 0.00          | 6.40        | 0.00     | 0.00      | 0.00      | 0.00 | 0.00 | 0.00 |

## West Grove Center - South Coast AQMD Air District, Annual

| Quarter | Start Date | End Date   | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|------------|--|--|
| 1       | 6-1-2021   | 8-31-2021  | 0.7592                                       | 0.7592                                     |
| 2       | 9-1-2021   | 11-30-2021 | 0.7348                                       | 0.7348                                     |
| 3       | 12-1-2021  | 2-28-2022  | 0.7645                                       | 0.7645                                     |
|         |            | Highest    | 0.7645                                       | 0.7645                                     |

**2.2 Overall Operational**Unmitigated Operational

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2         | Total CO2         | CH4           | N2O                | CO2e              |  |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|--------------------|-------------------|--|
| Category     | tons/yr       |               |               |               |               |               |               |                |               |               |                | MT/yr             |                   |               |                    |                   |  |
| Area         | 0.0934        | 2.0000e-005   | 1.8500e-003   | 0.0000        |               | 1.0000e-005   | 1.0000e-005   |                | 1.0000e-005   | 1.0000e-005   | 0.0000         | 3.6000e-003       | 3.6000e-003       | 1.0000e-005   | 0.0000             | 3.8400e-003       |  |
| Energy       | 0.0142        | 0.1295        | 0.1088        | 7.8000e-004   |               | 9.8400e-003   | 9.8400e-003   |                | 9.8400e-003   | 9.8400e-003   | 0.0000         | 404.1948          | 404.1948          | 0.0136        | 4.8300e-003        | 405.9742          |  |
| Mobile       | 1.1851        | 5.6680        | 8.3955        | 0.0232        | 1.5542        | 0.0202        | 1.5744        | 0.4165         | 0.0188        | 0.4353        | 0.0000         | 2,150.4148        | 2,150.4148        | 0.1498        | 0.0000             | 2,154.1585        |  |
| Waste        |               |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 35.5701        | 0.0000            | 35.5701           | 2.1021        | 0.0000             | 88.1234           |  |
| Water        |               |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 1.3665         | 18.6679           | 20.0344           | 0.1411        | 3.4700e-003        | 24.5977           |  |
| <b>Total</b> | <b>1.2927</b> | <b>5.7975</b> | <b>8.5061</b> | <b>0.0239</b> | <b>1.5542</b> | <b>0.0300</b> | <b>1.5842</b> | <b>0.4165</b>  | <b>0.0286</b> | <b>0.4451</b> | <b>36.9366</b> | <b>2,573.2811</b> | <b>2,610.2177</b> | <b>2.4066</b> | <b>8.3000e-003</b> | <b>2,672.8577</b> |  |

## West Grove Center - South Coast AQMD Air District, Annual

**2.2 Overall Operational****Mitigated Operational**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2         | Total CO2         | CH4           | N2O                | CO2e              |  |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|--------------------|-------------------|--|
| Category     | tons/yr       |               |               |               |               |               |               |                |               |               |                | MT/yr             |                   |               |                    |                   |  |
| Area         | 0.0934        | 2.0000e-005   | 1.8500e-003   | 0.0000        |               | 1.0000e-005   | 1.0000e-005   |                | 1.0000e-005   | 1.0000e-005   | 0.0000         | 3.6000e-003       | 3.6000e-003       | 1.0000e-005   | 0.0000             | 3.8400e-003       |  |
| Energy       | 0.0142        | 0.1295        | 0.1088        | 7.8000e-004   |               | 9.8400e-003   | 9.8400e-003   |                | 9.8400e-003   | 9.8400e-003   | 0.0000         | 404.1948          | 404.1948          | 0.0136        | 4.8300e-003        | 405.9742          |  |
| Mobile       | 1.1851        | 5.6680        | 8.3955        | 0.0232        | 1.5542        | 0.0202        | 1.5744        | 0.4165         | 0.0188        | 0.4353        | 0.0000         | 2,150.4148        | 2,150.4148        | 0.1498        | 0.0000             | 2,154.1585        |  |
| Waste        |               |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 35.5701        | 0.0000            | 35.5701           | 2.1021        | 0.0000             | 88.1234           |  |
| Water        |               |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 1.3665         | 18.6679           | 20.0344           | 0.1411        | 3.4700e-003        | 24.5977           |  |
| <b>Total</b> | <b>1.2927</b> | <b>5.7975</b> | <b>8.5061</b> | <b>0.0239</b> | <b>1.5542</b> | <b>0.0300</b> | <b>1.5842</b> | <b>0.4165</b>  | <b>0.0286</b> | <b>0.4451</b> | <b>36.9366</b> | <b>2,573.2811</b> | <b>2,610.2177</b> | <b>2.4066</b> | <b>8.3000e-003</b> | <b>2,672.8577</b> |  |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

**3.0 Construction Detail****Construction Phase**

## West Grove Center - South Coast AQMD Air District, Annual

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 6/1/2021   | 8/22/2021 | 5             | 59       |                   |
| 2            | Grading               | Grading               | 8/23/2021  | 8/30/2021 | 5             | 6        |                   |
| 3            | Building Construction | Building Construction | 8/31/2021  | 2/1/2022  | 5             | 111      |                   |
| 4            | Architectural Coating | Architectural Coating | 10/1/2021  | 2/17/2022 | 5             | 100      |                   |
| 5            | Paving                | Paving                | 12/1/2021  | 1/25/2022 | 5             | 40       |                   |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 9**

**Acres of Paving: 1.66**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 32,189; Non-Residential Outdoor: 10,730; Striped Parking Area: 4,389 (Architectural Coating – sqft)**

#### OffRoad Equipment

## West Grove Center - South Coast AQMD Air District, Annual

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |
| Paving                | Cement and Mortar Mixers  | 1      | 8.00        | 9           | 0.56        |
| Demolition            | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Building Construction | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 2      | 7.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Paving                | Pavers                    | 1      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 1      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Demolition            | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Building Construction | Tractors/Loaders/Backhoes | 1      | 6.00        | 97          | 0.37        |
| Demolition            | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Grading               | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Paving                | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |
| Building Construction | Welders                   | 3      | 8.00        | 46          | 0.45        |
| Grading               | Crawler Tractors          | 2      | 8.00        | 212         | 0.43        |

Trips and VMT

## West Grove Center - South Coast AQMD Air District, Annual

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 5                       | 13.00              | 0.00               | 82.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 4                       | 10.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 8                       | 39.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 8.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Demolition - 2021****Unmitigated Construction On-Site**

|               | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |  |
|---------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|--|
| Category      | tons/yr |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |        |        |         |  |
| Fugitive Dust |         |        |        |             | 8.8600e-003   | 0.0000       | 8.8600e-003 | 1.3400e-003    | 0.0000        | 1.3400e-003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |  |
| Off-Road      | 0.0588  | 0.5811 | 0.4275 | 7.1000e-004 |               | 0.0307       | 0.0307      |                | 0.0287        | 0.0287      | 0.0000   | 62.1604   | 62.1604   | 0.0159 | 0.0000 | 62.5578 |  |
| Total         | 0.0588  | 0.5811 | 0.4275 | 7.1000e-004 | 8.8600e-003   | 0.0307       | 0.0396      | 1.3400e-003    | 0.0287        | 0.0300      | 0.0000   | 62.1604   | 62.1604   | 0.0159 | 0.0000 | 62.5578 |  |

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**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 3.0000e-004 | 0.0107      | 2.2700e-003 | 3.0000e-005 | 7.0000e-004   | 3.0000e-005  | 7.4000e-004 | 1.9000e-004    | 3.0000e-005   | 2.2000e-004 | 0.0000   | 3.0615    | 3.0615    | 2.1000e-004 | 0.0000 | 3.0667 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 1.6000e-003 | 1.1800e-003 | 0.0134      | 4.0000e-005 | 4.2100e-003   | 3.0000e-005  | 4.2400e-003 | 1.1200e-003    | 3.0000e-005   | 1.1500e-003 | 0.0000   | 3.6650    | 3.6650    | 1.0000e-004 | 0.0000 | 3.6674 |  |
| Total    | 1.9000e-003 | 0.0119      | 0.0156      | 7.0000e-005 | 4.9100e-003   | 6.0000e-005  | 4.9800e-003 | 1.3100e-003    | 6.0000e-005   | 1.3700e-003 | 0.0000   | 6.7264    | 6.7264    | 3.1000e-004 | 0.0000 | 6.7341 |  |

**Mitigated Construction On-Site**

|               | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|
| Category      | tons/yr |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |        |        |         |
| Fugitive Dust |         |        |        |             | 3.4600e-003   | 0.0000       | 3.4600e-003 | 5.2000e-004    | 0.0000        | 5.2000e-004 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0588  | 0.5811 | 0.4275 | 7.1000e-004 |               | 0.0307       | 0.0307      |                | 0.0287        | 0.0287      | 0.0000   | 62.1604   | 62.1604   | 0.0159 | 0.0000 | 62.5577 |
| Total         | 0.0588  | 0.5811 | 0.4275 | 7.1000e-004 | 3.4600e-003   | 0.0307       | 0.0342      | 5.2000e-004    | 0.0287        | 0.0292      | 0.0000   | 62.1604   | 62.1604   | 0.0159 | 0.0000 | 62.5577 |

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**3.2 Demolition - 2021****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 3.0000e-004 | 0.0107      | 2.2700e-003 | 3.0000e-005 | 7.0000e-004   | 3.0000e-005  | 7.4000e-004 | 1.9000e-004    | 3.0000e-005   | 2.2000e-004 | 0.0000   | 3.0615    | 3.0615    | 2.1000e-004 | 0.0000 | 3.0667 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 1.6000e-003 | 1.1800e-003 | 0.0134      | 4.0000e-005 | 4.2100e-003   | 3.0000e-005  | 4.2400e-003 | 1.1200e-003    | 3.0000e-005   | 1.1500e-003 | 0.0000   | 3.6650    | 3.6650    | 1.0000e-004 | 0.0000 | 3.6674 |  |
| Total    | 1.9000e-003 | 0.0119      | 0.0156      | 7.0000e-005 | 4.9100e-003   | 6.0000e-005  | 4.9800e-003 | 1.3100e-003    | 6.0000e-005   | 1.3700e-003 | 0.0000   | 6.7264    | 6.7264    | 3.1000e-004 | 0.0000 | 6.7341 |  |

**3.3 Grading - 2021****Unmitigated Construction On-Site**

|               | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|---------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category      | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Fugitive Dust |             |        |        |             | 0.0228        | 0.0000       | 0.0228      | 0.0105         | 0.0000        | 0.0105      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Off-Road      | 7.8000e-003 | 0.0925 | 0.0320 | 9.0000e-005 | 0.0228        | 3.7300e-003  | 3.7300e-003 | 0.0105         | 3.4300e-003   | 3.4300e-003 | 0.0000   | 8.1368    | 8.1368    | 2.6300e-003 | 0.0000 | 8.2026 |
| Total         | 7.8000e-003 | 0.0925 | 0.0320 | 9.0000e-005 | 0.0228        | 3.7300e-003  | 0.0266      | 0.0105         | 3.4300e-003   | 0.0139      | 0.0000   | 8.1368    | 8.1368    | 2.6300e-003 | 0.0000 | 8.2026 |

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**3.3 Grading - 2021****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |        |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 1.3000e-004 | 9.0000e-005 | 1.0500e-003 | 0.0000 | 3.3000e-004   | 0.0000       | 3.3000e-004 | 9.0000e-005    | 0.0000        | 9.0000e-005 | 0.0000   | 0.2867    | 0.2867    | 1.0000e-005 | 0.0000 | 0.2869 |  |
| Total    | 1.3000e-004 | 9.0000e-005 | 1.0500e-003 | 0.0000 | 3.3000e-004   | 0.0000       | 3.3000e-004 | 9.0000e-005    | 0.0000        | 9.0000e-005 | 0.0000   | 0.2867    | 0.2867    | 1.0000e-005 | 0.0000 | 0.2869 |  |

**Mitigated Construction On-Site**

|               | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|---------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category      | tons/yr     |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Fugitive Dust |             |        |        |             | 8.9100e-003   | 0.0000       | 8.9100e-003 | 4.0700e-003    | 0.0000        | 4.0700e-003 | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Off-Road      | 7.8000e-003 | 0.0925 | 0.0320 | 9.0000e-005 |               | 3.7300e-003  | 3.7300e-003 |                | 3.4300e-003   | 3.4300e-003 | 0.0000   | 8.1368    | 8.1368    | 2.6300e-003 | 0.0000 | 8.2026 |  |
| Total         | 7.8000e-003 | 0.0925 | 0.0320 | 9.0000e-005 | 8.9100e-003   | 3.7300e-003  | 0.0126      | 4.0700e-003    | 3.4300e-003   | 7.5000e-003 | 0.0000   | 8.1368    | 8.1368    | 2.6300e-003 | 0.0000 | 8.2026 |  |

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**3.3 Grading - 2021****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |        |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 1.3000e-004 | 9.0000e-005 | 1.0500e-003 | 0.0000 | 3.3000e-004   | 0.0000       | 3.3000e-004 | 9.0000e-005    | 0.0000        | 9.0000e-005 | 0.0000   | 0.2867    | 0.2867    | 1.0000e-005 | 0.0000 | 0.2869 |  |
| Total    | 1.3000e-004 | 9.0000e-005 | 1.0500e-003 | 0.0000 | 3.3000e-004   | 0.0000       | 3.3000e-004 | 9.0000e-005    | 0.0000        | 9.0000e-005 | 0.0000   | 0.2867    | 0.2867    | 1.0000e-005 | 0.0000 | 0.2869 |  |

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |  |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|--|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          | MT/yr     |           |        |        |         |  |
| Off-Road | 0.0910  | 0.7132 | 0.6481 | 1.1100e-003 |               | 0.0364       | 0.0364     |                | 0.0349        | 0.0349      | 0.0000   | 92.4037   | 92.4037   | 0.0182 | 0.0000 | 92.8582 |  |
| Total    | 0.0910  | 0.7132 | 0.6481 | 1.1100e-003 |               | 0.0364       | 0.0364     |                | 0.0349        | 0.0349      | 0.0000   | 92.4037   | 92.4037   | 0.0182 | 0.0000 | 92.8582 |  |

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**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |  |
|----------|-------------|-------------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|--|
| Category | tons/yr     |             |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |         |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |  |
| Vendor   | 2.0300e-003 | 0.0689      | 0.0171 | 1.8000e-004 | 4.4900e-003   | 1.4000e-004  | 4.6300e-003 | 1.2900e-003    | 1.3000e-004   | 1.4300e-003 | 0.0000   | 17.3832   | 17.3832   | 1.1000e-003 | 0.0000 | 17.4107 |  |
| Worker   | 7.2300e-003 | 5.3500e-003 | 0.0605 | 1.8000e-004 | 0.0190        | 1.4000e-004  | 0.0192      | 5.0600e-003    | 1.3000e-004   | 5.1900e-003 | 0.0000   | 16.5855   | 16.5855   | 4.4000e-004 | 0.0000 | 16.5966 |  |
| Total    | 9.2600e-003 | 0.0742      | 0.0776 | 3.6000e-004 | 0.0235        | 2.8000e-004  | 0.0238      | 6.3500e-003    | 2.6000e-004   | 6.6200e-003 | 0.0000   | 33.9687   | 33.9687   | 1.5400e-003 | 0.0000 | 34.0073 |  |

**Mitigated Construction On-Site**

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |  |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|---------|--|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          | MT/yr     |           |        |        |         |  |
| Off-Road | 0.0910  | 0.7132 | 0.6481 | 1.1100e-003 |               | 0.0364       | 0.0364     |                | 0.0349        | 0.0349      | 0.0000   | 92.4036   | 92.4036   | 0.0182 | 0.0000 | 92.8581 |  |
| Total    | 0.0910  | 0.7132 | 0.6481 | 1.1100e-003 |               | 0.0364       | 0.0364     |                | 0.0349        | 0.0349      | 0.0000   | 92.4036   | 92.4036   | 0.0182 | 0.0000 | 92.8581 |  |

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**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |  |
|----------|-------------|-------------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|--|
| Category | tons/yr     |             |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |         |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |  |
| Vendor   | 2.0300e-003 | 0.0689      | 0.0171 | 1.8000e-004 | 4.4900e-003   | 1.4000e-004  | 4.6300e-003 | 1.2900e-003    | 1.3000e-004   | 1.4300e-003 | 0.0000   | 17.3832   | 17.3832   | 1.1000e-003 | 0.0000 | 17.4107 |  |
| Worker   | 7.2300e-003 | 5.3500e-003 | 0.0605 | 1.8000e-004 | 0.0190        | 1.4000e-004  | 0.0192      | 5.0600e-003    | 1.3000e-004   | 5.1900e-003 | 0.0000   | 16.5855   | 16.5855   | 4.4000e-004 | 0.0000 | 16.5966 |  |
| Total    | 9.2600e-003 | 0.0742      | 0.0776 | 3.6000e-004 | 0.0235        | 2.8000e-004  | 0.0238      | 6.3500e-003    | 2.6000e-004   | 6.6200e-003 | 0.0000   | 33.9687   | 33.9687   | 1.5400e-003 | 0.0000 | 34.0073 |  |

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |  |
|----------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|--|
| Category | tons/yr |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |         |  |
| Off-Road | 0.0204  | 0.1606 | 0.1579 | 2.8000e-004 |               | 7.7200e-003  | 7.7200e-003 |                | 7.4000e-003   | 7.4000e-003 | 0.0000   | 22.8448   | 22.8448   | 4.4100e-003 | 0.0000 | 22.9550 |  |
| Total    | 0.0204  | 0.1606 | 0.1579 | 2.8000e-004 |               | 7.7200e-003  | 7.7200e-003 |                | 7.4000e-003   | 7.4000e-003 | 0.0000   | 22.8448   | 22.8448   | 4.4100e-003 | 0.0000 | 22.9550 |  |

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**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 4.7000e-004 | 0.0162      | 3.9900e-003 | 4.0000e-005 | 1.1100e-003   | 3.0000e-005  | 1.1400e-003 | 3.2000e-004    | 3.0000e-005   | 3.5000e-004 | 0.0000   | 4.2592    | 4.2592    | 2.6000e-004 | 0.0000 | 4.2657 |  |
| Worker   | 1.6800e-003 | 1.1900e-003 | 0.0138      | 4.0000e-005 | 4.7100e-003   | 3.0000e-005  | 4.7400e-003 | 1.2500e-003    | 3.0000e-005   | 1.2800e-003 | 0.0000   | 3.9528    | 3.9528    | 1.0000e-004 | 0.0000 | 3.9553 |  |
| Total    | 2.1500e-003 | 0.0173      | 0.0178      | 8.0000e-005 | 5.8200e-003   | 6.0000e-005  | 5.8800e-003 | 1.5700e-003    | 6.0000e-005   | 1.6300e-003 | 0.0000   | 8.2119    | 8.2119    | 3.6000e-004 | 0.0000 | 8.2210 |  |

**Mitigated Construction On-Site**

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |  |
|----------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|--|
| Category | tons/yr |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |         |  |
| Off-Road | 0.0204  | 0.1606 | 0.1579 | 2.8000e-004 |               | 7.7200e-003  | 7.7200e-003 |                | 7.4000e-003   | 7.4000e-003 | 0.0000   | 22.8448   | 22.8448   | 4.4100e-003 | 0.0000 | 22.9550 |  |
| Total    | 0.0204  | 0.1606 | 0.1579 | 2.8000e-004 |               | 7.7200e-003  | 7.7200e-003 |                | 7.4000e-003   | 7.4000e-003 | 0.0000   | 22.8448   | 22.8448   | 4.4100e-003 | 0.0000 | 22.9550 |  |

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**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 4.7000e-004 | 0.0162      | 3.9900e-003 | 4.0000e-005 | 1.1100e-005   | 3.0000e-005  | 1.1400e-003 | 3.2000e-004    | 3.0000e-005   | 3.5000e-004 | 0.0000   | 4.2592    | 4.2592    | 2.6000e-004 | 0.0000 | 4.2657 |  |
| Worker   | 1.6800e-003 | 1.1900e-003 | 0.0138      | 4.0000e-005 | 4.7100e-003   | 3.0000e-005  | 4.7400e-003 | 1.2500e-003    | 3.0000e-005   | 1.2800e-003 | 0.0000   | 3.9528    | 3.9528    | 1.0000e-004 | 0.0000 | 3.9553 |  |
| Total    | 2.1500e-003 | 0.0173      | 0.0178      | 8.0000e-005 | 5.8200e-003   | 6.0000e-005  | 5.8800e-003 | 1.5700e-003    | 6.0000e-005   | 1.6300e-003 | 0.0000   | 8.2119    | 8.2119    | 3.6000e-004 | 0.0000 | 8.2210 |  |

**3.5 Architectural Coating - 2021****Unmitigated Construction On-Site**

|                 | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|-----------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category        | tons/yr     |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Archit. Coating | 0.0724      |        |        |             |               |              | 0.0000      | 0.0000         |               | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Off-Road        | 7.2200e-003 | 0.0504 | 0.0600 | 1.0000e-004 |               | 3.1100e-003  | 3.1100e-003 |                | 3.1100e-003   | 3.1100e-003 | 0.0000   | 8.4257    | 8.4257    | 5.8000e-004 | 0.0000 | 8.4402 |  |
| Total           | 0.0796      | 0.0504 | 0.0600 | 1.0000e-004 |               | 3.1100e-003  | 3.1100e-003 |                | 3.1100e-003   | 3.1100e-003 | 0.0000   | 8.4257    | 8.4257    | 5.8000e-004 | 0.0000 | 8.4402 |  |

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**3.5 Architectural Coating - 2021****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 1.1000e-003 | 8.1000e-004 | 9.2000e-003 | 3.0000e-005 | 2.9000e-003   | 2.0000e-005  | 2.9200e-003 | 7.7000e-004    | 2.0000e-005   | 7.9000e-004 | 0.0000   | 2.5229    | 2.5229    | 7.0000e-005 | 0.0000 | 2.5246 |  |
| Total    | 1.1000e-003 | 8.1000e-004 | 9.2000e-003 | 3.0000e-005 | 2.9000e-003   | 2.0000e-005  | 2.9200e-003 | 7.7000e-004    | 2.0000e-005   | 7.9000e-004 | 0.0000   | 2.5229    | 2.5229    | 7.0000e-005 | 0.0000 | 2.5246 |  |

**Mitigated Construction On-Site**

|                 | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|-----------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category        | tons/yr     |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Archit. Coating | 0.0724      |        |        |             |               |              | 0.0000      | 0.0000         |               | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Off-Road        | 7.2200e-003 | 0.0504 | 0.0600 | 1.0000e-004 |               | 3.1100e-003  | 3.1100e-003 |                | 3.1100e-003   | 3.1100e-003 | 0.0000   | 8.4257    | 8.4257    | 5.8000e-004 | 0.0000 | 8.4402 |  |
| Total           | 0.0796      | 0.0504 | 0.0600 | 1.0000e-004 |               | 3.1100e-003  | 3.1100e-003 |                | 3.1100e-003   | 3.1100e-003 | 0.0000   | 8.4257    | 8.4257    | 5.8000e-004 | 0.0000 | 8.4402 |  |

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**3.5 Architectural Coating - 2021****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 1.1000e-003 | 8.1000e-004 | 9.2000e-003 | 3.0000e-005 | 2.9000e-003   | 2.0000e-005  | 2.9200e-003 | 7.7000e-004    | 2.0000e-005   | 7.9000e-004 | 0.0000   | 2.5229    | 2.5229    | 7.0000e-005 | 0.0000 | 2.5246 |  |
| Total    | 1.1000e-003 | 8.1000e-004 | 9.2000e-003 | 3.0000e-005 | 2.9000e-003   | 2.0000e-005  | 2.9200e-003 | 7.7000e-004    | 2.0000e-005   | 7.9000e-004 | 0.0000   | 2.5229    | 2.5229    | 7.0000e-005 | 0.0000 | 2.5246 |  |

**3.5 Architectural Coating - 2022****Unmitigated Construction On-Site**

|                 | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|-----------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category        | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |        |
| Archit. Coating | 0.0373      |        |        |             |               |              | 0.0000      | 0.0000         |               | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
| Off-Road        | 3.4800e-003 | 0.0239 | 0.0308 | 5.0000e-005 |               | 1.3900e-003  | 1.3900e-003 |                | 1.3900e-003   | 1.3900e-003 | 0.0000   | 4.3405    | 4.3405    | 2.8000e-004 | 0.0000 | 4.3476 |
| Total           | 0.0408      | 0.0239 | 0.0308 | 5.0000e-005 |               | 1.3900e-003  | 1.3900e-003 |                | 1.3900e-003   | 1.3900e-003 | 0.0000   | 4.3405    | 4.3405    | 2.8000e-004 | 0.0000 | 4.3476 |

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**3.5 Architectural Coating - 2022****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 5.3000e-004 | 3.8000e-004 | 4.3800e-003 | 1.0000e-005 | 1.4900e-003   | 1.0000e-005  | 1.5000e-003 | 4.0000e-004    | 1.0000e-005   | 4.1000e-004 | 0.0000   | 1.2531    | 1.2531    | 3.0000e-005 | 0.0000 | 1.2539 |  |
| Total    | 5.3000e-004 | 3.8000e-004 | 4.3800e-003 | 1.0000e-005 | 1.4900e-003   | 1.0000e-005  | 1.5000e-003 | 4.0000e-004    | 1.0000e-005   | 4.1000e-004 | 0.0000   | 1.2531    | 1.2531    | 3.0000e-005 | 0.0000 | 1.2539 |  |

**Mitigated Construction On-Site**

|                 | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|-----------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category        | tons/yr     |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Archit. Coating | 0.0373      |        |        |             |               |              | 0.0000      | 0.0000         |               | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Off-Road        | 3.4800e-003 | 0.0239 | 0.0308 | 5.0000e-005 |               | 1.3900e-003  | 1.3900e-003 |                | 1.3900e-003   | 1.3900e-003 | 0.0000   | 4.3405    | 4.3405    | 2.8000e-004 | 0.0000 | 4.3476 |  |
| Total           | 0.0408      | 0.0239 | 0.0308 | 5.0000e-005 |               | 1.3900e-003  | 1.3900e-003 |                | 1.3900e-003   | 1.3900e-003 | 0.0000   | 4.3405    | 4.3405    | 2.8000e-004 | 0.0000 | 4.3476 |  |

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**3.5 Architectural Coating - 2022****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 5.3000e-004 | 3.8000e-004 | 4.3800e-003 | 1.0000e-005 | 1.4900e-003   | 1.0000e-005  | 1.5000e-003 | 4.0000e-004    | 1.0000e-005   | 4.1000e-004 | 0.0000   | 1.2531    | 1.2531    | 3.0000e-005 | 0.0000 | 1.2539 |  |
| Total    | 5.3000e-004 | 3.8000e-004 | 4.3800e-003 | 1.0000e-005 | 1.4900e-003   | 1.0000e-005  | 1.5000e-003 | 4.0000e-004    | 1.0000e-005   | 4.1000e-004 | 0.0000   | 1.2531    | 1.2531    | 3.0000e-005 | 0.0000 | 1.2539 |  |

**3.6 Paving - 2021****Unmitigated Construction On-Site**

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |         |
| Off-Road | 0.0122      | 0.1225 | 0.1354 | 2.1000e-004 |               | 6.7000e-003  | 6.7000e-003 |                | 6.1800e-003   | 6.1800e-003 | 0.0000   | 17.8305   | 17.8305   | 5.6500e-003 | 0.0000 | 17.9718 |
| Paving   | 8.4000e-004 |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| Total    | 0.0131      | 0.1225 | 0.1354 | 2.1000e-004 |               | 6.7000e-003  | 6.7000e-003 |                | 6.1800e-003   | 6.1800e-003 | 0.0000   | 17.8305   | 17.8305   | 5.6500e-003 | 0.0000 | 17.9718 |

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**3.6 Paving - 2021****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 7.2000e-004 | 5.3000e-004 | 6.0100e-003 | 2.0000e-005 | 1.8900e-003   | 1.0000e-005  | 1.9100e-003 | 5.0000e-004    | 1.0000e-005   | 5.2000e-004 | 0.0000   | 1.6485    | 1.6485    | 4.0000e-005 | 0.0000 | 1.6496 |  |
| Total    | 7.2000e-004 | 5.3000e-004 | 6.0100e-003 | 2.0000e-005 | 1.8900e-003   | 1.0000e-005  | 1.9100e-003 | 5.0000e-004    | 1.0000e-005   | 5.2000e-004 | 0.0000   | 1.6485    | 1.6485    | 4.0000e-005 | 0.0000 | 1.6496 |  |

**Mitigated Construction On-Site**

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |  |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|--|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |         |  |
| Off-Road | 0.0122      | 0.1225 | 0.1354 | 2.1000e-004 |               | 6.7000e-003  | 6.7000e-003 |                | 6.1800e-003   | 6.1800e-003 | 0.0000   | 17.8305   | 17.8305   | 5.6500e-003 | 0.0000 | 17.9718 |  |
| Paving   | 8.4000e-004 |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |  |
| Total    | 0.0131      | 0.1225 | 0.1354 | 2.1000e-004 |               | 6.7000e-003  | 6.7000e-003 |                | 6.1800e-003   | 6.1800e-003 | 0.0000   | 17.8305   | 17.8305   | 5.6500e-003 | 0.0000 | 17.9718 |  |

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**3.6 Paving - 2021****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 7.2000e-004 | 5.3000e-004 | 6.0100e-003 | 2.0000e-005 | 1.8900e-003   | 1.0000e-005  | 1.9100e-003 | 5.0000e-004    | 1.0000e-005   | 5.2000e-004 | 0.0000   | 1.6485    | 1.6485    | 4.0000e-005 | 0.0000 | 1.6496 |  |
| Total    | 7.2000e-004 | 5.3000e-004 | 6.0100e-003 | 2.0000e-005 | 1.8900e-003   | 1.0000e-005  | 1.9100e-003 | 5.0000e-004    | 1.0000e-005   | 5.2000e-004 | 0.0000   | 1.6485    | 1.6485    | 4.0000e-005 | 0.0000 | 1.6496 |  |

**3.6 Paving - 2022****Unmitigated Construction On-Site**

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |         |
| Off-Road | 8.0000e-003 | 0.0793 | 0.0994 | 1.5000e-004 |               | 4.1500e-003  | 4.1500e-003 |                | 3.8200e-003   | 3.8200e-003 | 0.0000   | 13.1835   | 13.1835   | 4.1800e-003 | 0.0000 | 13.2880 |
| Paving   | 6.2000e-004 |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| Total    | 8.6200e-003 | 0.0793 | 0.0994 | 1.5000e-004 |               | 4.1500e-003  | 4.1500e-003 |                | 3.8200e-003   | 3.8200e-003 | 0.0000   | 13.1835   | 13.1835   | 4.1800e-003 | 0.0000 | 13.2880 |

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**3.6 Paving - 2022****Unmitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 5.0000e-004 | 3.5000e-004 | 4.1000e-003 | 1.0000e-005 | 1.4000e-003   | 1.0000e-005  | 1.4100e-003 | 3.7000e-004    | 1.0000e-005   | 3.8000e-004 | 0.0000   | 1.1748    | 1.1748    | 3.0000e-005 | 0.0000 | 1.1755 |  |
| Total    | 5.0000e-004 | 3.5000e-004 | 4.1000e-003 | 1.0000e-005 | 1.4000e-003   | 1.0000e-005  | 1.4100e-003 | 3.7000e-004    | 1.0000e-005   | 3.8000e-004 | 0.0000   | 1.1748    | 1.1748    | 3.0000e-005 | 0.0000 | 1.1755 |  |

**Mitigated Construction On-Site**

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |  |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|--|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |         |  |
| Off-Road | 8.0000e-003 | 0.0793 | 0.0994 | 1.5000e-004 |               | 4.1500e-003  | 4.1500e-003 |                | 3.8200e-003   | 3.8200e-003 | 0.0000   | 13.1835   | 13.1835   | 4.1800e-003 | 0.0000 | 13.2880 |  |
| Paving   | 6.2000e-004 |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000  |  |
| Total    | 8.6200e-003 | 0.0793 | 0.0994 | 1.5000e-004 |               | 4.1500e-003  | 4.1500e-003 |                | 3.8200e-003   | 3.8200e-003 | 0.0000   | 13.1835   | 13.1835   | 4.1800e-003 | 0.0000 | 13.2880 |  |

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**3.6 Paving - 2022****Mitigated Construction Off-Site**

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |  |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|--|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          | MT/yr     |           |             |        |        |  |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Vendor   | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000 | 0.0000 |  |
| Worker   | 5.0000e-004 | 3.5000e-004 | 4.1000e-003 | 1.0000e-005 | 1.4000e-003   | 1.0000e-005  | 1.4100e-003 | 3.7000e-004    | 1.0000e-005   | 3.8000e-004 | 0.0000   | 1.1748    | 1.1748    | 3.0000e-005 | 0.0000 | 1.1755 |  |
| Total    | 5.0000e-004 | 3.5000e-004 | 4.1000e-003 | 1.0000e-005 | 1.4000e-003   | 1.0000e-005  | 1.4100e-003 | 3.7000e-004    | 1.0000e-005   | 3.8000e-004 | 0.0000   | 1.1748    | 1.1748    | 3.0000e-005 | 0.0000 | 1.1755 |  |

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

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|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |  |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|--|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             |          | MT/yr          |                |        |        |                |  |
| Mitigated   | 1.1851  | 5.6680 | 8.3955 | 0.0232 | 1.5542        | 0.0202       | 1.5744     | 0.4165         | 0.0188        | 0.4353      | 0.0000   | 2,150.414<br>8 | 2,150.414<br>8 | 0.1498 | 0.0000 | 2,154.158<br>5 |  |
| Unmitigated | 1.1851  | 5.6680 | 8.3955 | 0.0232 | 1.5542        | 0.0202       | 1.5744     | 0.4165         | 0.0188        | 0.4353      | 0.0000   | 2,150.414<br>8 | 2,150.414<br>8 | 0.1498 | 0.0000 | 2,154.158<br>5 |  |

**4.2 Trip Summary Information**

| Land Use                             | Average Daily Trip Rate |          |          | Unmitigated |            | Mitigated  |            |
|--------------------------------------|-------------------------|----------|----------|-------------|------------|------------|------------|
|                                      | Weekday                 | Saturday | Sunday   | Annual VMT  | Annual VMT | Annual VMT | Annual VMT |
| Fast Food Restaurant w/o Drive Thru  | 1,921.23                | 3,862.10 | 2774.50  | 1,819,987   |            | 1,819,987  |            |
| Fast Food Restaurant with Drive Thru | 2,424.98                | 2,424.98 | 2424.98  | 1,218,961   |            | 1,218,961  |            |
| Other Non-Asphalt Surfaces           | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Parking Lot                          | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Supermarket                          | 1,307.52                | 2,174.96 | 2038.43  | 1,051,394   |            | 1,051,394  |            |
| Total                                | 5,653.74                | 8,462.04 | 7,237.91 | 4,090,342   |            | 4,090,342  |            |

**4.3 Trip Type Information**

| Land Use                        | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|---------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                 | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Fast Food Restaurant w/o Drive  | 16.60      | 3.30       | 3.60        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| Fast Food Restaurant with Drive | 16.60      | 3.60       | 3.60        | 2.20       | 78.80      | 19.00       | 29             | 21       | 50      |
| Other Non-Asphalt Surfaces      | 16.60      | 3.60       | 3.60        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Parking Lot                     | 16.60      | 3.60       | 3.60        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Supermarket                     | 16.60      | 3.60       | 3.60        | 6.50       | 74.50      | 19.00       | 34             | 30       | 36      |

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**4.4 Fleet Mix**

| Land Use                             | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Fast Food Restaurant w/o Drive Thru  | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Fast Food Restaurant with Drive Thru | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Other Non-Asphalt Surfaces           | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Parking Lot                          | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |
| Supermarket                          | 0.549559 | 0.042893 | 0.201564 | 0.118533 | 0.015569 | 0.005846 | 0.021394 | 0.034255 | 0.002099 | 0.001828 | 0.004855 | 0.000709 | 0.000896 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category                | tons/yr |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |             |          |
| Electricity Mitigated   |         |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 263.2605  | 263.2605  | 0.0109      | 2.2500e-003 | 264.2023 |
| Electricity Unmitigated |         |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 263.2605  | 263.2605  | 0.0109      | 2.2500e-003 | 264.2023 |
| NaturalGas Mitigated    | 0.0142  | 0.1295 | 0.1088 | 7.8000e-004 |               | 9.8400e-003  | 9.8400e-003 |                | 9.8400e-003   | 9.8400e-003 | 0.0000   | 140.9343  | 140.9343  | 2.7000e-003 | 2.5800e-003 | 141.7718 |
| NaturalGas Unmitigated  | 0.0142  | 0.1295 | 0.1088 | 7.8000e-004 |               | 9.8400e-003  | 9.8400e-003 |                | 9.8400e-003   | 9.8400e-003 | 0.0000   | 140.9343  | 140.9343  | 2.7000e-003 | 2.5800e-003 | 141.7718 |

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**5.2 Energy by Land Use - NaturalGas****Unmitigated**

|                                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use                             | kBTU/yr        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                 |                 |                    |                    |                 |
| Fast Food Restaurant w/o Drive Thru  | 1.43897e+006   | 7.7600e-003   | 0.0705        | 0.0593        | 4.2000e-004        |               | 5.3600e-003        | 5.3600e-003        |                | 5.3600e-003        | 5.3600e-003        | 0.0000        | 76.7887         | 76.7887         | 1.4700e-003        | 1.4100e-003        | 77.2451         |
| Fast Food Restaurant with Drive Thru | 950408         | 5.1200e-003   | 0.0466        | 0.0391        | 2.8000e-004        |               | 3.5400e-003        | 3.5400e-003        |                | 3.5400e-003        | 3.5400e-003        | 0.0000        | 50.7174         | 50.7174         | 9.7000e-004        | 9.3000e-004        | 51.0188         |
| Other Non-Asphalt Surfaces           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Parking Lot                          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Supermarket                          | 251635         | 1.3600e-003   | 0.0123        | 0.0104        | 7.0000e-005        |               | 9.4000e-004        | 9.4000e-004        |                | 9.4000e-004        | 9.4000e-004        | 0.0000        | 13.4282         | 13.4282         | 2.6000e-004        | 2.5000e-004        | 13.5080         |
| <b>Total</b>                         |                | <b>0.0142</b> | <b>0.1295</b> | <b>0.1087</b> | <b>7.7000e-004</b> |               | <b>9.8400e-003</b> | <b>9.8400e-003</b> |                | <b>9.8400e-003</b> | <b>9.8400e-003</b> | <b>0.0000</b> | <b>140.9343</b> | <b>140.9343</b> | <b>2.7000e-003</b> | <b>2.5900e-003</b> | <b>141.7718</b> |

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**5.2 Energy by Land Use - NaturalGas****Mitigated**

|                                      | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use                             | kBTU/yr        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                 |                 |                    |                    |                 |
| Fast Food Restaurant w/o Drive Thru  | 1.43897e+006   | 7.7600e-003   | 0.0705        | 0.0593        | 4.2000e-004        |               | 5.3600e-003        | 5.3600e-003        |                | 5.3600e-003        | 5.3600e-003        | 0.0000        | 76.7887         | 76.7887         | 1.4700e-003        | 1.4100e-003        | 77.2451         |
| Fast Food Restaurant with Drive Thru | 950408         | 5.1200e-003   | 0.0466        | 0.0391        | 2.8000e-004        |               | 3.5400e-003        | 3.5400e-003        |                | 3.5400e-003        | 3.5400e-003        | 0.0000        | 50.7174         | 50.7174         | 9.7000e-004        | 9.3000e-004        | 51.0188         |
| Other Non-Asphalt Surfaces           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Parking Lot                          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Supermarket                          | 251635         | 1.3600e-003   | 0.0123        | 0.0104        | 7.0000e-005        |               | 9.4000e-004        | 9.4000e-004        |                | 9.4000e-004        | 9.4000e-004        | 0.0000        | 13.4282         | 13.4282         | 2.6000e-004        | 2.5000e-004        | 13.5080         |
| <b>Total</b>                         |                | <b>0.0142</b> | <b>0.1295</b> | <b>0.1087</b> | <b>7.7000e-004</b> |               | <b>9.8400e-003</b> | <b>9.8400e-003</b> |                | <b>9.8400e-003</b> | <b>9.8400e-003</b> | <b>0.0000</b> | <b>140.9343</b> | <b>140.9343</b> | <b>2.7000e-003</b> | <b>2.5900e-003</b> | <b>141.7718</b> |

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**5.3 Energy by Land Use - Electricity****Unmitigated**

|                                      | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|--------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use                             | kWh/yr          | MT/yr           |               |                    |                 |
| Fast Food Restaurant w/o Drive Thru  | 202428          | 64.4977         | 2.6600e-003   | 5.5000e-004        | 64.7285         |
| Fast Food Restaurant with Drive Thru | 133699          | 42.5994         | 1.7600e-003   | 3.6000e-004        | 42.7518         |
| Other Non-Asphalt Surfaces           | 0               | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Parking Lot                          | 17220           | 5.4867          | 2.3000e-004   | 5.0000e-005        | 5.5063          |
| Supermarket                          | 472902          | 150.6767        | 6.2200e-003   | 1.2900e-003        | 151.2157        |
| <b>Total</b>                         |                 | <b>263.2605</b> | <b>0.0109</b> | <b>2.2500e-003</b> | <b>264.2023</b> |

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**5.3 Energy by Land Use - Electricity****Mitigated**

|                                      | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|--------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use                             | kWh/yr          | MT/yr           |               |                    |                 |
| Fast Food Restaurant w/o Drive Thru  | 202428          | 64.4977         | 2.6600e-003   | 5.5000e-004        | 64.7285         |
| Fast Food Restaurant with Drive Thru | 133699          | 42.5994         | 1.7600e-003   | 3.6000e-004        | 42.7518         |
| Other Non-Asphalt Surfaces           | 0               | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Parking Lot                          | 17220           | 5.4867          | 2.3000e-004   | 5.0000e-005        | 5.5063          |
| Supermarket                          | 472902          | 150.6767        | 6.2200e-003   | 1.2900e-003        | 151.2157        |
| <b>Total</b>                         |                 | <b>263.2605</b> | <b>0.0109</b> | <b>2.2500e-003</b> | <b>264.2023</b> |

**6.0 Area Detail****6.1 Mitigation Measures Area**

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|             | ROG     | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4         | N2O    | CO2e        |  |
|-------------|---------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|--------|-------------|--|
| Category    | tons/yr |             |             |        |               |              |             |                |               |             |          | MT/yr       |             |             |        |             |  |
| Mitigated   | 0.0934  | 2.0000e-005 | 1.8500e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 3.6000e-003 | 3.6000e-003 | 1.0000e-005 | 0.0000 | 3.8400e-003 |  |
| Unmitigated | 0.0934  | 2.0000e-005 | 1.8500e-003 | 0.0000 |               | 1.0000e-005  | 1.0000e-005 |                | 1.0000e-005   | 1.0000e-005 | 0.0000   | 3.6000e-003 | 3.6000e-003 | 1.0000e-005 | 0.0000 | 3.8400e-003 |  |

**6.2 Area by SubCategory****Unmitigated**

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2          | Total CO2          | CH4                | N2O           | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|
| SubCategory           | tons/yr       |                    |                    |               |               |                    |                    |                |                    |                    | MT/yr         |                    |                    |                    |               |                    |
| Architectural Coating | 0.0110        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Consumer Products     | 0.0823        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Landscaping           | 1.7000e-004   | 2.0000e-005        | 1.8500e-003        | 0.0000        |               | 1.0000e-005        | 1.0000e-005        |                | 1.0000e-005        | 1.0000e-005        | 0.0000        | 3.6000e-003        | 3.6000e-003        | 1.0000e-005        | 0.0000        | 3.8400e-003        |
| <b>Total</b>          | <b>0.0934</b> | <b>2.0000e-005</b> | <b>1.8500e-003</b> | <b>0.0000</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> |                | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.6000e-003</b> | <b>3.6000e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.8400e-003</b> |

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**6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10 | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total        | Bio- CO2           | NBio- CO2     | Total CO2          | CH4                | N2O                | CO2e          |                    |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|--------------|--------------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|
| SubCategory           | tons/yr       |                    |                    |               |               |              |                    |                    |               |                    | MT/yr              |               |                    |                    |                    |               |                    |
| Architectural Coating | 0.0110        |                    |                    |               |               |              | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        |                    |
| Consumer Products     | 0.0823        |                    |                    |               |               |              | 0.0000             | 0.0000             |               | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        |                    |
| Landscaping           | 1.7000e-004   | 2.0000e-005        | 1.8500e-003        | 0.0000        |               |              | 1.0000e-005        | 1.0000e-005        |               | 1.0000e-005        | 1.0000e-005        | 0.0000        | 3.6000e-003        | 3.6000e-003        | 1.0000e-005        | 0.0000        | 3.8400e-003        |
| <b>Total</b>          | <b>0.0934</b> | <b>2.0000e-005</b> | <b>1.8500e-003</b> | <b>0.0000</b> |               |              | <b>1.0000e-005</b> | <b>1.0000e-005</b> |               | <b>1.0000e-005</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.6000e-003</b> | <b>3.6000e-003</b> | <b>1.0000e-005</b> | <b>0.0000</b> | <b>3.8400e-003</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

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|             | Total CO2 | CH4    | N2O         | CO2e    |
|-------------|-----------|--------|-------------|---------|
| Category    | MT/yr     |        |             |         |
| Mitigated   | 20.0344   | 0.1411 | 3.4700e-003 | 24.5977 |
| Unmitigated | 20.0344   | 0.1411 | 3.4700e-003 | 24.5977 |

**7.2 Water by Land Use****Unmitigated**

|                                      | Indoor/Out door Use | Total CO2      | CH4           | N2O                | CO2e           |
|--------------------------------------|---------------------|----------------|---------------|--------------------|----------------|
| Land Use                             | Mgal                | MT/yr          |               |                    |                |
| Fast Food Restaurant w/o Drive Thru  | 1.68461 / 0.107528  | 7.9042         | 0.0552        | 1.3600e-003        | 9.6891         |
| Fast Food Restaurant with Drive Thru | 1.11397 / 0.0711044 | 5.2267         | 0.0365        | 9.0000e-004        | 6.4070         |
| Other Non-Asphalt Surfaces           | 0 / 0               | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| Parking Lot                          | 0 / 0               | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| Supermarket                          | 1.5088 / 0.046664   | 6.9035         | 0.0494        | 1.2200e-003        | 8.5016         |
| <b>Total</b>                         |                     | <b>20.0344</b> | <b>0.1411</b> | <b>3.4800e-003</b> | <b>24.5977</b> |

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**7.2 Water by Land Use****Mitigated**

|                                      | Indoor/Outdoor Use  | Total CO2      | CH4           | N2O                | CO2e           |
|--------------------------------------|---------------------|----------------|---------------|--------------------|----------------|
| Land Use                             | Mgal                | MT/yr          |               |                    |                |
| Fast Food Restaurant w/o Drive Thru  | 1.68461 / 0.107528  | 7.9042         | 0.0552        | 1.3600e-003        | 9.6891         |
| Fast Food Restaurant with Drive Thru | 1.11397 / 0.0711044 | 5.2267         | 0.0365        | 9.0000e-004        | 6.4070         |
| Other Non-Asphalt Surfaces           | 0 / 0               | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| Parking Lot                          | 0 / 0               | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| Supermarket                          | 1.5088 / 0.046664   | 6.9035         | 0.0494        | 1.2200e-003        | 8.5016         |
| <b>Total</b>                         |                     | <b>20.0344</b> | <b>0.1411</b> | <b>3.4800e-003</b> | <b>24.5977</b> |

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
|             | MT/yr     |        |        |         |
| Mitigated   | 35.5701   | 2.1021 | 0.0000 | 88.1234 |
| Unmitigated | 35.5701   | 2.1021 | 0.0000 | 88.1234 |

**8.2 Waste by Land Use**Unmitigated

|                                      | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|--------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use                             | tons           | MT/yr          |               |               |                |
| Fast Food Restaurant w/o Drive Thru  | 63.93          | 12.9772        | 0.7669        | 0.0000        | 32.1505        |
| Fast Food Restaurant with Drive Thru | 42.27          | 8.5804         | 0.5071        | 0.0000        | 21.2577        |
| Other Non-Asphalt Surfaces           | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Parking Lot                          | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Supermarket                          | 69.03          | 14.0125        | 0.8281        | 0.0000        | 34.7153        |
| <b>Total</b>                         |                | <b>35.5701</b> | <b>2.1021</b> | <b>0.0000</b> | <b>88.1234</b> |

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**8.2 Waste by Land Use****Mitigated**

|                                      | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|--------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use                             | tons           | MT/yr          |               |               |                |
| Fast Food Restaurant w/o Drive Thru  | 63.93          | 12.9772        | 0.7669        | 0.0000        | 32.1505        |
| Fast Food Restaurant with Drive Thru | 42.27          | 8.5804         | 0.5071        | 0.0000        | 21.2577        |
| Other Non-Asphalt Surfaces           | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Parking Lot                          | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Supermarket                          | 69.03          | 14.0125        | 0.8281        | 0.0000        | 34.7153        |
| <b>Total</b>                         |                | <b>35.5701</b> | <b>2.1021</b> | <b>0.0000</b> | <b>88.1234</b> |

**9.0 Operational Offroad**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

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**User Defined Equipment**

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

**11.0 Vegetation**

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