

ADDENDUM No. 1 TO ENVIRONMENTAL IMPACT REPORT



IRWINDALE MATERIALS RECOVERY FACILITY AND TRANSFER STATION PROJECT

SEPTEMBER 2017

STATE CLEARINGHOUSE NUMBER

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Addendum No. 1 – Environmental Impact Report

Irwindale Materials Recovery Facility And Transfer Station

City of Irwindale

(State Clearinghouse No. 2013051029)

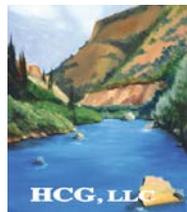
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TABLE OF CONTENTS

SECTION 1.0	INTRODUCTION	1
1.1	Project Background.....	1
1.2	Background and Description of the Proposed Action.....	2
1.3	CEQA Guidance and Basis for an Addendum to the EIR	6
1.4	Proposed Site Plan Revisions.....	7
SECTION 2.0	REVIEW OF THE EIR IMPACT ANALYSES AND PROPOSED REVISED SITE PLAN	11
2.1	Updated Air Quality Assessment.....	19
2.2	Updated Traffic Circulation Assessment – On-site Ingress and Egress.....	21
2.1.1	Revised Site Plan	22
2.1.2	Project Driveway Trip Distribution	23
2.1.3	Project Recommendations.....	26
2.1.4	Conclusions Regarding Proposed Traffic Circulation Revisions.....	28
SECTION 3.0	CONCLUSIONS	30
SECTION 4.0	REFERENCES	31
	TECHNICAL APPENDICES	32
	Appendix A – Air Quality Technical Documentation: CalEEMod Output Files	33
	Appendix B – Athens Irwindale MRF/TS Revised Site Access Evaluation.....	375
	LIST OF FIGURES & EXHIBITS	
Figure 1	Revised Site Plan	3
Figure 2	Site Plan Overlay Showing Revised Footprint and DEIR Site Plan Footprint	4
Figure 3	Rendering of Site Configuration Evaluated in the EIR.....	5
Figure 4	Rendering of Revised Site Plan Evaluated in this Addendum.....	5
Exhibit A	Site Access Recommendations	24
Exhibit B	Access and On-Site Circulation	25
Exhibit L	Site Access Recommendations	29
	LIST OF TABLES	
Table 2-1	Review of EIR Impact Analyses and Proposed Site Plan Changes.....	9
Table 2-2	Estimated Worst Case Daily Unmitigated Emissions from Project Construction.....	19
Table 2-3	Estimated Worst Case Daily Mitigated Emissions from Project Construction	20
	Updated Mitigation Monitoring and Reporting Program (MMRP)	392

Addendum No. 1 to the Environmental Impact Report Irwindale Materials Recovery Facility and Transfer Station Project City of Irwindale

1.0 INTRODUCTION

This Addendum No. 1 to the Environmental Impact Report (EIR) for the Irwindale Materials Recovery Facility and Transfer Station Project (MRF/TS) (SCH No. 2013051029) has been prepared to address minor, internal site plan adjustments made in the final design of the MRT/TS to improve its functionality and efficiency, and enhance the level of design and increase setbacks. There are also minor off-site improvements resulting from the internal site changes, including a right-hand turn lane and installation of an intersection stop light. The EIR was certified and the Project Disposition and Development Agreement (DDA) was approved by the City Council on June 8, 2016.

1.1 PROJECT BACKGROUND

The proposed Project involves development of a MRF/TS, and convenience store/fueling station. A MRF/TS is a regional facility where residential, commercial, and/or industrial municipal solid waste and recyclable materials are delivered by commercial and non-commercial haulers, and sorted and processed in one central location prior to delivery at end use distributors. The proposed MRF/TS site is approximately 17.22 acres (Assessor's Parcel No. 8535-001-911). The MRF/TS consists of a fully enclosed building with the interior designed to provide separate areas to receive, process, and transfer mixed municipal solid waste (MSW), green waste, construction and demolition (C&D) materials, and waste hauled in by self-haulers.

MRF/TS operations would consist of sorting, consolidating, and compacting received materials, and then re-loading all material into transfer trucks for transport to additional processing and/or disposal facilities (end use distributors). On-site improvements include operations offices, administrative offices and visitor center, maintenance facility, scale houses, and a fueling facility/convenience store open to the public. The fueling facility/convenience store would be a separate structure located in the south-eastern portion of the site adjacent to Arrow Highway and includes a fueling island with pump canopy, convenience store, and parking for customers.

Subsequent to the City's certification of the EIR, Athens Services submitted a final site plan for approval that includes minor adjustments to driveway locations, and changes in building footprints, total square-footage of individual components of the MRF/TS buildings, and

arrangement of employee parking. The City prepared this addendum to the EIR to evaluate potential changes in impacts of the MRF/TS as reported in the EIR due to these proposed site plan adjustments, and to determine whether mitigation requirements imposed as conditions of approval would need to be modified or supplemented in any way. [See Figure 1: *Revised Site Plan*; Figure 2: *Site Plan Overlay Showing Revised Footprint and DEIR Site Plan Footprint*; and Figure 3: *Rendering of Site Configuration Evaluated in the EIR*; and Figure 4: *Rendering of Revised Site Plan Evaluated in this Addendum*.]

The project's waste handling capacity of up to 6,000 tons per day (tpd) is unchanged, as are the off-site traffic routes and trip numbers. The number of employees working at the MRF/TS would also remain the same as was analyzed in the EIR. All changes are, therefore, internal to the site and will not affect any of the Project's off-site characteristics or impacts. A full and complete list of the proposed modifications to the MRF/TS is provided in Section 1.4, *Proposed Site Plan Revisions*.

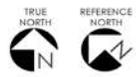
1.2 BACKGROUND AND DESCRIPTION OF THE PROPOSED ACTION

This addendum to the EIR addresses the potential for the revised project to result in changes in the impacts analyzed and reported in the EIR. Each of the environmental topics covered in the EIR is examined and discussed. The analysis also evaluates whether mitigation requirements imposed as conditions of approval would need to be modified or supplemented.

Figure 1: Revised Site Plan



SCALE 1"=40' 0"



Conceptual Site Plan
Athens Irwindale
Material Recovery Facility and Transfer Station
2200 Arrow Hwy, Irwindale, CA

Job No. 3955
02.03.2017
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A1.1

Figure 2: Site Plan Overlay Showing Revised Footprint and DEIR Site Plan Footprint



SCALE: 1"=50'-0"



Conceptual Site Plan - Overlay

Athens Irwindale
Material Recovery Facility and Transfer Station
2200 Arrow Hwy, Irwindale, CA

Job No. 3955
02.03.2017

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A1.2

Figure 3: Rendering of Site Configuration Evaluated in the EIR



Aerial view northwest from above the intersection of Arrow Highway and Live Oak Avenue – main building is the MRF/TS, administration office in lower right corner and convenience store at top right.

Figure 4: Rendering of Revised Site Plan Evaluated in this Addendum



Aerial view west-northwest from above the intersection of Arrow Highway and Live Oak Avenue – main building is the MRF/TS with the administration office incorporated in front-center, and convenience store at lower right; adjusted driveways and parking.

1.3 CEQA GUIDANCE AND BASIS FOR AN ADDENDUM TO THE EIR

As the Lead Agency under CEQA, the City of Irwindale certified the EIR evaluating and disclosing the potential environmental impacts associated with implementation of the MRF/TS Project. When an EIR has been certified and the project is modified or otherwise changed after certification, additional CEQA review may be necessary. The key considerations in determining the need for and appropriate type of additional CEQA review are outlined in §21166 of the Public Resources Code (CEQA) and § 15162 of the CEQA Guidelines, which specifically provide that a Subsequent or Supplemental EIR is not required unless one or more of the following occurs:

- (a) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (b) Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (c) New information, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - Significant effects previously examined will be substantially more severe than shows in the previous EIR;
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Pursuant to the 2017 State CEQA Guidelines §15164, and with reference to §15162, an addendum to a previously certified Environmental Impact Report (EIR) is required when changes or additions are necessary, but where none of the conditions call for the preparation of a subsequent EIR. This addendum has been prepared to assess the requested site plan adjustments, and to provide substantial evidence pursuant to the State CEQA Guidelines §15164(e) supporting the City's decision not to prepare a Supplemental EIR. As evidenced by the analysis contained in this addendum the proposed minor changes to the MRF/TS would not result in any of the conditions requiring preparation of a Subsequent or Supplemental EIR (identified above). The modifications are to internal components of the MRF/TS, would not impact any external operations or characteristics of the project (i.e., truck trips or routes), and would not result in new significant impacts, increase the severity of significant impacts, or otherwise trigger additional review. Consistent with the requirements of CEQA, when considering any required discretionary action for the MRF/TS Project, the City will consider the information contained in this addendum together with the EIR.

1.4 PROPOSED SITE PLAN REVISIONS

The design revisions from the site and operational plan analyzed in the EIR (DEIR Site Plan, October 2013) to the currently proposed site plan (Current Site Plan, February 2017) have been proposed by Athens Services to improve the efficiency of facility functions, enhanced circulation and processing of materials, and increased setbacks from Arrow Highway and Live Oak Avenue. The maximum capacity for daily throughput of material to be processed by the facility and the number staff and vehicles serving the facility has not changed with the Current Site Plan. All changes are confined to the 17.22-acre MRF/TS site, and off-site travel routes have also not been changed in any way, except for minor adjustments to ingress and egress driveways for improved circulation. The design changes are summarized as follows:

Building Footprint

- The footprint occupied by the revised design and the DEIR Site Plan is nearly identical to the Current Site Plan, as shown in Figure 2: Site Plan Overlay. The primary change is the relocation of the Convenience Store along Arrow Highway from the north area of the site to the south area of the site. The separate Administration and Maintenance Building in the DEIR Site Plan has also been incorporated into the main building.
- The total building area has been increased from 247,007 square feet to 265,228 square feet.
- The internal arrangement of spaces within the overall building from the DEIR Site Plan to the Current Site Plan has been shifted to move the Self-Haul/Construction & Demolition area from north to south and the MRF/TS from the north to the center of the site. The Green Waste has also been shifted from the center to the south. The basic purpose of the relocation

of spaces is to keep all of the public accessed areas (Self-Haul/C&D and Administration) at the north side of the project such that access to these areas does not require intermingling with commercial traffic for the balance of the project.

Tunnel

- The loadout tunnel adjacent to the MRF/TS is a critical component of the project and was previously located on the west side of the project. This resulted in a long and inefficient tunnel. The tunnel has now been relocated to the south side of the project with a much shorter east-west tunnel configuration.
- A bridge over the tunnel has been added at the west side of the project to improve circulation by separating collection/commercial traffic from the transfer truck traffic.

Dock

- The recyclable loading dock has been relocated from the east side of the project to the south side.

Circulation

- The overall circulation of the project has remained similar to the DEIR Site Plan. All commercial traffic and visitor traffic enters and exits from Arrow Highway.
- As with the DEIR Site Plan, employee traffic primarily enters and exits from the intersection at Live Oak Avenue and Baldwin Park Boulevard.
- An employee parking area has been added along Arrow Highway.
- Driveway 1 has shifted approximately 300 feet south on Arrow Highway accounting for the relocated convenience store and administration building.
- Driveway 2 remains in the same location on Arrow Highway at the northeastern end of the site, and includes a trucks only ingress lane and a second entrance with ingress and egress for the employee parking lot.
- Driveway 3 remains in the same location on Live oak Avenue for access to employee parking.
- Driveway 4 has shifted approximately 125 feet south on Arrow Highway and provides access to employee parking only.
- Driveway 5 has been added approximately 150 south of Driveway 1 and approximately 450 feet north of the Arrow Highway / Live Oak Avenue intersection providing ingress and egress for the relocated convenience store.

Parking

- The total employee and visitor parking stalls have been increased from 180 parking spaces to 307 spaces. This increase was made possible by coordination with the Los Angeles Department of Water and Power (LADWP) to allow parking under their transmission line easement at the south area of the site and adding parking in the easement along the east side of the site along Arrow Highway. The increased parking spaces allow for a smoother employee shift change. In addition to the above parking, there are 26 spaces for the Convenience Store and 34 flexible parking stalls.
- The 23 transfer truck parking spaces in the DEIR design have been reduced to 19 spaces.

Architecture and Building Setbacks

- The architectural design of the building has remained consistent with the DEIR Site Plan and has been enhanced per comments from the Irwindale Planning Department and integrated in the design.
- A larger setback has been provided in the Current Site Plan design by locating new employee parking along Arrow Highway and relocating the Administration and Maintenance Building into the MRF/TS building footprint.
- The relocation of the tunnel from the west side of the project has also provided an increased setback at this area of the project.

The proposed revisions to the site plan described above will not change plant capacity, staff levels, traffic volumes or trip distances. As discussed below, with the exception of one change (the revision of mitigation measure MM T-6), no changes to the mitigation requirements adopted by the City Council as set forth in the EIR and MMRP are proposed. Truck haul routes, source materials, processed materials destinations, and number and types of employees are the same as those described in the EIR.

With the revisions to the internal site plan, revisions to minor off-site improvements are also included. These improvements are associated with the construction of the access driveways of the project, and serve as revisions to prior off-site improvements that were required in the EIR.

The minor off-site improvements which are discussed below would not trigger additional construction or operational impacts, as they would benefit the operations of the project and would not substantially alter the magnitude of construction impacts or alter the construction schedule beyond that contemplated in the EIR. Grading for construction of the tunnel for truck circulation is greater (an increase of 17,400 cubic yards of import), but is subject to the same dust control measures, and does not change conclusions regarding potential impacts of construction. Total impervious surfacing remains the same, and essentially covers the entire site except for a small portion of the southeast corner. Please refer to Recirculated Draft EIR Section 3.12.8 for a discussion of the previously identified measures.

Review of the impact analysis for each resource topic area is presented in *Table 2.1: Review of EIR Impact Analyses and Proposed Site Plan Changes*. Supplemental analysis of air quality and related GHG emissions is presented in text following Table 2.1, and the supporting technical model outputs are contained in *Appendix A: Air Quality Technical Documentation – CalEEMod Output Files*. The traffic assessment of revised driveway locations on Arrow Highway is also presented in subsequent text, and the complete updated traffic report is contained in the supporting *Appendix B: Athens Irwindale MRF & Transfer Station Revised Site Access Evaluation*, attached to this Addendum.

2.0 REVIEW OF THE EIR IMPACT ANALYSES AND PROPOSED REVISED SITE PLAN

Table 2.1: Review of EIR Impact Analysis and Proposed Site Plan Changes presents assessments of the proposed site plan changes as they relate to each resource area evaluated in the MRF/TS EIR. The supplemental traffic impact assessment examining the proposed site plan changes to driveway locations on Arrow Highway is presented separately in Section 2.1 below.

TABLE 2.1 REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES	
MRF/TS EIR CHAPTER	IMPACT ANALYSIS
3.1 Effects Not Found To Be Significant	This chapter of the MRF/TS EIR (pages 3.1-1 through 3.1-3) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i> . The proposed site plan revisions do not raise any issues pertaining to agriculture, forestry, or mineral resources.
3.2 Aesthetics	This chapter of the MRF/TS EIR (pages 3.2-1 through 3.2-34) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i> . The EIR did consider the potential aesthetic effects of the MRF/TS buildings on the surrounding community, and concluded that impacts would be less than significant given the existing environment and the characteristics of the proposed project. With the proposed design adjustments, the height of the buildings is not proposed to be revised, and the change in square footage ($\pm 7\%$ increase) will not produce a detectable visual change since it is completely contained within the previously proposed MRF/TS facility (which results in only a small incremental change to the overall building). The total disturbance area on the site is unchanged. The minor architectural changes are cosmetic, were made in response to City comments as intended improvements, and are consistent with the architectural style assessed in the EIR; (see Figures 3 and 4 above).

TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
3.3 Air Quality, Greenhouse Gases and Health Risk Assessment	<p>This chapter of the MRF/TS EIR (pages 3.3-1 through 3.3-72) remains accurate, and is updated in Section 2.1 (below) of this <i>Addendum No. 1 to the MRF/TS EIR</i> to assess the modified site plan and increased grading requirements. The site plan adjustments do not result in the generation greater emissions that would result in a new significant impact or increase the severity of a previously identified significant impact, or change in operations that could produce greenhouse gases, odor, or health impacts different from those analyzed in the EIR. For long term operations, overall capacity and through put, the number of truck trips, and the number of employees would remain the same as the originally proposed project. However, the revisions would incrementally increase the overall square footage of the MRF/TS facility. This square footage increase ($\pm 7\%$) would not result in a new significant impact or increase the severity of a previously identified significant impact, however, because (1) it would not increase operational capacity, employees or truck trips, (2) would not significantly increase construction time or emissions, and (3) would not appreciably increase point-source emissions from mechanical equipment such as HVACs.</p>
3.4 Biological Resources	<p>This chapter of the MRF/TS EIR (pages 3.4-1 through 3.4-18) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The disturbance area is not changed from that analyzed in the EIR, and the mitigation measure for protection of nesting migratory birds recommended in the EIR and adopted by the City in its approval of the MMRP (MM Bio-1) is equally applicable to the revised design.</p>

**TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES**

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
3.5 Cultural Resources	<p>This chapter of the MRF/TS EIR (pages 3.5-1 through 3.5-16) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The disturbance area is not changed from that analyzed in the EIR, and the mitigation measures for protection of potential cultural and paleontological resources that may be encountered during grading for construction recommended in the EIR and adopted by the City in its approval of the MMRP (MM CR-1 – MM CR-4) are equally applicable to the revised design.</p>
3.6 Environmental Justice	<p>This chapter of the MRF/TS EIR (pages 3.6-1 through 3.6-9) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The same amount of incoming material will be handled by the MRF/TS facility, and the same amount of waste would be generated within the Los Angeles Basin. As discussed previously, local air quality impacts were determined to be less than significant, and these revisions would not change that conclusion.</p>
3.7 Geology, Soils, and Mineral Resources	<p>This chapter of the MRF/TS EIR (pages 3.7-1 through 3.7-19) remains accurate and is unchanged by this <i>Addendum No. 1 to the MRF/TS EIR</i>. The proposed design changes do not change any conditions that could result in greater geologic hazards or loss of mineral resources. The characteristics of the site have not changed, including with respect to soils, topography, and the potential for seismic ground shaking. The altered tunnel design would require additional grading for the deeper and shorter tunnel. This modification, however, would not result in increased geologic risks as compared to the originally proposed tunnel. The total disturbance area is not changed from that analyzed in the EIR, and the mitigation measure for a geotechnical assessment to support final</p>

**TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES**

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
	<p>engineering design recommended in the EIR and adopted by the City in its approval of the MMRP (MM GEO-1) is equally applicable to the revised design. Also, as was previously required, the project would be constructed in accordance with applicable standards such as the California Building Code.</p>
<p>3.8 Hazards and Hazardous Materials</p>	<p>This chapter of the MRF/TS EIR (pages 3.8-1 through 3.8-31) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The volume and types of materials to be processed at the MRF/TS is not changed from that analyzed in the EIR. As discussed in the EIR, a Phase I and Phase II Environmental Site Assessment were prepared for the project site to identify any potential hazardous materials. The conclusions of those reports remain applicable, and the revised project would not include changes that are inconsistent with the previous analysis (i.e., no new throughput of waste and no processing of hazardous waste materials). With respect to potential spills, the revised project would not expand operations, so the potential for spills remains the same. Also, the same storage and disposal regulations and procedures would apply to the revised project. The convenience store is moved, and the USTs associated with that use will simply be relocated to another portion of the project site, which would not increase the potential for impacts.</p>
<p>3.9 Land Use and Planning</p>	<p>This chapter of the MRF/TS EIR (pages 3.9-1 through 3.9-23) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The proposed site design changes are limited to the 17.22 acre site, are entirely consistent with the land uses evaluated in the EIR, and will not alter any aspect of surrounding land uses or applicable land use plans.</p>

**TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES**

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
3.10 Noise	<p>This chapter of the MRF/TS EIR (pages 3.10-1 through 3.10-37) remains accurate, and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. Because operational capacity will not increase, and thus trucks will not increase, noise from trucks traveling to and from the site, and MRF/TS and convenience store operations will not increase from the levels identified and analyzed in the EIR. Also, although the revisions would result in additional square footage ($\pm 7\%$), the revisions would not result in an extension of the proposed construction period or require new equipment that would substantially increase construction noise beyond what was analyzed in the EIR. As noted above, grading would increase under the revised project, necessitating additional trucks during the 30-day grading period. However, these additional grading trucks would not result in a new significant impact or increase the severity of a significant impact because those trucks would only occur during the short grading phase (30 days), would occur only during the hours of 7:00 AM – 7:00 PM, and would represent only a minor contributor to traffic noise. The EIR acknowledged that haul trips would raise ambient noise levels along haul routes (dump trucks would generate 88 dBA at 50 feet). However, these trucks would travel on highly-used roads, only infrequently and during only a short period of the project’s overall construction schedule. For instance, the haul trips are a fraction of the project’s operational truck trips (3,897 daily trips), which would result in a significant impact at only one location. The number of employees would also not increase, which would ensure that traffic noise remains the same as was analyzed in the EIR. Mitigation measures for noise control recommended in the EIR and adopted by the City in its approval of the MMRP (MM N-1 – N-7) are equally applicable to the revised design.</p>

**TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES**

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
3.11 Public Services and Utilities	<p>This chapter of the MRF/TS EIR (pages 3.11-1 through 3.11-18) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The project’s proposed revisions would not increase the need for public services such as police or fire, as it would not increase total operations (i.e., throughput, number of employees, or truck trips). Also, although the square footage would be increased marginally ($\pm 7\%$), that increase would not, in and of itself, generate the need for additional public services because the operational characteristics of the Proposed Project are unchanged. Likewise, although public utilities, including energy use and water use, may be increased with the additional square footage, the overall usage of such utilities would only increase incrementally. However, because the operational characteristics of the Proposed Project are unchanged, which would be the source of such use, any increase would be minimal. That incremental increase would not trigger a new significant impact or increase the severity of a previously identified significant impact.</p>
3.12 Traffic Generation and Circulation	<p>This chapter of the MRF/TS EIR (pages 3.12-1 through 3.12-101) remains accurate, and is updated in Section 2.2 (below) of this <i>Addendum No. 1 to the MRF/TS EIR</i> to assess the revised internal site circulation and driveway access and egress for traffic entering and exiting the site on Arrow Highway. The increased number of truck trips required to accomplish the revised grading plans – averaging 73 per day over a 30-day grading period – does not result in any significant traffic impact or significant increase in the severity of traffic impacts, and is a minor increase relative to the operational daily trips for the Proposed Project. Aside from the minor revisions to on-site circulation and access, the revised site plan would</p>

**TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES**

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
	<p>not result in an increase in traffic as it would not increase either truck or employee trips. Also, while there would be minor revisions to site access, the ultimate location of access is largely consistent with the originally proposed project. Thus, the access changes would not change the trip distribution assumptions of the EIR such that truck or employee trips would be distributed to intersections differently than what was analyzed in the EIR. The conclusions of the EIR remain valid and unchanged with respect to these revisions. The traffic control improvements and revised site access would not increase traffic impacts, and are consistent with previously proposed improvements. As discussed above, off-site traffic conditions remain unchanged from those analyzed in the EIR, and the mitigation measures for off-site traffic impacts recommended in the EIR and adopted by the City in its approval of the MMRP (MM T-1 – T-5) are equally applicable to the revised design, with the exception of minor revisions to MM T-6.</p>
<p>3.13 Water Quality and Hydrology</p>	<p>This chapter of the MRF/TS EIR (pages 3.13-1 through 3.13-18) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The disturbance area and impervious surfacing of the Project site is not changed from that analyzed in the EIR, and the mitigation measure for protection of water quality recommended in the EIR and adopted by the City in its approval of the MMRP (MM WQ-1) is equally applicable to the revised design.</p>
<p>4.0 Mandatory CEQA Considerations</p>	<p>This chapter of the MRF/TS EIR (pages 4.0-1 through 4.0-8) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i>. The proposed site plan adjustments do not increase any significant unavoidable impacts or cumulative effects different from those addressed in the EIR.</p>

**TABLE 2.1
REVIEW OF EIR IMPACT ANALYSES AND PROPOSED SITE PLAN CHANGES**

MRF/TS EIR CHAPTER	IMPACT ANALYSIS
5.0 Alternatives to the Proposed Project	This chapter of the MRF/TS EIR (pages 5.0-1 through 5.0-34) remains accurate and is unchanged by the proposed site plan changes addressed in this <i>Addendum No. 1 to the MRF/TS EIR</i> . The proposed site plan changes are final design adjustments intended to improve efficiency of the MRF/TS for this particular site, and constitute a refinement to the project design evaluated in the EIR, rather than an alternative project.

2.1 UPDATED AIR QUALITY ASSESSMENT – CONSTRUCTION AND OPERATIONAL EMISSIONS

The updated air quality assessment was prepared by The RCH Group, and is the same consulting team that assisted the City of Irwindale in preparation of air quality assessment presented in the MRF/TS EIR. Their technical assessment of changes for the increased grading during the construction period is presented herein.

Grading for the reconfigured tunnel will increase from that assessed in the EIR, with an added 17,400 cubic yards of imported material. This change results in 4,050 total trips during the 30-day grading period. This is approximately 73 more daily trips (during a 30-day period) than were assumed in the EIR.

As shown in Tables 2.2 and 2.3 below, construction emissions have been recalculated to account for these extra trips. The revised grading operations do not cause any SCAQMD threshold to be exceeded with implementation of the prescribed mitigation measures. Also, the increase in trucks would not result in the exceedance of any AAQS during the construction phase.

The increase in trucks would also not result in a new significant impact with respect to the project’s Health Risk Assessment (HRA). The EIR concluded that construction activities would result in a maximum incremental cancer risk that was far less than the SCAQMD significance threshold of 10 in one million. (EIR at 3.3-56.) The short-term increase in grading trucks would not result in an exceedance of the threshold because: 1) the increase is extremely short-term (30-days), and 2) represents only a 10% increase in overall construction activities, and less than 1% of operational activities. All air quality mitigation measures recommended in the EIR and adopted by the City in its approval of the MMRP (MM AQ-1 through MM AQ-21) are equally applicable to the revised design.

Table 2.2:
Estimated Worst Case Daily Unmitigated Emissions from Project Construction (Pounds per Day)

Construction Year	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂
2017	9.7	123	84.4	21.4	12.8	0.1
Significant (Yes or No)?	No	No	No	No	No	No
2018	289	33.7	32.1	3.8	2.4	0.1
Significant (Yes or No)?	Yes	Yes	No	No	No	No
SCAQMD Thresholds of Significance	75	100	550	150	55	150

NOTE: Values in **bold** are in excess of the applicable SCAQMD significance threshold.

SOURCE: RCH Group, 2017

Table 2.3
Estimated Worst Case Daily Mitigated Emissions From Project Construction
(Pounds Per Day)

Construction Year	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂
2017	4.8	95.0	71.5	7.9	4.7	0.1
Significant (Yes or No)?	No	No	No	No	No	No
2018	11.8	28.6	31.5	2.7	1.4	0.1
Significant (Yes or No)?	No	No	No	No	No	No
SCAQMD Thresholds of Significance	75	100	550	150	55	150
NOTE: Values in bold are in excess of the applicable SCAQMD significance threshold.						
<i>SOURCE: RCH Group, 2017</i>						

Would Project-related construction and operational activities potentially cause an exceedance of the Ambient Air Quality Standards for Criteria Pollutants?

For construction, the CO impacts including background concentrations are 3.1 and 1.4 ppm for the 1-hour and 8-hour averaging periods, respectively; well below the thresholds of 20 and 9 ppm, respectively. For construction, the NO₂ impacts including background concentrations are 0.15 (an increase from 0.14) and 0.02 ppm for the 1-hour and annual averaging periods, respectively; well below the thresholds of 0.18 and 0.03 ppm, respectively. The SO₂ impacts are less than 0.01 ppm as a result of ultra-low sulfur diesel. Diesel fuel does not contain lead emissions and gasoline fuel is unleaded.

The project construction incremental PM₁₀ impacts are 2.9 (an increase from 2.8) for 24-hour impact and 0.3 µg/m³ for annual impacts. The project construction incremental PM_{2.5} impacts are 1.8 (an increase from 1.7) µg/m³ for 24-hour impacts. The impacts for 24-hour PM₁₀ and PM_{2.5} are well below the 24-hour threshold of 10.4 µg/m³ and the annual PM₁₀ impacts are well below the annual threshold of 1.0 µg/m³.

MM AQ-1 through MM AQ-11 would further reduce the construction impacts. For example, the NO₂ impacts including background concentrations are 0.14 (an increase from 0.13) and 0.02 ppm for the 1-hour and annual averaging periods, respectively. The project construction incremental PM₁₀ impacts are 1.8 (an increase from 1.7) for 24-hour impact and 0.2 µg/m³ for annual impacts. The project construction incremental PM_{2.5} impacts are 1.0 (an increase from 0.9) µg/m³ for 24-hour impacts.

Would Project operational activities expose sensitive receptors to substantial concentrations of toxic air contaminants (TACs)?

During construction activities, the maximum incremental cancer risks from all trucks using the MRF/TS and the service station would be 0.2 (residential adult receptor), 2.3 (residential child receptor), and less than 0.1 (school children receptor) cancers per million, which are less than the SCAQMD significance threshold of 10 in one million. The additional grading would not change these values.

Would the Project conflict with implementation of state goals for reducing greenhouse gas emissions?

Finally, the increase in construction truck trips would incrementally increase GHG emissions from construction. However, because the operational characteristic of the project would not change, the primary activities associated with GHG emissions would not be increased. Moreover, MM AQ-22 is still applicable to the project and requires that the Project Applicant purchase verifiable and certified GHG off-set credits sufficient to off-set the GHG emissions of the project.

The construction emissions associated with the Proposed Project at 32,400 cubic yards of material import during grading would be approximately 1,035 metric tons of CO₂e, an increase of 95 metric tons of CO₂e compared to the 940 metric tons of CO₂e estimated in the RDEIR for 15,000 cubic yards of material export. This would be an increase of approximately 3 metric tons of CO₂e per year when amortized over the life of the project (assumed to be 30 years in the RDEIR). MM AQ-22 is still applicable and the Project Applicant would need to purchase an additional 95 metric tons of CO₂e offset credits over the lifetime of the Proposed Project.

2.2 UPDATED TRAFFIC CIRCULATION ASSESSMENT – ON-SITE INGRESS AND EGRESS

The updated assessment of on-site traffic circulation was prepared by Urban Crossroads, Inc., and is the same consulting team that assisted the City of Irwindale in preparation of Traffic Impact Assessment (TIA) presented in the MRF/TS EIR. Their technical memo is presented in its original form in Appendix A to this Addendum No. 1. This focused assessment is provided as a supplement to Athens-Irwindale Materials Recovery Facility and Transfer Station Updated Traffic Impact Analysis (Urban Crossroads, Inc. March 17, 2016). With the modified site plan recently submitted to the City as a part of its final design and entitlements package, the facility's capacity is unchanged, and traffic volumes and routing offsite remain the same, and therefore Project trip generation has not been re-examined for this analysis.

2.1.1 REVISED SITE PLAN

The site plan adjustments to building footprints and total square footage include a single building with all components of the MRF/TS including the administrative offices, a shorter tunnel now with an east-west orientation, shifted convenience store to the southeastern corner of the site, modified driveway locations for ingress and egress from Arrow Highway, and rearranged parking between the perimeter and main building. The main circulation changes are summarized as follows:

- The overall circulation of the project has remained similar to the DEIR Site Plan. All commercial traffic and visitor traffic enters and exits from Arrow Highway.
- As with the DEIR Site Plan, employee traffic primarily enters and exits from the intersection at Live Oak Avenue and Baldwin Park Boulevard.
- An employee parking area has been added along Arrow Highway.
- Driveway 1 has shifted approximately 300 feet south on Arrow Highway accounting for the relocated convenience store and administration building.
- Driveway 2 remains in the same location on Arrow Highway at the northeastern end of the site, and includes a trucks only ingress lane and a second entrance with ingress and egress for the employee parking lot only.
- Driveway 3 remains in the same location on Live Oak Avenue for access to employee parking only.
- Driveway 4 has shifted approximately 125 feet south on Arrow Highway and provides access to employee parking only.
- Driveway 5 has been added approximately 150 feet south of Driveway 1 and approximately 450 feet north of the Arrow Highway / Live Oak Avenue intersection providing ingress and egress for the relocated convenience store.

This evaluation focuses on changes in site access conditions resulting from these site plan changes. Exhibit A highlights the modified driveway locations for ingress and egress from Arrow Highway with the proposed revised site plan.

Exhibit B illustrates the proposed revised Access and On-Site Circulation for the Project with notes in text boxes added for this assessment. Primary access for transfer trucks to and from the project site would be from Arrow Highway, and directed towards Interstate 605 for regional transport, utilizing City of Irwindale roadways. Two additional access points to the south from Live Oak Avenue will serve for employees, visitors and Fire Department access only. Site access into the Fueling Facility/Convenience Store area would be located on Arrow Highway. As shown in Exhibit B, Driveway 1 will provide full access to the MRF/TS facility for trucks and other vehicles accessing parking lots, (not including the convenience store). Driveway 2 has two components, the northernmost driveway is proposed as an entrance only for trucks and the

second access is parking lot access for passenger cars (i.e. – employee and visitor traffic). Driveway 4, located south of Driveway 2, should be limited to right-in/right-out only access. Driveway 5 is right in / right out access for the convenience store/fueling facility in conjunction with internal connectivity to Driveway 1.

2.1.2 PROJECT DRIVEWAY TRIP DISTRIBUTION

The following discussion explains the updated traffic assessment for the proposed internal circulation design changes, and related minor shifts in driveway locations. Off-site distribution patterns and traffic volumes are not changed in any way by the internal circulation changes, and other than the driveway locations being shifted for improved efficiency, all ingress and egress to and from the site remains exactly as described in the EIR.

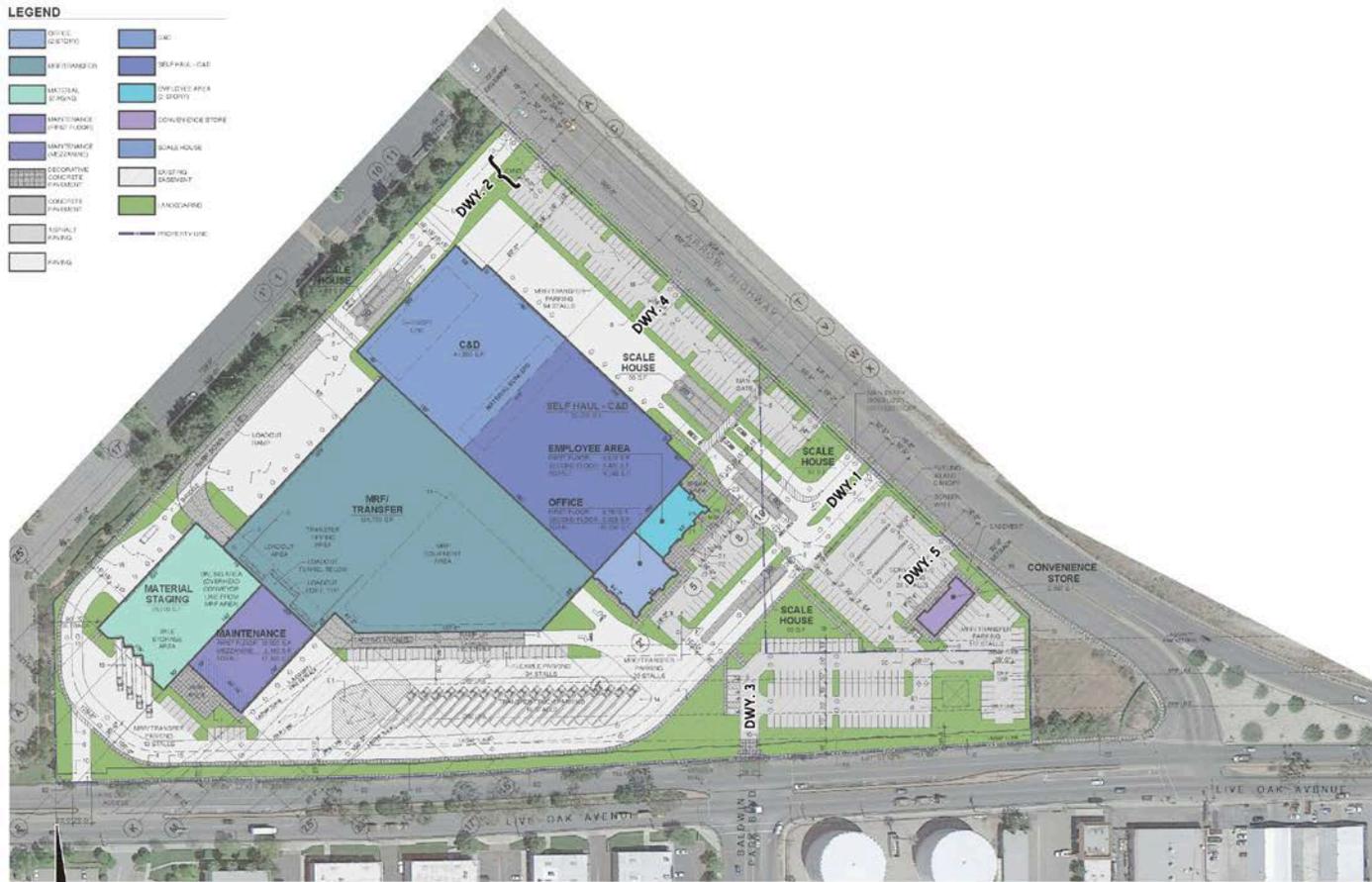
The trip distribution anticipated for the Collection Trucks and Roll-Off Trucks represent the traffic pattern for trucks/vehicles bringing commodities into the site for processing (see Exhibit C in Appendix A).

The self-haul/contractor trucks are proposed to utilize Driveway 1. The trip distribution anticipated for the “Self-Haul/Contractor” vehicles represent the traffic pattern for trucks/vehicles bringing commodities into the site for processing (see Exhibit D n Appendix A).

Transfer trucks are proposed to utilize Driveway 2 for entering the site and Driveway 1 for exiting the site (see Exhibit E in Appendix A). The trip distribution anticipated for the Transfer Trucks represents the traffic pattern for trucks bringing materials out of the site to be transferred to compost facilities in Victorville or to the ports of Los Angeles and Long Beach for overseas shipping to recycling plants. As described in the EIR, unrecoverable materials would be transported to one of several landfills in Los Angeles County, Riverside County, or Tulare County.

Three employee parking areas are shown, with employees proposed to utilize Driveways 1, 2, 3, and 4 (see Exhibit F in Appendix A). The “Convenience Store / Fueling Facility” trip distribution patterns will utilize driveways 1 and 5. Consistent with the EIR Traffic Impact Assessment, twenty percent (20%) of the Convenience Store / Fueling Facility traffic is anticipated to be captured within the project site (see Exhibit G in Appendix A).

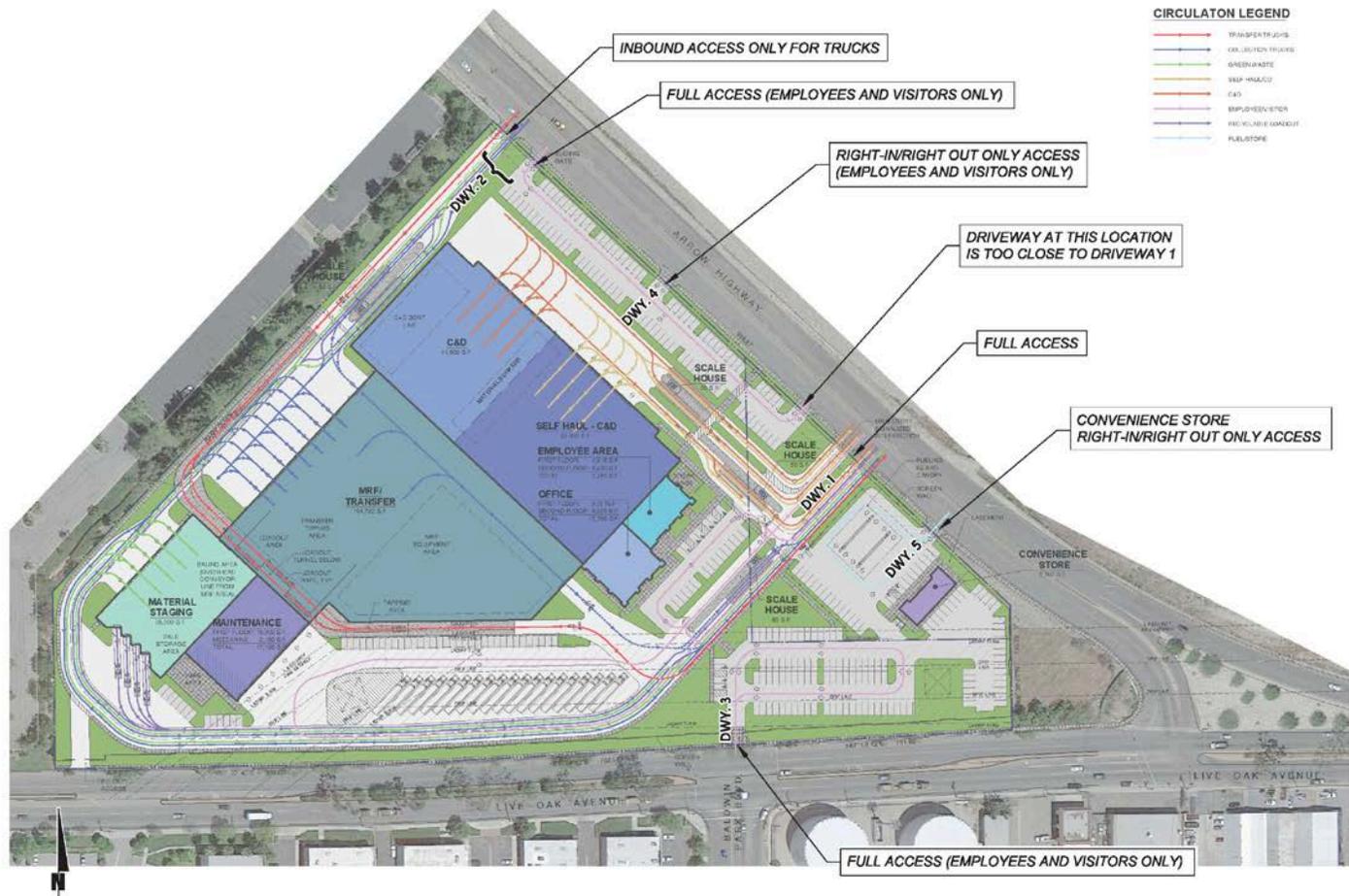
EXHIBIT A: SITE ACCESS RECOMMENDATIONS



10910 - 001.dwg



EXHIBIT B: ACCESS AND ON-SITE CIRCULATION



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2.1.3 PROJECT RECOMMENDATIONS

Urban Crossroads reviewed the proposed minor revisions to the project, including the proposed driveway locations and orientations, and made improvement recommendations to ensure there would be no conflict with existing roadways, and thus no significant impact, consistent with the conclusions of the Final EIR.

The improvements identified in the mitigation measures below are unchanged from the Final EIR, and the mitigation measures shall remain the same. As determined by Urban Crossroads, mitigation measure MM T-6 requires revisions because the convenience store was moved from its original location to the southeast of the project site.

MM T-3

Arrow Highway (NS) / Driveway 1 (EW) – Install a traffic signal and construct the intersection with the following geometrics:

- Northbound Approach: One left turn lane (two way turn lane) and two through lanes.
- Southbound Approach: Two through lanes and one right turn lane.
- Eastbound Approach: One left turn lane and one right turn lane.
- Westbound Approach: N/A

MM T-4

Arrow Highway (NS) / Driveway 2 (EW) – Install stop control on the eastbound approach and construct the intersection with the following geometrics:

- Northbound Approach: One left turn lane (two way turn lane) and two through lanes.
- Southbound Approach: Two through lanes and one right turn lane.
- Eastbound Approach: One shared left turn and right turn lane.
- Westbound Approach: N/A

MM T-5

Driveway 3 - Baldwin Park Boulevard (NS) / Live Oak Avenue (EW) – Modify traffic signal to include Project Driveway 3 (north leg) and construct the intersection with the following geometrics:

- Northbound Approach: Two left turn lanes and one shared through-right turn lane.
- Southbound Approach: One left turn lane and one shared through-right turn lane.
- Eastbound Approach: One left turn lane (100-foot pocket length), two through lanes, and one defacto right turn lane.
- Westbound Approach: One left turn lane, two through lanes, and one right turn lane.

The revised project includes slight changes at Driveways 4 and 5, both of which occur along Arrow Highway, as a result of the relocation of the convenience store. MM T-6 previously identified improvements that would mitigate the potential impact of conflicting turning movements in the vicinity of Driveway 1, which lies between Driveways 4 and 5. MM T-6 is revised to reflect the proposed project revisions.

MM T-6

Arrow Highway (NS) / Driveway 4 (EW) – Install stop control on the eastbound approach and construct the right in / right out driveway intersection with the following geometrics:

- Northbound Approach: Two through lanes (no left turn access).
- Southbound Approach: One through lane and one shared through-right turn lane.
- Eastbound Approach: One right turn lane.
- Westbound Approach: N/A

Arrow Highway (NS) / Driveway 5 (EW) – Install stop control on the eastbound approach and construct the right in / right out driveway intersection with the following geometrics:

- Northbound Approach: Two through lanes (no left turn access).
- Southbound Approach: One through lane and one shared through-right turn lane.
- Eastbound Approach: One right turn lane.
- Westbound Approach: N/A

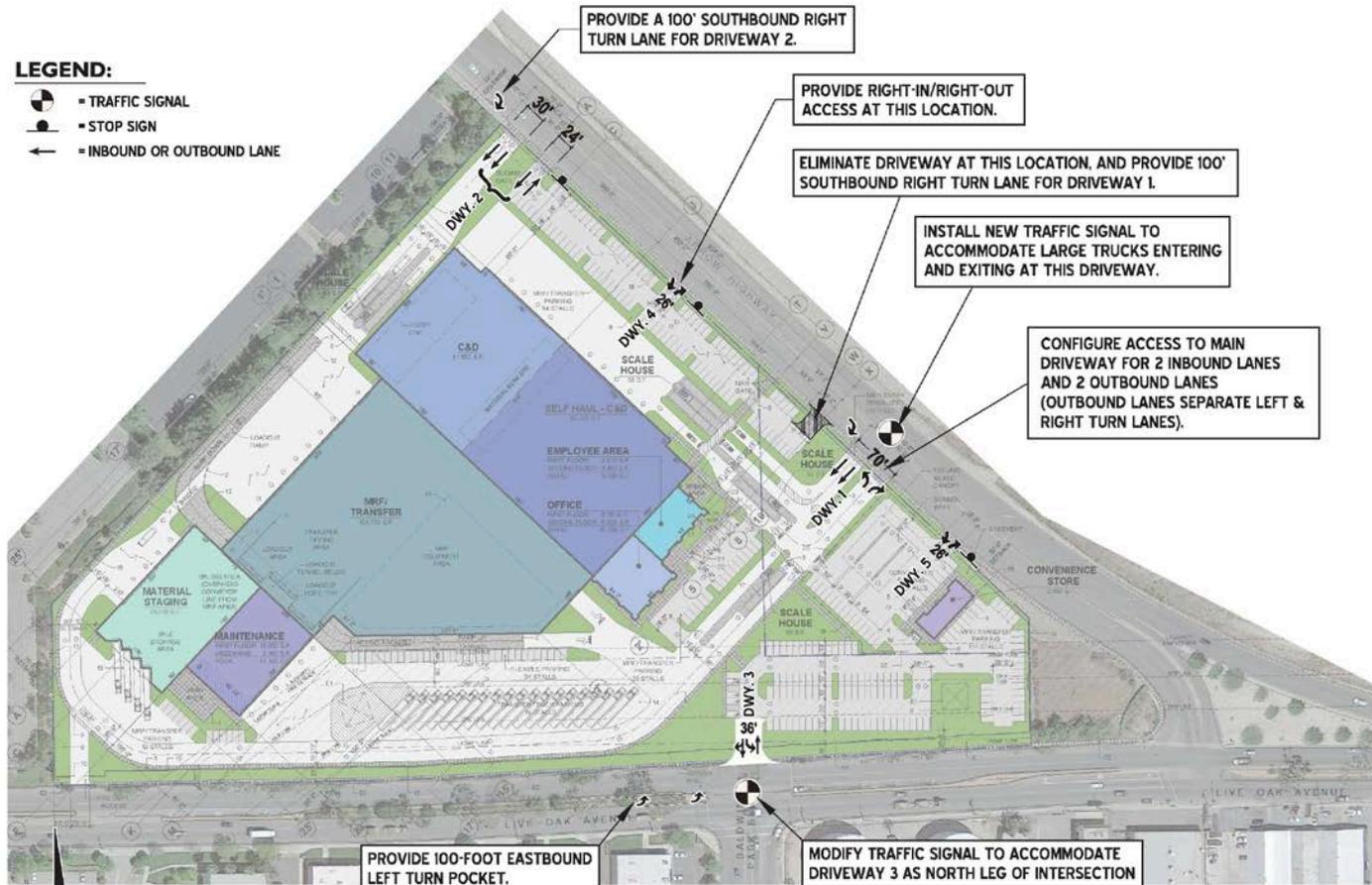
On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project site. Sight distance at the project driveways should be reviewed with respect to standard Caltrans and City of Irwindale sight distance standards at the time of preparation of final grading, landscape and street improvement plans. The improvements identified above would ensure that the revised project would not result in new significant impacts or increase the severity of a previously identified significant impact.

2.1.4 Conclusions Regarding Proposed Traffic Circulation Revisions

The recommended project site revisions provide for safe and efficient access conditions, and accommodate the internal circulation activities associated with the MRF/TS project. Implementation of the revised site plan would not conflict with adopted policies, plans, or programs that would result in a decrease of the performance or safety of public transit, bicycle, or pedestrian facilities. These revisions are not substantial and would not increase the significance of a previously identified impact or result in a new significant impact. Impacts are considered less than significant and no additional mitigation measures are required.

EXHIBIT L: SITE ACCESS RECOMMENDATIONS

- LEGEND:**
- ◉ = TRAFFIC SIGNAL
 - ◐ = STOP SIGN
 - ← = INBOUND OR OUTBOUND LANE



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3.0 CONCLUSIONS

The proposed action is within the scope of the MRF/TS EIR and this Addendum No. 1 fulfills the CEQA review necessary for the City's consideration and decision-making regarding the proposed site plan revisions. Based upon the foregoing analysis and recommended minor modifications to the site's ingress and egress driveways from Arrow Highway, the proposed site plan adjustments are not substantial, and are determined to be consistent with the description of the environmental setting, environmental impacts and mitigation measures as set forth in the originally certified MRF/TS EIR (June 8, 2016).

None of the conditions described in State CEQA Guidelines §15162 calling for the preparation of a subsequent EIR have occurred, and therefore CEQA §15164 applies. All applicable and relevant mitigation measures to the MRF/TS plan that were included in the MRF/TS EIR are incorporated by reference herein and are contained in the Mitigation Monitoring and Reporting Program (MMRP) prepared for the MRF/TS EIR (refer to Chapter 9.0 – Mitigation Monitoring and Reporting Program). As discussed above, mitigation measures for traffic improvements will ensure that no significant impacts occur with respect to the location and orientation of the project's driveways. These mitigation measures will be included in the project's MMRP. No further environmental review is required.

Because the revisions to the Project are not substantial and there are no new or substantially more severe impacts, the Addendum need not be circulated for public review. However, the City shall make the Addendum available to the public and consider it in conjunction with all of the associated documents in the record as a part of making its decision whether to approve the final site plan. No formal noticing or recirculation of the MRF/TS EIR is required since conditions permitting adoption of an Addendum are satisfied. Prior to the City making its final decision regarding Project approval, this Addendum will be inserted as a part of the MRF/TS EIR (State CEQA Guidelines §15164(c) and (d)).

This *Addendum No. 1* to the MRF/TS Project Environmental Impact Report and the complete 2016 EIR are available for review during normal business hours at the Irwindale City Hall: 5050 Irwindale Boulevard, Irwindale, California 91706.

4.0 REFERENCES

On-File with the City of Irwindale Community Development:

Irwindale Materials Recovery Facility and Transfer Station, Final Environmental Impact Report, State Clearinghouse No. 2013051029 (certified by the City of Irwindale City Council on June 8, 2016).

Athens Services, land use entitlement application packet submitted to the City on October 16, 2016 based on the approved DDA and EIR certified on June 8, 2016 entitled:

Project: Development of the Irwindale Materials Recovery Facility and Transfer Station project (MRF/TS), a 265,382 SF materials recovery facility and transfer station, and a 2,587 SF convenience store/fueling station, including:

- *General Plan Amendment No. 02-2016 (GP map change from commercial to commercial/industrial land use);*
- *Zoning Ordinance Amendment No. 04-2016 (Zoning text change to allow a MRF/TS use as a permitted land use in the M-2 zone with approval of a development agreement, and to revise the distance requirements for the sale of alcoholic beverages);*
- *Conditional Use Permit 08-2016 (for the sale of alcoholic beverages and the gas station);*
- *Site Plan and Design Review (DA) No. 06-2016 (for the site layout plan and design approval);*
- *Development Agreement No. 02-2016; and*
- *Franchise and Facility Operations Agreement.*

Appendix A

Air Quality Technical Documentation: CalEEMod Output Files

Appendix AQ

CalEEMod Output Files

- Annual Unmitigated
- Summer Unmitigated
- Winter Unmitigated
- Annual Mitigated
- Summer Mitigated
- Winter Mitigated

Irwindale MRF
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	291.00
tblConstructionPhase	NumDays	20.00	29.00
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8588	0.0457	282.9847
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7148	0.0584	3,610.4941

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8585	0.0456	282.9560
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7144	0.0584	3,610.4654

	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	0.01	0.12	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	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/5/2016	5	291	
5	Paving	Paving	5/6/2016	6/2/2016	5	20	
6	Architectural Coating	Architectural Coating	6/3/2016	7/13/2016	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Demolition - 2015

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	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	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	0.0000
Worker	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989	
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989	

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	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
Total	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989

3.3 Site Preparation - 2015

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	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	0.0000
Worker	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594

3.4 Grading - 2015

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					0.1319	0.0000	0.1319	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1319	0.0570	0.1890	0.0542	0.0525	0.1067	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	0.0000	138.1115
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	0.0000
Worker	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	0.0000	141.3093

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					0.1319	0.0000	0.1319	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1319	0.0570	0.1890	0.0542	0.0525	0.1067	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	138.1115
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	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	141.3093

3.5 Building Construction - 2015

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	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063
Total	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063

3.5 Building Construction - 2015

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	0.0000
Vendor	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376	
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244	
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619	

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	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060	
Total	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060	

3.5 Building Construction - 2015

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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

3.5 Building Construction - 2016

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	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9691	108.9691	0.0270	0.0000	109.5367
Total	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9691	108.9691	0.0270	0.0000	109.5367

3.5 Building Construction - 2016

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	0.0000
Vendor	0.0200	0.2043	0.2622	4.9000e-004	0.0138	3.1900e-003	0.0170	3.9500e-003	2.9300e-003	6.8800e-003	0.0000	44.3811	44.3811	3.2000e-004	0.0000	44.3879	
Worker	0.0231	0.0339	0.3528	7.8000e-004	0.0632	5.4000e-004	0.0637	0.0168	4.9000e-004	0.0173	0.0000	59.2069	59.2069	3.1900e-003	0.0000	59.2738	
Total	0.0431	0.2382	0.6150	1.2700e-003	0.0770	3.7300e-003	0.0808	0.0207	3.4200e-003	0.0242	0.0000	103.5880	103.5880	3.5100e-003	0.0000	103.6617	

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	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9690	108.9690	0.0270	0.0000	109.5365	
Total	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9690	108.9690	0.0270	0.0000	109.5365	

3.5 Building Construction - 2016**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	0.0200	0.2043	0.2622	4.9000e-004	0.0138	3.1900e-003	0.0170	3.9500e-003	2.9300e-003	6.8800e-003	0.0000	44.3811	44.3811	3.2000e-004	0.0000	44.3879
Worker	0.0231	0.0339	0.3528	7.8000e-004	0.0632	5.4000e-004	0.0637	0.0168	4.9000e-004	0.0173	0.0000	59.2069	59.2069	3.1900e-003	0.0000	59.2738
Total	0.0431	0.2382	0.6150	1.2700e-003	0.0770	3.7300e-003	0.0808	0.0207	3.4200e-003	0.0242	0.0000	103.5880	103.5880	3.5100e-003	0.0000	103.6617

3.6 Paving - 2016**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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436

3.7 Architectural Coating - 2016

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	2.8826					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3400e-003	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114
Total	2.8880	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114

3.7 Architectural Coating - 2016

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	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	0.0000
Worker	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796	
Total	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796	

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	2.8826					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3400e-003	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114
Total	2.8880	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114

3.7 Architectural Coating - 2016

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	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796
Total	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Unmitigated	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

~~5.1 Fleet Mix~~

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	868.6983	868.6983	0.0399	8.2600e-003	872.0979
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	868.6983	868.6983	0.0399	8.2600e-003	872.0979
NaturalGas Mitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525
NaturalGas Unmitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525

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					
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

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					
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Unmitigated	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	229.7912	1.8585	0.0456	282.9560
Unmitigated	229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2281
Manufacturing	56.5684 / 0	228.7304	1.8530	0.0455	281.7566
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2280
Manufacturing	56.5684 / 0	228.7304	1.8526	0.0455	281.7280
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8584	0.0456	282.9560

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	63.0307	3.7250	0.0000	141.2559
Unmitigated	63.0307	3.7250	0.0000	141.2559

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating - Use super compliant VOC coatings for all architectural applications. Rule 1113 of the SCAQMD contain less than 10 grams of VOC per liter

Construction Off-road Equipment Mitigation - Project Description

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8588	0.0457	282.9847
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7148	0.0584	3,610.4941

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8585	0.0456	282.9560
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7144	0.0584	3,610.4654

	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	0.01	0.12	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	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/18/2016	5	300	
5	Paving	Paving	5/19/2016	6/15/2016	5	20	
6	Architectural Coating	Architectural Coating	6/16/2016	7/13/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

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	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989

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	0.0129	0.3347	0.2527	4.0000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
Total	0.0129	0.3347	0.2527	4.0000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989

3.3 Site Preparation - 2015

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	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	0.0000
Worker	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	

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					0.0335	0.0000	0.0335	0.0184	0.0000	0.0184	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1500e-003	0.1721	0.1170	2.0000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	6.1500e-003	0.1721	0.1170	2.0000e-004	0.0335	4.8100e-003	0.0383	0.0184	4.8100e-003	0.0232	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594

3.4 Grading - 2015

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					0.1319	0.0000	0.1319	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1319	0.0570	0.1890	0.0542	0.0525	0.1067	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	0.0000	138.1115
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	0.0000
Worker	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	0.0000	141.3093

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					0.0489	0.0000	0.0489	0.0201	0.0000	0.0201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.7642	0.5692	9.3000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.0284	0.7642	0.5692	9.3000e-004	0.0489	0.0207	0.0696	0.0201	0.0207	0.0408	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	138.1115
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	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	141.3093

3.5 Building Construction - 2015

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	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063
Total	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063

3.5 Building Construction - 2015

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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

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	0.1084	2.3579	1.7905	2.7000e-003		0.0906	0.0906		0.0906	0.0906	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060
Total	0.1084	2.3579	1.7905	2.7000e-003		0.0906	0.0906		0.0906	0.0906	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060

3.5 Building Construction - 2015**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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

3.5 Building Construction - 2016**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	0.1686	1.4111	0.9161	1.3300e-003		0.0974	0.0974		0.0915	0.0915	0.0000	119.8660	119.8660	0.0297	0.0000	120.4903
Total	0.1686	1.4111	0.9161	1.3300e-003		0.0974	0.0974		0.0915	0.0915	0.0000	119.8660	119.8660	0.0297	0.0000	120.4903

3.5 Building Construction - 2016

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	0.0000
Vendor	0.0220	0.2247	0.2884	5.4000e-004	0.0152	3.5100e-003	0.0187	4.3500e-003	3.2200e-003	7.5700e-003	0.0000	48.8192	48.8192	3.6000e-004	0.0000	48.8266	
Worker	0.0254	0.0373	0.3881	8.5000e-004	0.0695	5.9000e-004	0.0701	0.0185	5.4000e-004	0.0190	0.0000	65.1276	65.1276	3.5100e-003	0.0000	65.2012	
Total	0.0474	0.2620	0.6765	1.3900e-003	0.0847	4.1000e-003	0.0888	0.0228	3.7600e-003	0.0266	0.0000	113.9468	113.9468	3.8700e-003	0.0000	114.0279	

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	0.0534	1.1613	0.8819	1.3300e-003		0.0446	0.0446		0.0446	0.0446	0.0000	119.8659	119.8659	0.0297	0.0000	120.4902
Total	0.0534	1.1613	0.8819	1.3300e-003		0.0446	0.0446		0.0446	0.0446	0.0000	119.8659	119.8659	0.0297	0.0000	120.4902

3.5 Building Construction - 2016

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	0.0220	0.2247	0.2884	5.4000e-004	0.0152	3.5100e-003	0.0187	4.3500e-003	3.2200e-003	7.5700e-003	0.0000	48.8192	48.8192	3.6000e-004	0.0000	48.8266
Worker	0.0254	0.0373	0.3881	8.5000e-004	0.0695	5.9000e-004	0.0701	0.0185	5.4000e-004	0.0190	0.0000	65.1276	65.1276	3.5100e-003	0.0000	65.2012
Total	0.0474	0.2620	0.6765	1.3900e-003	0.0847	4.1000e-003	0.0888	0.0228	3.7600e-003	0.0266	0.0000	113.9468	113.9468	3.8700e-003	0.0000	114.0279

3.6 Paving - 2016

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436

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	9.1200e-003	0.1970	0.1693	2.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1970	0.1693	2.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436

3.7 Architectural Coating - 2016

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	0.1153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	0.1190	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596

3.7 Architectural Coating - 2016

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	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	0.0000
Worker	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756	2.6756
Total	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756	2.6756

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	0.1153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1400e-003	0.0235	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	0.1165	0.0235	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596

3.7 Architectural Coating - 2016

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	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756
Total	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Unmitigated	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	868.6983	868.6983	0.0399	8.2600e-003	872.0979
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	868.6983	868.6983	0.0399	8.2600e-003	872.0979
NaturalGas Mitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525
NaturalGas Unmitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525

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					
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

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					
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Unmitigated	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	229.7912	1.8585	0.0456	282.9560
Unmitigated	229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2281
Manufacturing	56.5684 / 0	228.7304	1.8530	0.0455	281.7566
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2280
Manufacturing	56.5684 / 0	228.7304	1.8526	0.0455	281.7280
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8584	0.0456	282.9560

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	63.0307	3.7250	0.0000	141.2559
Unmitigated	63.0307	3.7250	0.0000	141.2559

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	291.00
tblConstructionPhase	NumDays	20.00	29.00
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/5/2016	5	291	
5	Paving	Paving	5/6/2016	6/2/2016	5	20	
6	Architectural Coating	Architectural Coating	6/3/2016	7/13/2016	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

3.7 Architectural Coating - 2016

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018			17,305.6347
Unmitigated	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018			17,305.6347

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating - Use super compliant VOC coatings for all architectural applications. Rule 1113 of the SCAQMD contain less than 10 grams of VOC per liter

Construction Off-road Equipment Mitigation - Project Description

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/18/2016	5	300	
5	Paving	Paving	5/19/2016	6/15/2016	5	20	
6	Architectural Coating	Architectural Coating	6/16/2016	7/13/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

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	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275		4,137.5225

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000				0.0000
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	1.2300	34.4240	23.4003	0.0391	6.6936	0.9611	7.6546	3.6793	0.9611	4.6404	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

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					3.2587	0.0000	3.2587	1.3394	0.0000	1.3394			0.0000			0.0000
Off-Road	1.8922	50.9465	37.9432	0.0618		1.3783	1.3783		1.3783	1.3783	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	1.8922	50.9465	37.9432	0.0618	3.2587	1.3783	4.6370	1.3394	1.3783	2.7176	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

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	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.0851	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295

3.7 Architectural Coating - 2016

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	11.8990	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449
Total	11.6445	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018			17,305.6347
Unmitigated	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018			17,305.6347

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	291.00
tblConstructionPhase	NumDays	20.00	29.00
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004			0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272		1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272		17,969.4190

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004			0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272		1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272		17,969.4190

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/5/2016	5	291	
5	Paving	Paving	5/6/2016	6/2/2016	5	20	
6	Architectural Coating	Architectural Coating	6/3/2016	7/13/2016	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000	
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003		1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848		1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937		2,575.1040

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

3.7 Architectural Coating - 2016

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076
Unmitigated	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating - Use super compliant VOC coatings for all architectural applications. Rule 1113 of the SCAQMD contain less than 10 grams of VOC per liter

Construction Off-road Equipment Mitigation - Project Description

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004			0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272		1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272		17,969.4190

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004			0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272		1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272		17,969.4190

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/18/2016	5	300	
5	Paving	Paving	5/19/2016	6/15/2016	5	20	
6	Architectural Coating	Architectural Coating	6/16/2016	7/13/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

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	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000	
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	1.2300	34.4240	23.4003	0.0391	6.6936	0.9611	7.6546	3.6793	0.9611	4.6404	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

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					3.2587	0.0000	3.2587	1.3394	0.0000	1.3394			0.0000			0.0000
Off-Road	1.8922	50.9465	37.9432	0.0618		1.3783	1.3783		1.3783	1.3783	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	1.8922	50.9465	37.9432	0.0618	3.2587	1.3783	4.6370	1.3394	1.3783	2.7176	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

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	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.0851	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

3.7 Architectural Coating - 2016

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	11.8990	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449
Total	11.6445	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076
Unmitigated	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	291.00
tblConstructionPhase	NumDays	20.00	29.00
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8588	0.0457	282.9847
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7148	0.0584	3,610.4941

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8585	0.0456	282.9560
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7144	0.0584	3,610.4654

	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	0.01	0.12	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	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/5/2016	5	291	
5	Paving	Paving	5/6/2016	6/2/2016	5	20	
6	Architectural Coating	Architectural Coating	6/3/2016	7/13/2016	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Demolition - 2015

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	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	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	0.0000
Worker	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989	
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989	

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	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
Total	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989

3.3 Site Preparation - 2015

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	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	0.0000
Worker	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594

3.4 Grading - 2015

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					0.1319	0.0000	0.1319	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1319	0.0570	0.1890	0.0542	0.0525	0.1067	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	0.0000	138.1115
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	0.0000
Worker	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	0.0000	141.3093

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					0.1319	0.0000	0.1319	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1319	0.0570	0.1890	0.0542	0.0525	0.1067	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	138.1115
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	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	141.3093

3.5 Building Construction - 2015

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	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063
Total	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063

3.5 Building Construction - 2015

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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

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	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060
Total	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060

3.5 Building Construction - 2015**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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

3.5 Building Construction - 2016**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	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9691	108.9691	0.0270	0.0000	109.5367
Total	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9691	108.9691	0.0270	0.0000	109.5367

3.5 Building Construction - 2016

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	0.0200	0.2043	0.2622	4.9000e-004	0.0138	3.1900e-003	0.0170	3.9500e-003	2.9300e-003	6.8800e-003	0.0000	44.3811	44.3811	3.2000e-004	0.0000	44.3879
Worker	0.0231	0.0339	0.3528	7.8000e-004	0.0632	5.4000e-004	0.0637	0.0168	4.9000e-004	0.0173	0.0000	59.2069	59.2069	3.1900e-003	0.0000	59.2738
Total	0.0431	0.2382	0.6150	1.2700e-003	0.0770	3.7300e-003	0.0808	0.0207	3.4200e-003	0.0242	0.0000	103.5880	103.5880	3.5100e-003	0.0000	103.6617

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	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9690	108.9690	0.0270	0.0000	109.5365
Total	0.1533	1.2828	0.8328	1.2100e-003		0.0885	0.0885		0.0832	0.0832	0.0000	108.9690	108.9690	0.0270	0.0000	109.5365

3.5 Building Construction - 2016

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	0.0200	0.2043	0.2622	4.9000e-004	0.0138	3.1900e-003	0.0170	3.9500e-003	2.9300e-003	6.8800e-003	0.0000	44.3811	44.3811	3.2000e-004	0.0000	44.3879
Worker	0.0231	0.0339	0.3528	7.8000e-004	0.0632	5.4000e-004	0.0637	0.0168	4.9000e-004	0.0173	0.0000	59.2069	59.2069	3.1900e-003	0.0000	59.2738
Total	0.0431	0.2382	0.6150	1.2700e-003	0.0770	3.7300e-003	0.0808	0.0207	3.4200e-003	0.0242	0.0000	103.5880	103.5880	3.5100e-003	0.0000	103.6617

3.6 Paving - 2016

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	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	0.0000
Worker	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436	
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436	

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	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	0.0000
Worker	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436	
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436	

3.7 Architectural Coating - 2016

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	2.8826					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3400e-003	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114
Total	2.8880	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114

3.7 Architectural Coating - 2016

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	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	0.0000
Worker	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796	
Total	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796	

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	2.8826					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3400e-003	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114
Total	2.8880	0.0344	0.0273	4.0000e-005		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	3.7022	3.7022	4.4000e-004	0.0000	3.7114

3.7 Architectural Coating - 2016

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	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796
Total	1.5100e-003	2.2200e-003	0.0231	5.0000e-005	4.1400e-003	4.0000e-005	4.1700e-003	1.1000e-003	3.0000e-005	1.1300e-003	0.0000	3.8752	3.8752	2.1000e-004	0.0000	3.8796

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Unmitigated	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	868.6983	868.6983	0.0399	8.2600e-003	872.0979
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	868.6983	868.6983	0.0399	8.2600e-003	872.0979
NaturalGas Mitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525
NaturalGas Unmitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525

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					
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

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					
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Unmitigated	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	229.7912	1.8585	0.0456	282.9560
Unmitigated	229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2281
Manufacturing	56.5684 / 0	228.7304	1.8530	0.0455	281.7566
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2280
Manufacturing	56.5684 / 0	228.7304	1.8526	0.0455	281.7280
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8584	0.0456	282.9560

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	63.0307	3.7250	0.0000	141.2559
Unmitigated	63.0307	3.7250	0.0000	141.2559

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating - Use super compliant VOC coatings for all architectural applications. Rule 1113 of the SCAQMD contain less than 10 grams of VOC per liter

Construction Off-road Equipment Mitigation - Project Description

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8588	0.0457	282.9847
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7148	0.0584	3,610.4941

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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	1,114.4551	1,114.4551	0.0446	0.0128	1,119.3504
Mobile	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Waste						0.0000	0.0000		0.0000	0.0000	63.0307	0.0000	63.0307	3.7250	0.0000	141.2559
Water						0.0000	0.0000		0.0000	0.0000	18.0027	211.7885	229.7912	1.8585	0.0456	282.9560
Total	2.9853	3.4289	13.9163	0.0281	1.7734	0.0572	1.8306	0.4745	0.0540	0.5286	81.0334	3,391.3339	3,472.3673	5.7144	0.0584	3,610.4654

	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	0.01	0.12	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	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/18/2016	5	300	
5	Paving	Paving	5/19/2016	6/15/2016	5	20	
6	Architectural Coating	Architectural Coating	6/16/2016	7/13/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

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	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	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	0.0000
Worker	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989	
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989	

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	0.0129	0.3347	0.2527	4.0000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
Total	0.0129	0.3347	0.2527	4.0000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544

3.2 Demolition - 2015

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	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989
Total	6.7000e-004	9.8000e-004	0.0102	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5970	1.5970	9.0000e-005	0.0000	1.5989

3.3 Site Preparation - 2015

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	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	0.0000
Worker	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594	

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					0.0335	0.0000	0.0335	0.0184	0.0000	0.0184	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1500e-003	0.1721	0.1170	2.0000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	6.1500e-003	0.1721	0.1170	2.0000e-004	0.0335	4.8100e-003	0.0383	0.0184	4.8100e-003	0.0232	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.3 Site Preparation - 2015

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	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594
Total	4.0000e-004	5.9000e-004	6.1000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9582	0.9582	5.0000e-005	0.0000	0.9594

3.4 Grading - 2015

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					0.1319	0.0000	0.1319	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1319	0.0570	0.1890	0.0542	0.0525	0.1067	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	0.0000	138.1115
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	0.0000
Worker	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	0.0000	141.3093

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					0.0489	0.0000	0.0489	0.0201	0.0000	0.0201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.7642	0.5692	9.3000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.0284	0.7642	0.5692	9.3000e-004	0.0489	0.0207	0.0696	0.0201	0.0207	0.0408	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.4 Grading - 2015

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	0.0412	0.6694	0.4754	1.5000e-003	0.0347	0.0109	0.0456	9.5200e-003	9.9900e-003	0.0195	0.0000	138.0884	138.0884	1.1000e-003	0.0000	138.1115
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	1.3400e-003	1.9600e-003	0.0204	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.1941	3.1941	1.8000e-004	0.0000	3.1979
Total	0.0425	0.6714	0.4958	1.5400e-003	0.0380	0.0109	0.0489	0.0104	0.0100	0.0204	0.0000	141.2825	141.2825	1.2800e-003	0.0000	141.3093

3.5 Building Construction - 2015

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	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063
Total	0.3677	3.0180	1.8838	2.7000e-003		0.2127	0.2127		0.2000	0.2000	0.0000	245.2143	245.2143	0.0615	0.0000	246.5063

3.5 Building Construction - 2015

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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

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	0.1084	2.3579	1.7905	2.7000e-003		0.0906	0.0906		0.0906	0.0906	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060
Total	0.1084	2.3579	1.7905	2.7000e-003		0.0906	0.0906		0.0906	0.0906	0.0000	245.2140	245.2140	0.0615	0.0000	246.5060

3.5 Building Construction - 2015**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	0.0507	0.5165	0.6300	1.0900e-003	0.0309	8.5800e-003	0.0395	8.8200e-003	7.8900e-003	0.0167	0.0000	100.2208	100.2208	8.0000e-004	0.0000	100.2376
Worker	0.0573	0.0840	0.8724	1.7400e-003	0.1411	1.2700e-003	0.1424	0.0375	1.1600e-003	0.0386	0.0000	136.9619	136.9619	7.7300e-003	0.0000	137.1244
Total	0.1080	0.6005	1.5024	2.8300e-003	0.1720	9.8500e-003	0.1819	0.0463	9.0500e-003	0.0554	0.0000	237.1827	237.1827	8.5300e-003	0.0000	237.3619

3.5 Building Construction - 2016**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	0.1686	1.4111	0.9161	1.3300e-003		0.0974	0.0974		0.0915	0.0915	0.0000	119.8660	119.8660	0.0297	0.0000	120.4903
Total	0.1686	1.4111	0.9161	1.3300e-003		0.0974	0.0974		0.0915	0.0915	0.0000	119.8660	119.8660	0.0297	0.0000	120.4903

3.5 Building Construction - 2016

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	0.0220	0.2247	0.2884	5.4000e-004	0.0152	3.5100e-003	0.0187	4.3500e-003	3.2200e-003	7.5700e-003	0.0000	48.8192	48.8192	3.6000e-004	0.0000	48.8266
Worker	0.0254	0.0373	0.3881	8.5000e-004	0.0695	5.9000e-004	0.0701	0.0185	5.4000e-004	0.0190	0.0000	65.1276	65.1276	3.5100e-003	0.0000	65.2012
Total	0.0474	0.2620	0.6765	1.3900e-003	0.0847	4.1000e-003	0.0888	0.0228	3.7600e-003	0.0266	0.0000	113.9468	113.9468	3.8700e-003	0.0000	114.0279

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	0.0534	1.1613	0.8819	1.3300e-003		0.0446	0.0446		0.0446	0.0446	0.0000	119.8659	119.8659	0.0297	0.0000	120.4902
Total	0.0534	1.1613	0.8819	1.3300e-003		0.0446	0.0446		0.0446	0.0446	0.0000	119.8659	119.8659	0.0297	0.0000	120.4902

3.5 Building Construction - 2016

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	0.0220	0.2247	0.2884	5.4000e-004	0.0152	3.5100e-003	0.0187	4.3500e-003	3.2200e-003	7.5700e-003	0.0000	48.8192	48.8192	3.6000e-004	0.0000	48.8266
Worker	0.0254	0.0373	0.3881	8.5000e-004	0.0695	5.9000e-004	0.0701	0.0185	5.4000e-004	0.0190	0.0000	65.1276	65.1276	3.5100e-003	0.0000	65.2012
Total	0.0474	0.2620	0.6765	1.3900e-003	0.0847	4.1000e-003	0.0888	0.0228	3.7600e-003	0.0266	0.0000	113.9468	113.9468	3.8700e-003	0.0000	114.0279

3.6 Paving - 2016

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	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0226	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	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	0.0000
Worker	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436	
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436	

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	9.1200e-003	0.1970	0.1693	2.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	1.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1970	0.1693	2.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

3.6 Paving - 2016

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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436

3.7 Architectural Coating - 2016

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	0.1153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	0.1190	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596

3.7 Architectural Coating - 2016

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	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	0.0000
Worker	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756	
Total	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756	

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	0.1153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1400e-003	0.0235	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	0.1165	0.0235	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596

3.7 Architectural Coating - 2016

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	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756
Total	1.0400e-003	1.5300e-003	0.0159	4.0000e-005	2.8500e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.6725	2.6725	1.4000e-004	0.0000	2.6756

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928
Unmitigated	1.5667	3.2031	13.7216	0.0267	1.7734	0.0400	1.8134	0.4745	0.0368	0.5114	0.0000	2,065.0805	2,065.0805	0.0863	0.0000	2,066.8928

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	868.6983	868.6983	0.0399	8.2600e-003	872.0979
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	868.6983	868.6983	0.0399	8.2600e-003	872.0979
NaturalGas Mitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525
NaturalGas Unmitigated	0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5100e-003	247.2525

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					
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

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					
Manufacturing	4.60125e+006	0.0248	0.2256	0.1895	1.3500e-003		0.0171	0.0171		0.0171	0.0171	0.0000	245.5400	245.5400	4.7100e-003	4.5000e-003	247.0343
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
Convenience Market With Gas Pumps	4063	2.0000e-005	2.0000e-004	1.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2168	0.2168	0.0000	0.0000	0.2181
Total		0.0248	0.2258	0.1896	1.3500e-003		0.0172	0.0172		0.0172	0.0172	0.0000	245.7568	245.7568	4.7100e-003	4.5000e-003	247.2525

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	36256.3	10.3754	4.8000e-004	1.0000e-004	10.4160
Manufacturing	2.94763e+006	843.5155	0.0388	8.0200e-003	846.8166
Parking Lot	51744	14.8074	6.8000e-004	1.4000e-004	14.8654
Total		868.6983	0.0399	8.2600e-003	872.0979

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Unmitigated	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

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	0.2883					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e-004	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	1.3938	5.0000e-005	5.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	229.7912	1.8585	0.0456	282.9560
Unmitigated	229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2281
Manufacturing	56.5684 / 0	228.7304	1.8530	0.0455	281.7566
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8588	0.0457	282.9847

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.177033 / 0.108504	1.0608	5.8100e-003	1.5000e-004	1.2280
Manufacturing	56.5684 / 0	228.7304	1.8526	0.0455	281.7280
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		229.7912	1.8584	0.0456	282.9560

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	63.0307	3.7250	0.0000	141.2559
Unmitigated	63.0307	3.7250	0.0000	141.2559

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	7.18	1.4575	0.0861	0.0000	3.2663
Manufacturing	303.33	61.5733	3.6389	0.0000	137.9896
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		63.0307	3.7250	0.0000	141.2559

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	291.00
tblConstructionPhase	NumDays	20.00	29.00
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/5/2016	5	291	
5	Paving	Paving	5/6/2016	6/2/2016	5	20	
6	Architectural Coating	Architectural Coating	6/3/2016	7/13/2016	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000	
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000			0.0000	
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

3.7 Architectural Coating - 2016

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018			17,305.6347
Unmitigated	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018			17,305.6347

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating - Use super compliant VOC coatings for all architectural applications. Rule 1113 of the SCAQMD contain less than 10 grams of VOC per liter

Construction Off-road Equipment Mitigation - Project Description

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Total	20.0966	23.5891	99.5788	0.2108	13.1563	0.3875	13.5438	3.5152	0.3642	3.8793		18,775.3691	18,775.3691	0.7305	0.0272	18,799.1461

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/18/2016	5	300	
5	Paving	Paving	5/19/2016	6/15/2016	5	20	
6	Architectural Coating	Architectural Coating	6/16/2016	7/13/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

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	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135
Total	0.0692	0.0866	1.0745	2.1300e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		184.8048	184.8048	9.9400e-003			185.0135

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275		4,137.5225

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000	
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	1.2300	34.4240	23.4003	0.0391	6.6936	0.9611	7.6546	3.6793	0.9611	4.6404	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162
Total	0.0830	0.1039	1.2894	2.5500e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		221.7657	221.7657	0.0119			222.0162

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

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					3.2587	0.0000	3.2587	1.3394	0.0000	1.3394			0.0000			0.0000
Off-Road	1.8922	50.9465	37.9432	0.0618		1.3783	1.3783		1.3783	1.3783	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	1.8922	50.9465	37.9432	0.0618	3.2587	1.3783	4.6370	1.3394	1.3783	2.7176	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.6355	42.3405	28.4034	0.0998	2.3513	0.7230	3.0743	0.6438	0.6650	1.3088		10,157.8628	10,157.8628	0.0802		10,159.5477
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	0.0922	0.1154	1.4326	2.8300e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		246.4063	246.4063	0.0133		246.6847
Total	2.7277	42.4560	29.8361	0.1026	2.5749	0.7250	3.2999	0.7031	0.6668	1.3699		10,404.2691	10,404.2691	0.0935		10,406.2324

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.577 1	2,689.577 1	0.6748			2,703.748 3

3.5 Building Construction - 2015

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	0.4725	4.9133	5.4201	0.0109	0.3124	0.0850	0.3973	0.0890	0.0781	0.1671		1,103.113 2	1,103.113 2	8.6700e- 003			1,103.295 2
Worker	0.5903	0.7388	9.1688	0.0181	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,577.000 6	1,577.000 6	0.0848			1,578.782 1
Total	1.0629	5.6521	14.5890	0.0290	1.7431	0.0976	1.8407	0.4684	0.0897	0.5581		2,680.113 8	2,680.113 8	0.0935			2,682.077 3

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4177	4.3423	4.9873	0.0109	0.3125	0.0705	0.3830	0.0890	0.0648	0.1538		1,090.9897	1,090.9897	7.8300e-003			1,091.1541
Worker	0.5329	0.6664	8.3025	0.0181	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,522.6657	1,522.6657	0.0781			1,524.3049
Total	0.9505	5.0087	13.2898	0.0290	1.7432	0.0825	1.8257	0.4684	0.0758	0.5443		2,613.6554	2,613.6554	0.0859			2,615.4590

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

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	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.0851	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
Total	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295

3.7 Architectural Coating - 2016

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	11.8990	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159			309.6244

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449
Total	11.6445	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159		309.6244
Total	0.1082	0.1354	1.6865	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2915	309.2915	0.0159		309.6244

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347
Unmitigated	12.3221	22.3517	98.4988	0.2033	13.1563	0.2934	13.4496	3.5152	0.2700	3.7852		17,290.8965	17,290.8965	0.7018		17,305.6347

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	291.00
tblConstructionPhase	NumDays	20.00	29.00
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272	17,969.4190

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272	17,969.4190

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/5/2016	5	291	
5	Paving	Paving	5/6/2016	6/2/2016	5	20	
6	Architectural Coating	Architectural Coating	6/3/2016	7/13/2016	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000			0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464

3.7 Architectural Coating - 2016

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

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	198.8027					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449
Total	199.1712	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076
Unmitigated	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Irwindale MRF
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	244.62	1000sqft	15.85	244,617.00	0
Parking Lot	147.00	Space	1.32	58,800.00	0
Convenience Market With Gas Pumps	2.39	1000sqft	0.05	2,390.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Description

Construction Phase - Project Description of 18 months

Grading - New 2017 material imported value

Architectural Coating - Use super compliant VOC coatings for all architectural applications. Rule 1113 of the SCAQMD contain less than 10 grams of VOC per liter

Construction Off-road Equipment Mitigation - Project Description

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblGrading	MaterialImported	0.00	32,400.00
tblLandUse	LandUseSquareFeet	244,620.00	244,617.00
tblLandUse	LotAcreage	5.62	15.85
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272	17,969.4190

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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Energy	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
Mobile	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030		16,475.9076
Total	20.6855	24.5901	104.5401	0.2007	13.1563	0.3900	13.5462	3.5152	0.3664	3.8816		17,945.6170	17,945.6170	0.7317	0.0272	17,969.4190

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/25/2015	5	30	
4	Building Construction	Building Construction	3/26/2015	5/18/2016	5	300	
5	Paving	Paving	5/19/2016	6/15/2016	5	20	
6	Architectural Coating	Architectural Coating	6/16/2016	7/13/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 373,157; Non-Residential Outdoor: 124,386 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,050.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	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
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

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	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

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	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886
Total	1.2905	33.4676	25.2649	0.0399		0.9338	0.9338		0.9338	0.9338	0.0000	4,127.1934	4,127.1934	1.1188			4,150.6886

3.2 Demolition - 2015

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	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553
Total	0.0709	0.0951	0.9938	1.9900e-003	0.1677	1.4800e-003	0.1691	0.0445	1.3500e-003	0.0458		173.3466	173.3466	9.9400e-003			173.5553

3.3 Site Preparation - 2015

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275			4,137.5225
Total	5.2609	56.8897	42.6318	0.0391	18.0663	3.0883	21.1545	9.9307	2.8412	12.7719		4,111.7444	4,111.7444	1.2275			4,137.5225

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000	
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224
Total	1.2300	34.4240	23.4003	0.0391	6.6936	0.9611	7.6546	3.6793	0.9611	4.6404	0.0000	4,111.7444	4,111.7444	1.2275			4,137.5224

3.3 Site Preparation - 2015

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	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664
Total	0.0850	0.1141	1.1926	2.3900e-003	0.2012	1.7700e-003	0.2030	0.0534	1.6200e-003	0.0550		208.0159	208.0159	0.0119			208.2664

3.4 Grading - 2015

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					8.7955	0.0000	8.7955	3.6150	0.0000	3.6150			0.0000				0.0000
Off-Road	6.7751	79.0467	50.8400	0.0618		3.8022	3.8022		3.4980	3.4980		6,486.2433	6,486.2433	1.9364			6,526.9080
Total	6.7751	79.0467	50.8400	0.0618	8.7955	3.8022	12.5977	3.6150	3.4980	7.1130		6,486.2433	6,486.2433	1.9364			6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

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					3.2587	0.0000	3.2587	1.3394	0.0000	1.3394			0.0000			0.0000
Off-Road	1.8922	50.9465	37.9432	0.0618		1.3783	1.3783		1.3783	1.3783	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080
Total	1.8922	50.9465	37.9432	0.0618	3.2587	1.3783	4.6370	1.3394	1.3783	2.7176	0.0000	6,486.2433	6,486.2433	1.9364		6,526.9080

3.4 Grading - 2015

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	2.7899	43.8774	32.2152	0.0996	2.3513	0.7255	3.0768	0.6438	0.6673	1.3111		10,133.8096	10,133.8096	0.0812		10,135.5155
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	0.0945	0.1268	1.3251	2.6600e-003	0.2236	1.9700e-003	0.2255	0.0593	1.8000e-003	0.0611		231.1287	231.1287	0.0133		231.4071
Total	2.8844	44.0042	33.5403	0.1023	2.5749	0.7275	3.3023	0.7031	0.6691	1.3722		10,364.9383	10,364.9383	0.0945		10,366.9226

3.5 Building Construction - 2015

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	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,689.5771	2,689.5771	0.6748			2,703.7483

3.5 Building Construction - 2015

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	0.5190	5.0411	6.4286	0.0108	0.3124	0.0860	0.3984	0.0890	0.0791	0.1680		1,093.9115	1,093.9115	8.9100e-003			1,094.0986
Worker	0.6047	0.8117	8.4806	0.0170	1.4307	0.0126	1.4433	0.3794	0.0115	0.3910		1,479.2239	1,479.2239	0.0848			1,481.0054
Total	1.1237	5.8527	14.9092	0.0278	1.7431	0.0986	1.8417	0.4684	0.0906	0.5590		2,573.1354	2,573.1354	0.0937			2,575.1040

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620			2,683.1890

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

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	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.286 4	2,669.286 4	0.6620			2,683.189 0

3.5 Building Construction - 2016

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	0.4578	4.4520	5.9862	0.0108	0.3125	0.0712	0.3837	0.0890	0.0655	0.1545		1,081.847 2	1,081.847 2	8.0600e- 003			1,082.016 5
Worker	0.5448	0.7320	7.6544	0.0170	1.4307	0.0120	1.4427	0.3794	0.0110	0.3904		1,428.089 8	1,428.089 8	0.0781			1,429.729 0
Total	1.0026	5.1840	13.6406	0.0278	1.7432	0.0832	1.8264	0.4684	0.0765	0.5449		2,509.937 0	2,509.937 0	0.0861			2,511.745 5

3.6 Paving - 2016

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	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2627	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.376 7	2,316.376 7	0.6987			2,331.049 5

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

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	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495
Paving	0.1729					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.0851	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,316.3767	2,316.3767	0.6987			2,331.0495

3.6 Paving - 2016

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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464
Total	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003			167.5464

3.7 Architectural Coating - 2016

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	11.8990	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

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	11.5306					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449
Total	11.6445	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0332			282.1449

3.7 Architectural Coating - 2016

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	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137
Total	0.1107	0.1487	1.5548	3.4500e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		290.0807	290.0807	0.0159			290.4137

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076
Unmitigated	12.9110	23.3527	103.4601	0.1933	13.1563	0.2958	13.4521	3.5152	0.2722	3.7874		16,461.1444	16,461.1444	0.7030			16,475.9076

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	2,020.98	3,461.51	2825.17	1,397,676	1,397,676
Manufacturing	934.45	364.48	151.66	3,282,233	3,282,233
Parking Lot	0.00	0.00	0.00		
Total	2,955.43	3,825.99	2,976.84	4,679,909	4,679,909

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
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

5.1 Fleet Mix

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	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201
NaturalGas Unmitigated	0.1361	1.2370	1.0391	7.4200e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Convenience Market With Gas Pumps	11.1315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Manufacturing	12606.2	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

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					
Manufacturing	12.6062	0.1360	1.2359	1.0382	7.4200e-003		0.0939	0.0939		0.0939	0.0939		1,483.0768	1,483.0768	0.0284	0.0272	1,492.1026
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
Convenience Market With Gas Pumps	0.0111315	1.2000e-004	1.0900e-003	9.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.3096	1.3096	3.0000e-005	2.0000e-005	1.3176
Total		0.1361	1.2370	1.0391	7.4300e-003		0.0940	0.0940		0.0940	0.0940		1,484.3864	1,484.3864	0.0285	0.0272	1,493.4201

6.0 Area Detail

6.1 Mitigation Measures Area

	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	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Unmitigated	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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	1.5795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.9600e-003	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913
Total	7.6385	3.9000e-004	0.0410	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0862	0.0862	2.4000e-004		0.0913

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
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10.0 Vegetation

Appendix B

Athens Irwindale MRF/TS Revised Site Access Evaluation



Ofc: 1001 Dove St. | Suite 260 | Newport Beach, CA 92660
Main: 260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626
urbanxroads.com

March 24, 2017

Jeffrey G. Harvey, Ph.D.
HARVEY CONSULTING GROUP
2146 Gold Claims Court
Gold River, California 95670

SUBJECT: ATHENS IRWINDALE MRF & TRANSFER STATION REVISED SITE ACCESS EVALUATION

Dear Jeffrey G. Harvey, Ph.D.:

Urban Crossroads, Inc. is pleased to submit this Revised Site Access Evaluation for the Athens Irwindale MRF & Transfer Station ("Project"). This focused assessment is provided as a supplement to Athens-Irwindale Materials Recovery Facility and Transfer Station Updated Traffic Impact Analysis (Urban Crossroads, Inc. March 17, 2016), hereafter referred to as the TIA. With the modified site plan recently submitted to the City as a part of its final design and entitlements package, the facility's capacity is unchanged, and traffic volumes and routing offsite are assumed to remain the same.

PROJECT DESCRIPTION

The site plan adjustments to building footprints and total square footage include a single building with all components of the MRF/TS, a shorter tunnel now with an E-W orientation, shifted convenience store, modified driveway locations for ingress and egress from Arrow Hwy, and rearranged parking between the perimeter and main building. This evaluation focuses on changes in site access conditions resulting from these site plan changes. Exhibit A shows the proposed project site plan.

Trip generation for the proposed project was presented in the TIA, and includes truck trips, employment, and convenience store categories. Project trip generation has not been updated for this analysis.

Exhibit B illustrates the proposed Access and On-Site Circulation for the project. Primary access for transfer trucks to and from the project site would be from Arrow Highway, and directed towards Interstate 605 for regional transport, utilizing Irwindale roadways. Two additional access points to the south from Live Oak Avenue will serve for employees, visitors and Fire Department access only. Site access into the Fueling Facility/Convenience Store area would be located on Arrow Highway. As shown in Exhibit B, Driveway 1 is proposed to be the only full access for trucks. Driveway 2 is proposed as an entrance only for trucks and full access for passenger cars (i.e. – employee and visitor traffic). Driveway 4, located south of Driveway 2, should be limited to right-in/right-out only access. Driveway 5 is right in / right out access for the convenience store/fueling facility in conjunction with internal connectivity to Driveway 1.

PROJECT TRIP DISTRIBUTION

Exhibit C presents the Collection Trucks and Roll-Off Trucks trip distribution patterns for the proposed project. The trip distribution anticipated for the Collection Trucks and Roll-Off Trucks represent the traffic pattern for trucks/vehicles bringing commodities into the site for processing.

Exhibit D presents the Self-Haul/Contractor trip distribution patterns for the proposed project. The self-haul/contractor trucks are proposed to utilize Driveway 1. The trip distribution anticipated for the “Self-Haul/Contractor” vehicles represent the traffic pattern for trucks/vehicles bringing commodities into the site for processing.

Exhibit E presents the Transfer Trucks trip distribution patterns for the proposed project. Transfer trucks are proposed to utilize Driveway 2 for entering the site and Driveway 1 for exiting the site. The trip distribution anticipated for the Transfer Trucks represents the traffic pattern for trucks bringing materials out of the site to be transferred to compost facilities in Victorville or to the ports of Los Angeles and Long Beach for overseas shipping to recycling plants. Unrecoverable materials would be transported to one of several landfills in Los Angeles County, Riverside County, or Tulare County.

Exhibit F presents the Employee trip distribution patterns for the proposed project. Three employee parking areas are shown, with employees proposed to utilize Driveways 1, 2, 3, and 4.

Exhibit G presents the “Convenience Store / Fueling Facility” trip distribution patterns for the proposed project. As shown on Exhibit G, 20% of the Convenience Store / Fueling Facility traffic is anticipated to be captured within the project site.

PROJECT ONLY VOLUMES

The project only related average daily traffic (ADT) volumes are shown on Exhibit H. Similarly, Exhibits I and J present the project only AM and PM peak hour volumes, respectively. As shown on these exhibits, Arrow Highway is projected to carry the most project related traffic with approximately 7,200 vehicles per day (vpd) immediately north of Driveway 2.

“Project only” peak hour 2-way (link) traffic volumes are presented on Exhibit K. As shown on Exhibit K, the project is anticipated to generate the most peak hour trips along Arrow Highway immediately north of Driveway 2.

PROJECT RECOMMENDATIONS

Exhibit L presents the on-site improvements related to the project access intersections as follows:

Arrow Highway (NS) / Driveway 1 (EW) – Install a traffic signal and construct the intersection with the following geometrics:

- Northbound Approach: One left turn lane (two way turn lane) and two through lanes.

- Southbound Approach: Two through lanes and one right turn lane.
- Eastbound Approach: One left turn lane and one right turn lane.
- Westbound Approach: N/A

Arrow Highway (NS) / Driveway 2 (EW) – Install stop control on the eastbound approach and construct the intersection with the following geometrics:

- Northbound Approach: One left turn lane (two way turn lane) and two through lanes.
- Southbound Approach: Two through lanes and one right turn lane.
- Eastbound Approach: One shared left turn and right turn lane.
- Westbound Approach: N/A

Driveway 3 - Baldwin Park Boulevard (NS) / Live Oak Av. (EW) – Modify traffic signal to include Project Driveway 3 (north leg) and construct the intersection with the following geometrics:

- Northbound Approach: Two left turn lanes and one shared through-right turn lane.
- Southbound Approach: One left turn lane and one shared through-right turn lane.
- Eastbound Approach: One left turn lane (100-foot pocket length), two through lanes, and one defacto right turn lane.
- Westbound Approach: One left turn lane, two through lanes, and one right turn lane.

Arrow Highway (NS) / Driveway 4 (EW) – Install stop control on the eastbound approach and construct the right in / right out driveway intersection with the following geometrics:

- Northbound Approach: Two through lanes (no left turn access).
- Southbound Approach: One through lane and one shared through-right turn lane.
- Eastbound Approach: One right turn lane.
- Westbound Approach: N/A

Arrow Highway (NS) / Driveway 5 (EW) – Install stop control on the eastbound approach and construct the right in / right out driveway intersection with the following geometrics:

- Northbound Approach: Two through lanes (no left turn access).
- Southbound Approach: One through lane and one shared through-right turn lane.
- Eastbound Approach: One right turn lane.
- Westbound Approach: N/A

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project site.

Jeffrey G. Harvey, Ph.D.
HARVEY CONSULTING GROUP
March 24, 2017
Page 4

Sight distance at the project driveways should be reviewed with respect to standard Caltrans and City of Irwindale sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

If you have any questions, please contact us at (949) 336-5990 for John or (949) 336-5991 for Marlie.

Respectfully submitted,

URBAN CROSSROADS, INC.

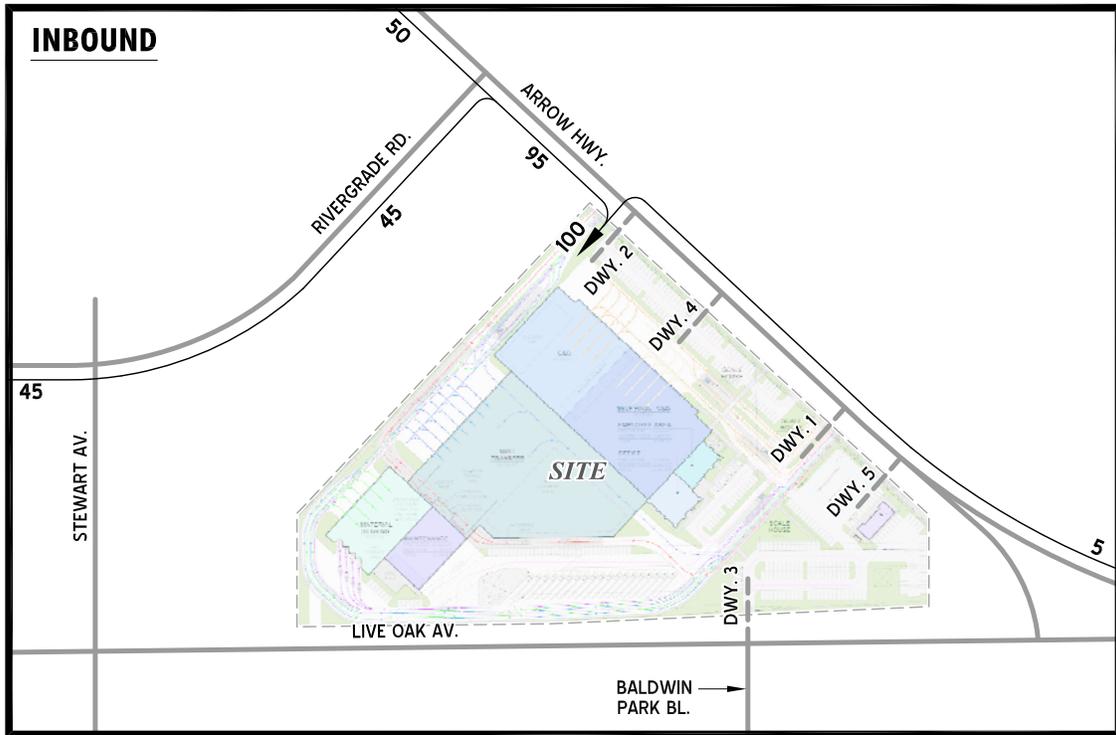
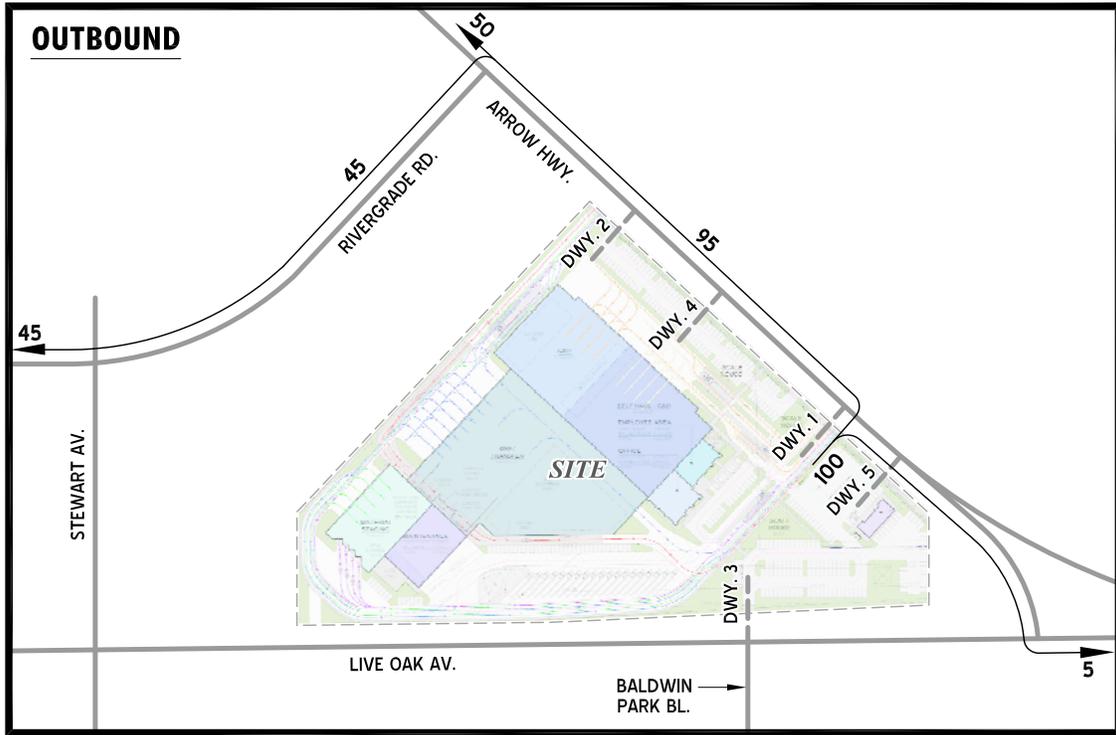


John Kain, AICP
Principal



Marlie Whiteman, P.E.
Senior Associate

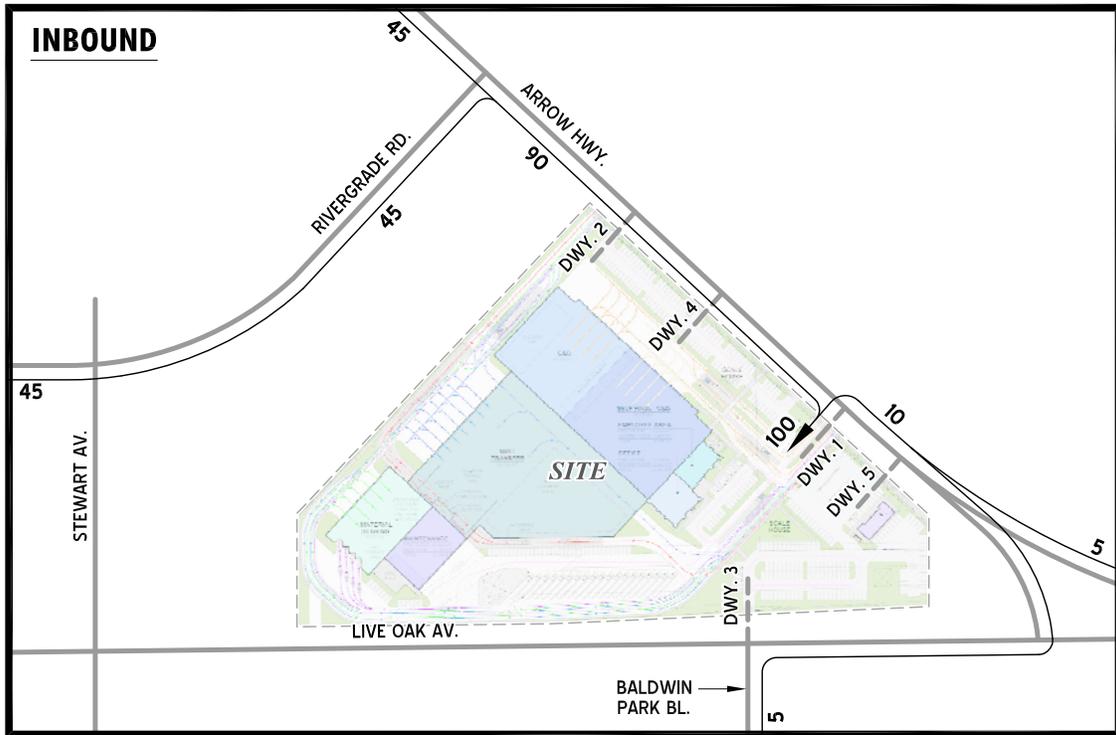
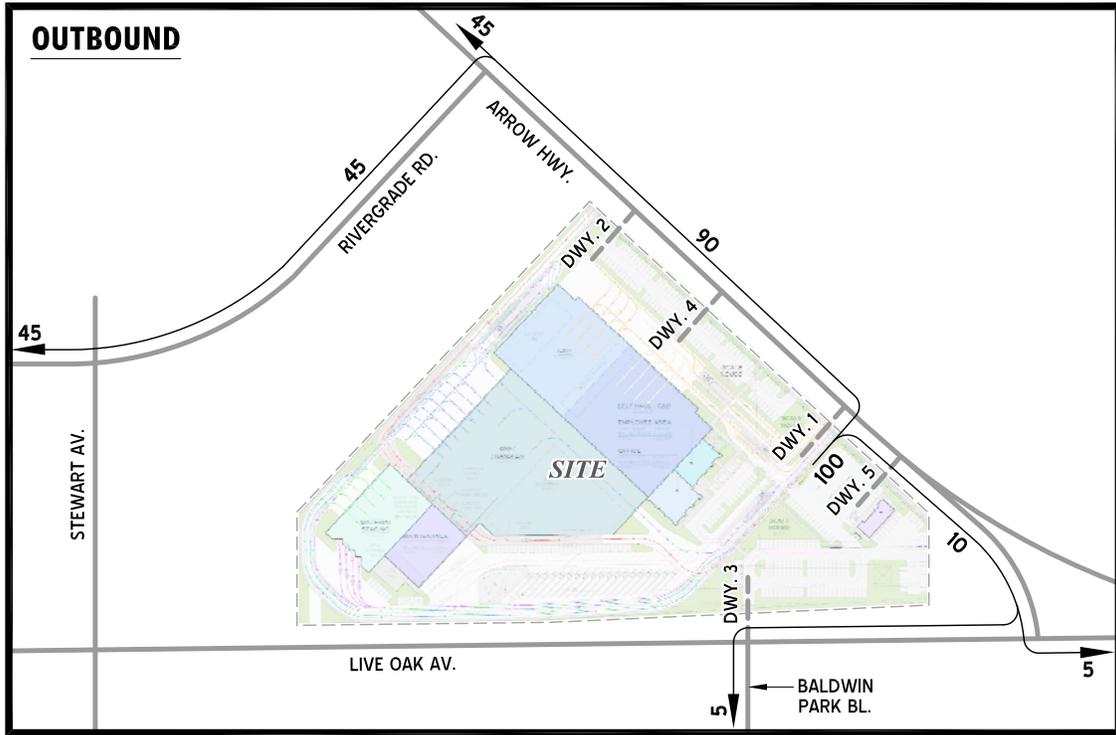
EXHIBIT C: COLLECTION TRUCK (INCLUDING PACKER, END DUMP & ROLL-OFF TRUCKS) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

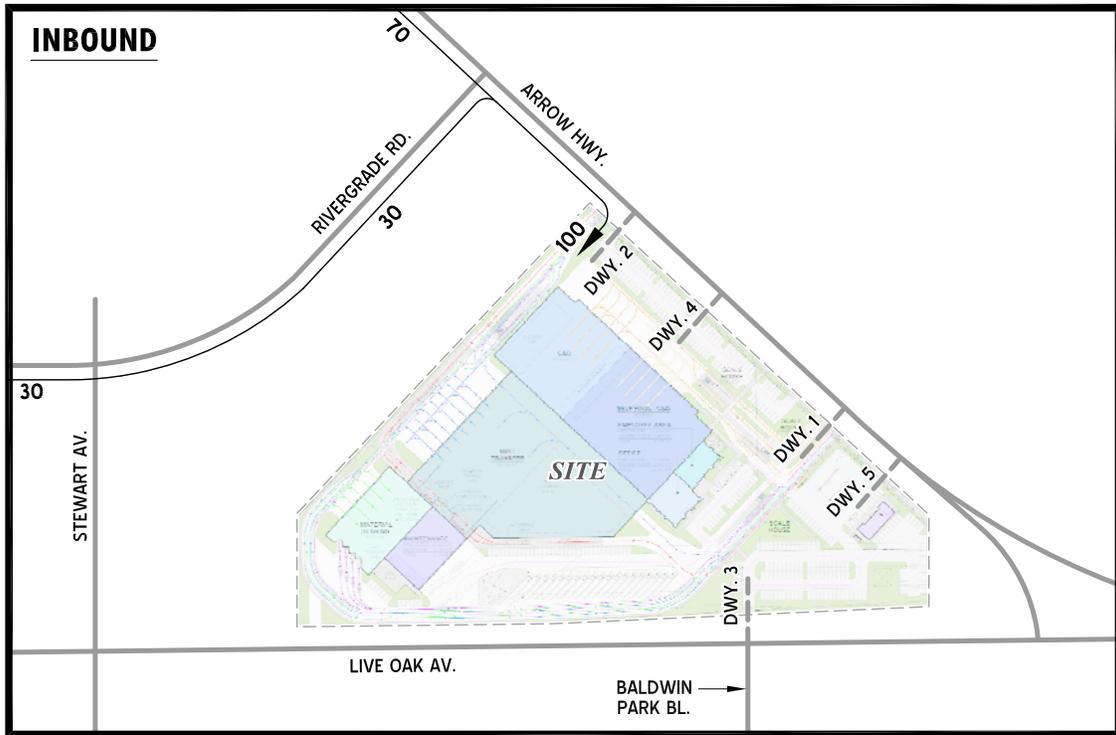
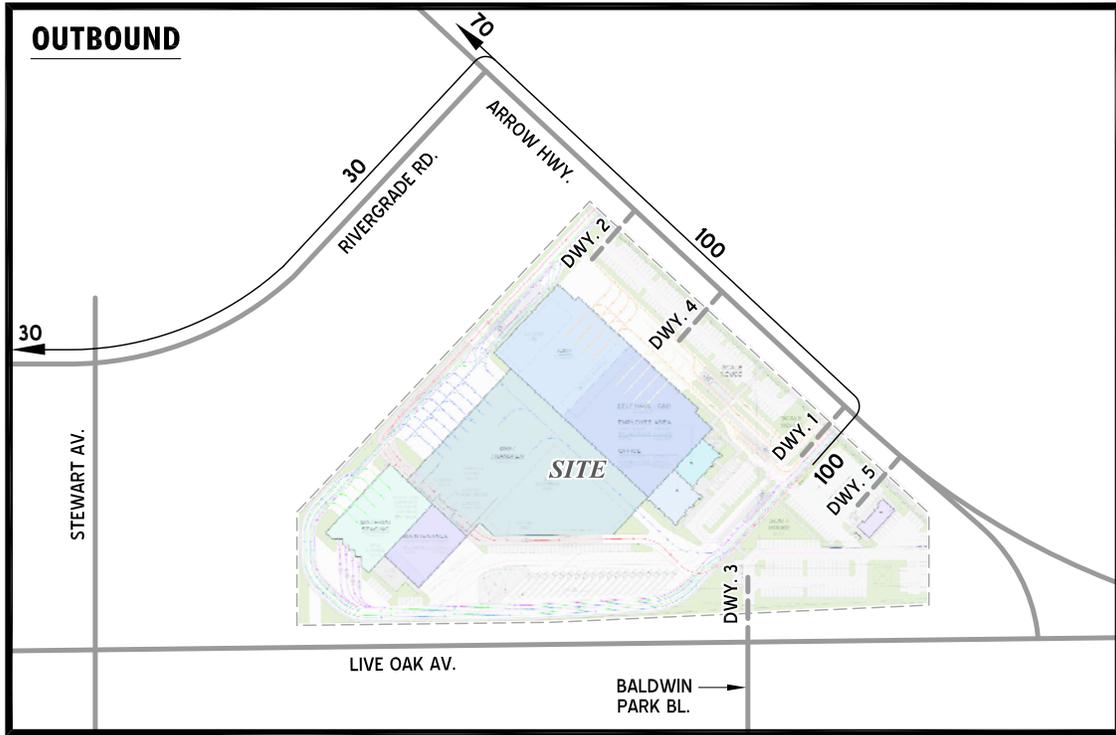
EXHIBIT D: SELF HAUL/CONTRACTOR TRUCK TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

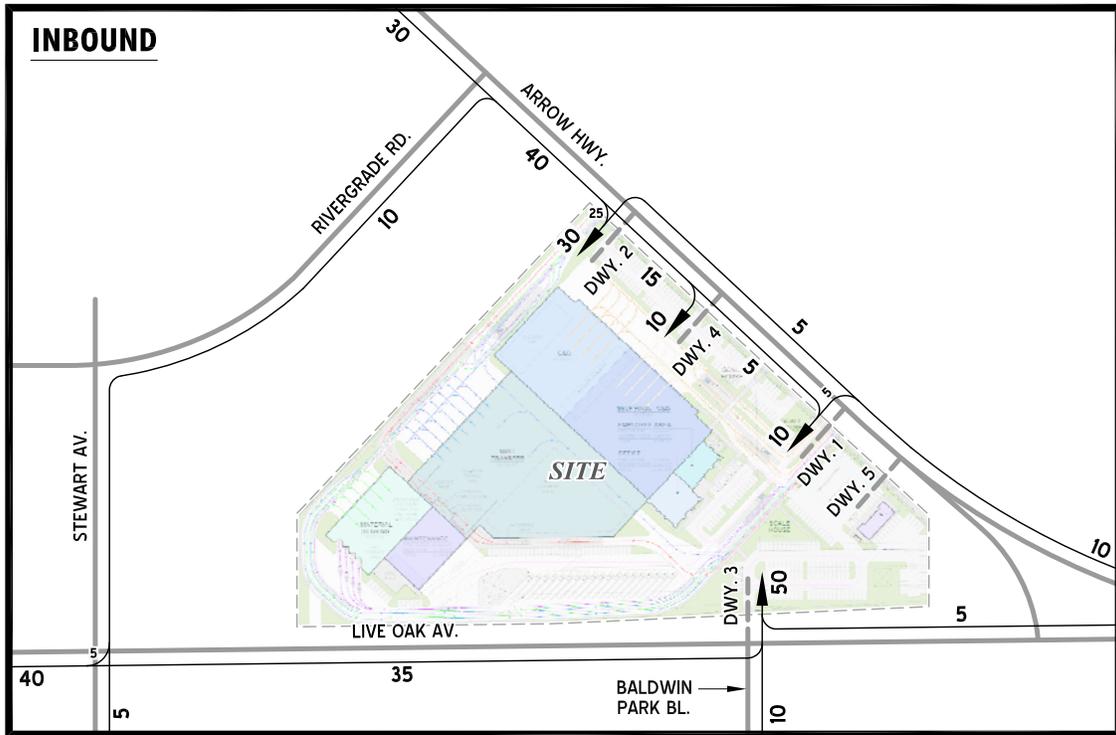
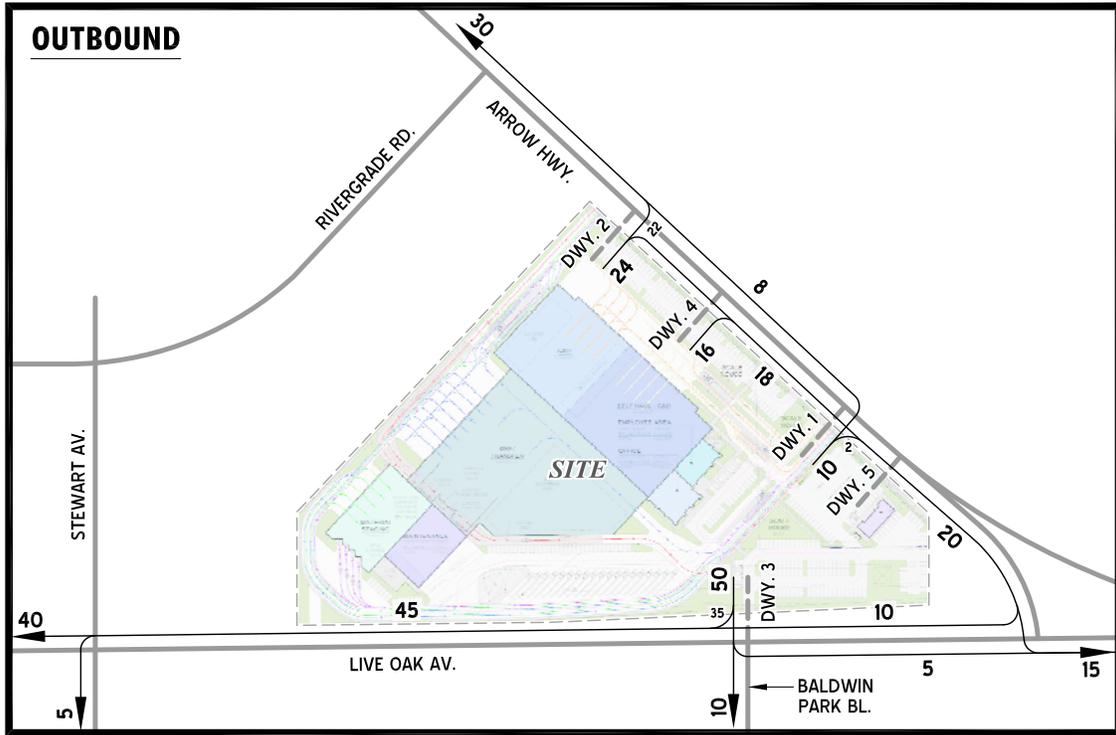
EXHIBIT E: TRANSFER & RECYCLABLE LOADOUT TRUCK TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

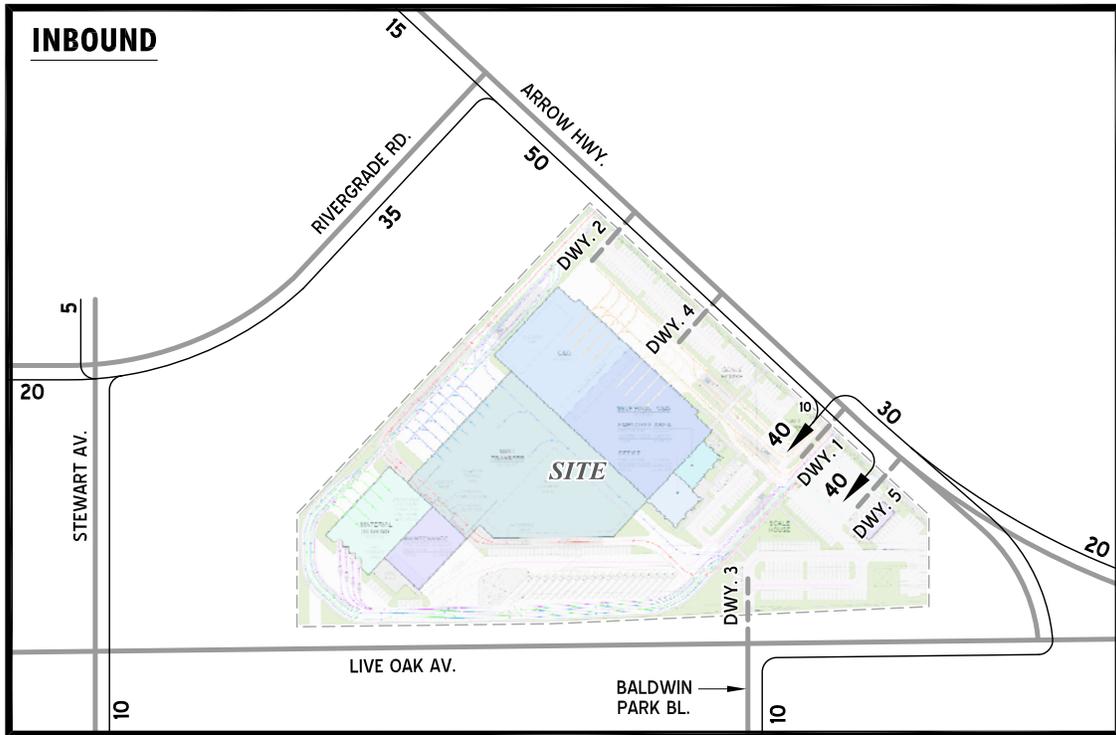
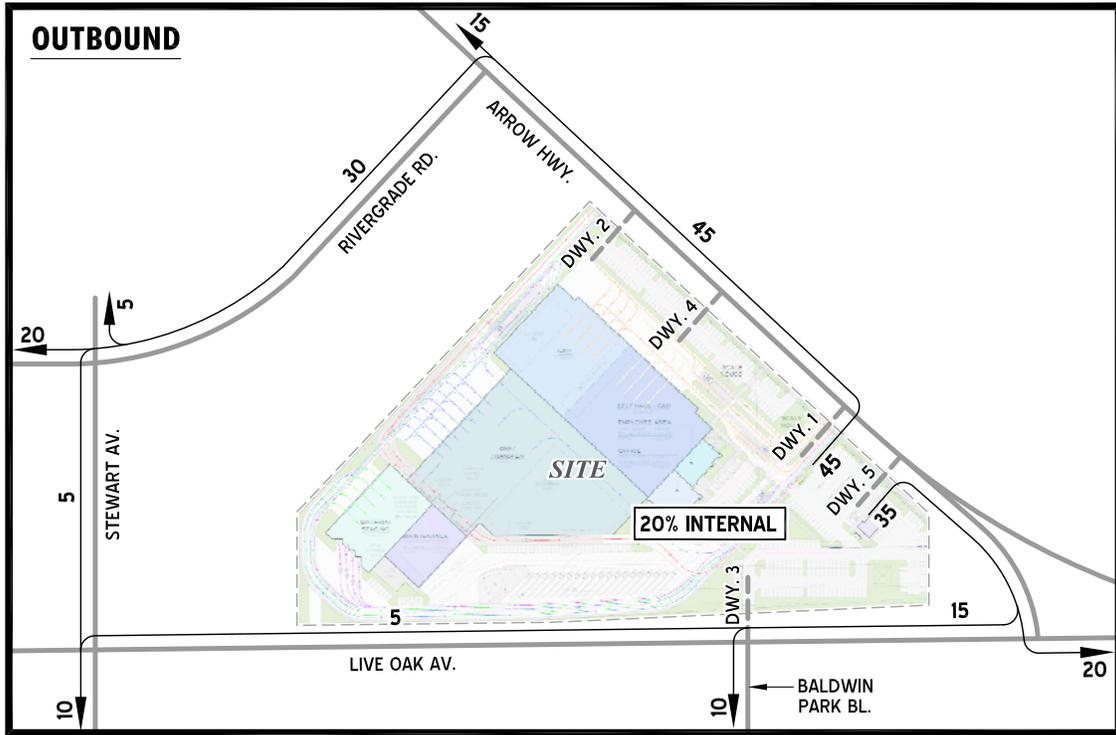
EXHIBIT F: EMPLOYEE (PASSENGER CAR) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

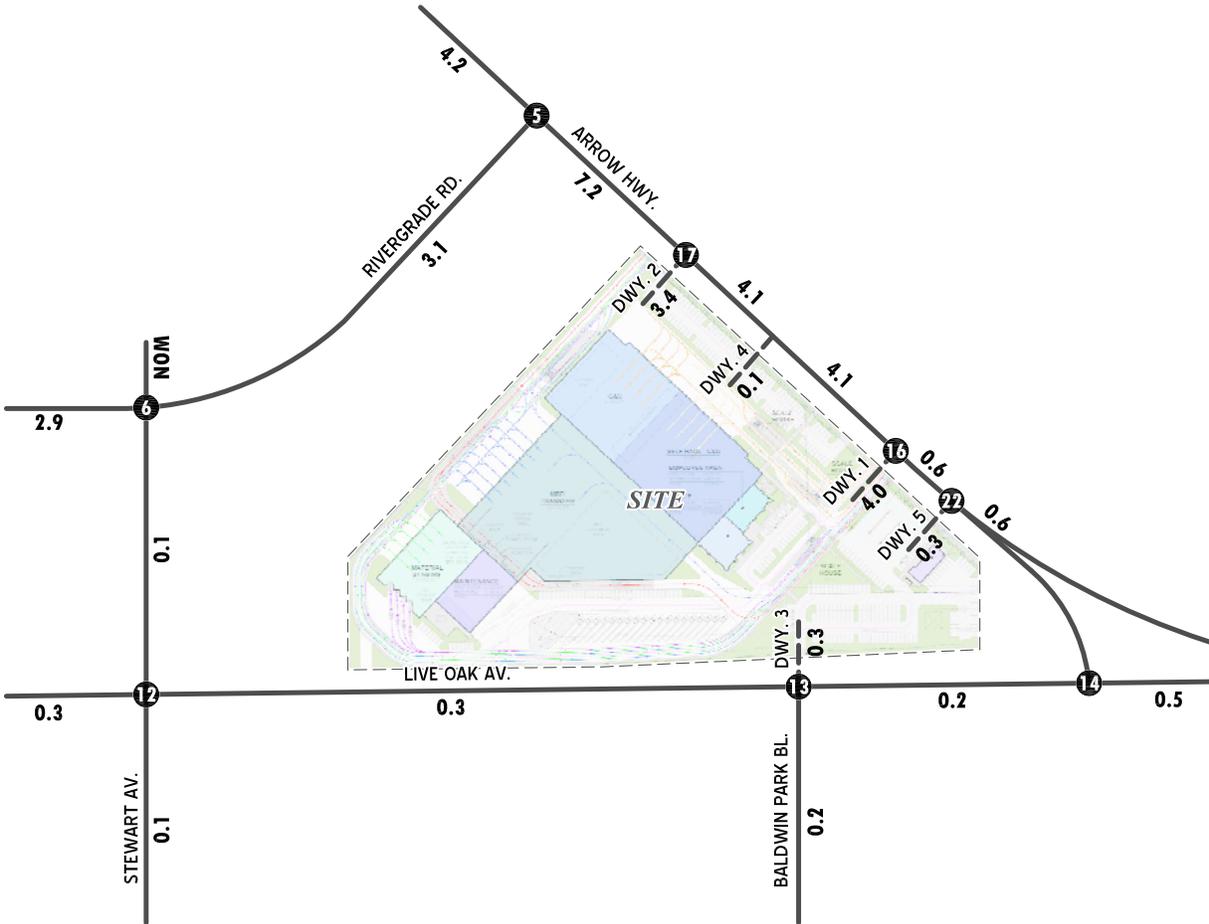
EXHIBIT G: CONVENIENCE STORE/FUELING FACILITY TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT H: PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

- # = INTERSECTION ID
- = FUTURE ROADWAY
- 10.0 = VEHICLES PER DAY (1000'S)
- NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT I: PROJECT AM PEAK HOUR INTERSECTION VOLUMES



<p>5 ARROW HWY. (NS) / RIVERGRADE RD. (EW)</p>	<p>6 STEWART AV. (NS) / RIVERGRADE RD. (EW)</p>	<p>12 STEWART AV. (NS) / LIVE OAK AV. (EW)</p>	<p>13 BALDWIN PARK BL. - DWY. 3 (NS) / LIVE OAK AV. (EW)</p>
<p>14 ARROW HWY. (NS) / LIVE OAK AV. (EW)</p>	<p>16 ARROW HWY. (NS) / DWY. 1 (EW)</p>	<p>17 ARROW HWY. (NS) / DWY. 2 (EW)</p>	<p>22 ARROW HWY. (NS) / DWY. 5 (EW)</p>

LEGEND:
 # = INTERSECTION ID
 - - - = FUTURE ROADWAY

NOTE: PEAK HOUR VOLUMES PRESENTED ARE CONVERTED TO PCE

EXHIBIT J: PROJECT PM PEAK HOUR INTERSECTION VOLUMES

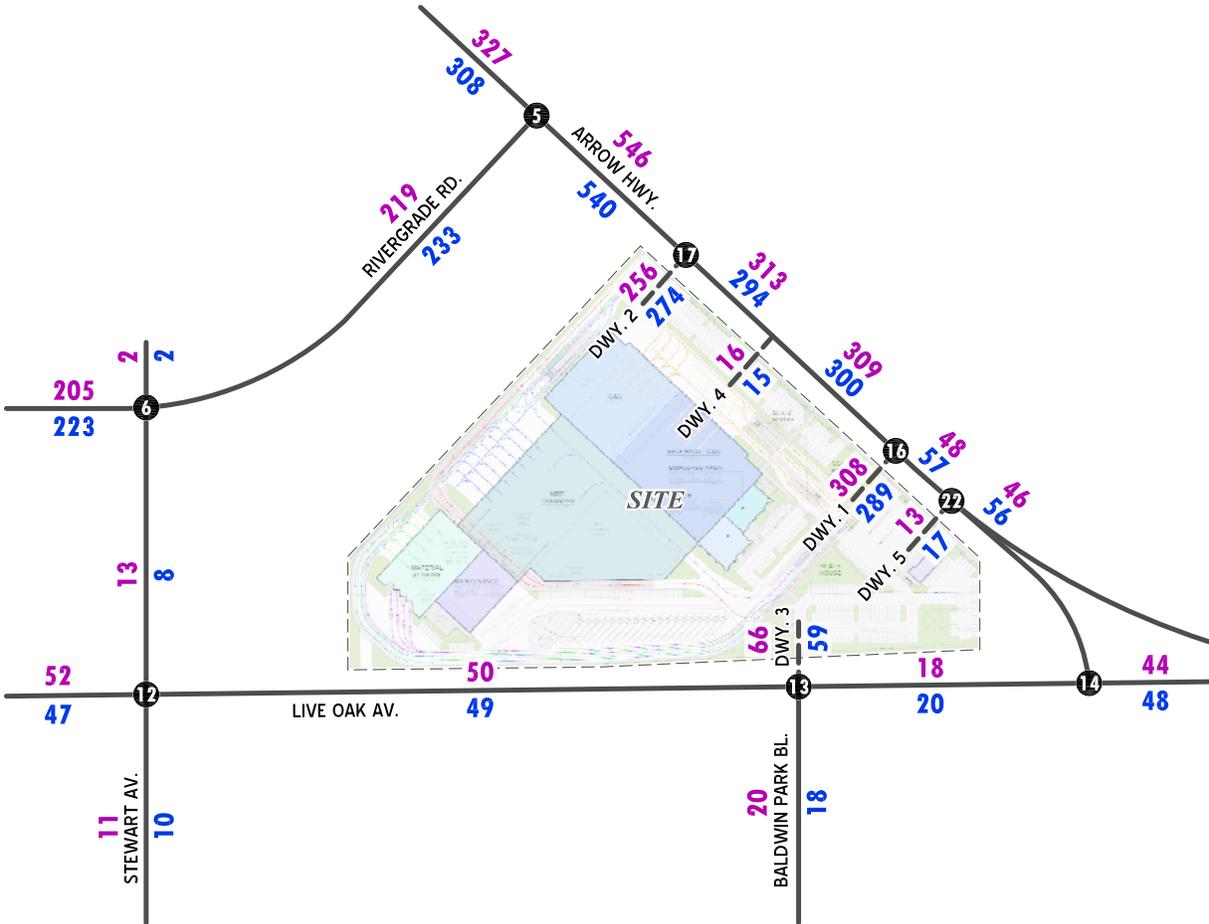


<p>5 ARROW HWY. (NS) / RIVERGRADE RD. (EW)</p>	<p>6 STEWART AV. (NS) / RIVERGRADE RD. (EW)</p>	<p>12 STEWART AV. (NS) / LIVE OAK AV. (EW)</p>	<p>13 BALDWIN PARK BL. - DWY. 3 (NS) / LIVE OAK AV. (EW)</p>
<p>14 ARROW HWY. (NS) / LIVE OAK AV. (EW)</p>	<p>16 ARROW HWY. (NS) / DWY. 1 (EW)</p>	<p>17 ARROW HWY. (NS) / DWY. 2 (EW)</p>	<p>22 ARROW HWY. (NS) / DWY. 5 (EW)</p>

LEGEND:
 # = INTERSECTION ID
 - - - = FUTURE ROADWAY

NOTE: PEAK HOUR VOLUMES PRESENTED ARE CONVERTED TO PCE

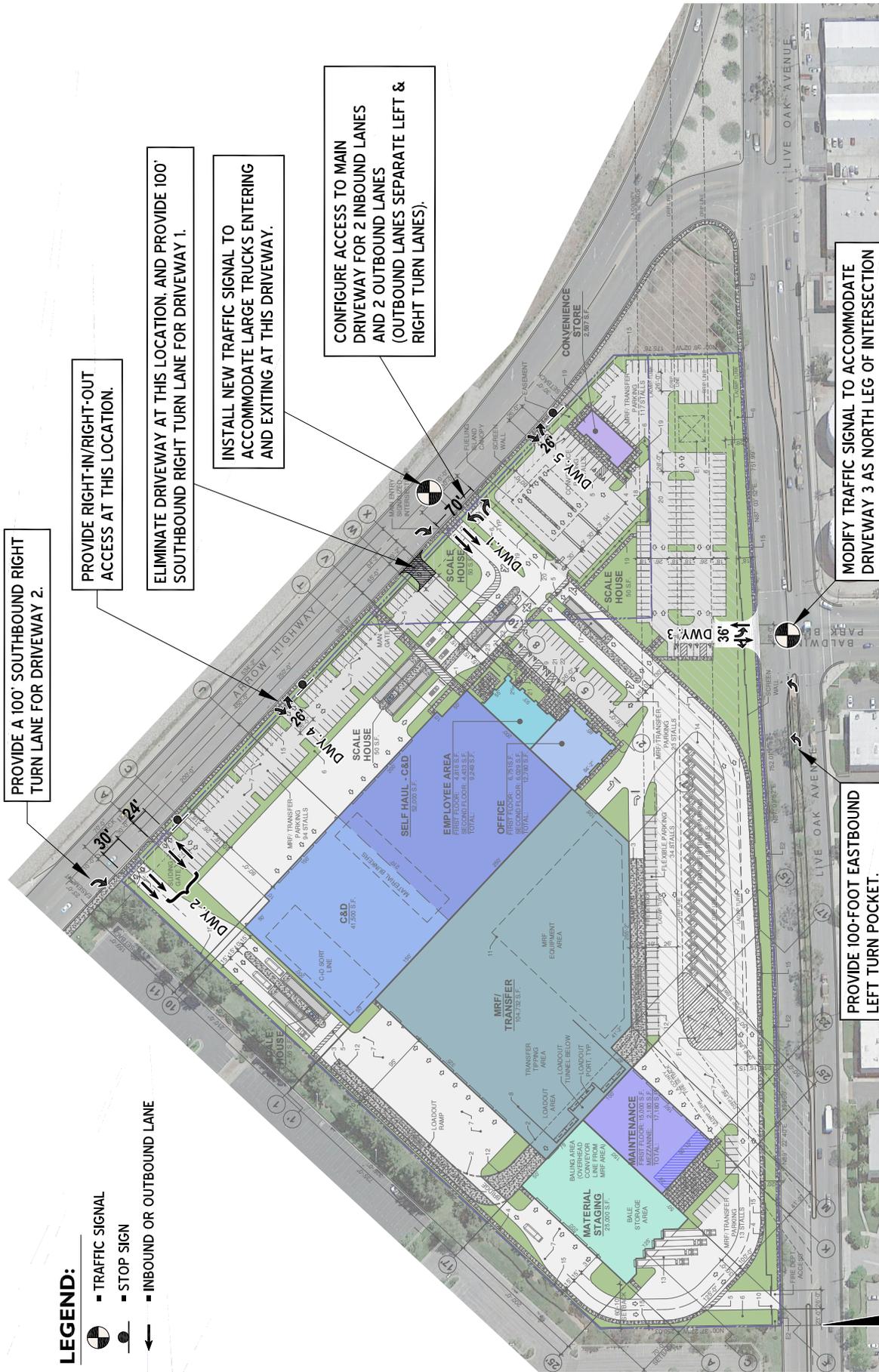
EXHIBIT K: PROJECT ONLY LINK VOLUMES



LEGEND:

- ⊕ - INTERSECTION ID
- - FUTURE ROADWAY
- 100 - PROJECT ONLY AM PEAK HOUR LINK (2-WAY) VOLUMES, PASSENGER CAR EQUIVALENTS (PCE)
- 100 - PROJECT ONLY PM PEAK HOUR LINK (2-WAY) VOLUMES, PASSENGER CAR EQUIVALENTS (PCE)

EXHIBIT L: SITE ACCESS RECOMMENDATIONS



Chapter 9.0 Mitigation Monitoring and Reporting Program

9.0 Mitigation Monitoring and Reporting Program

State CEQA Guideline §15097 directs the Lead Agency, the City of Irwindale, to adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. This Mitigation Monitoring and Reporting Program (MMRP) is required as a condition of approval by the City of Irwindale order to ensure that the mitigation measures and project revisions identified in the EIR are implemented. The MMRP will be monitored by various departments of the City of Irwindale. This MMRP includes the mitigation as identified in the Final EIR; and those which are required to address the potential environmental impacts associated with implementation of the proposed project. CEQA (Public Resources Code Section 21081.6 (a) (1)).

State CEQA Guidelines §15370 defines “mitigation” as:

- Avoiding the impact completely by not taking a certain action or parts of an action;
- Minimizing the impact by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations, during the life of the action;
- Compensating for the impact by replacing or providing substitute resources or environments.

Note: Authority cited: Section 21083, Public Resources Code; Reference: Sections 21002, 21002.1, 21081, and 21100(c), Public Resources Code.

In addition to mitigation measures (“MM”), the *Irwindale Materials Recovery Facility and Transfer Station Project* is required to comply with project design features (“PDF”). PDFs are designed during the initial planning phase and are incorporated into the physical design of a project. PDFs have been introduced by either the Applicant or the Lead Agency as a way to reduce an anticipated effect. This mitigation program incorporates both MMs and PDFs. All direct and indirect impacts that can be avoided or reduced to less than significant levels by the mitigation program are discussed in the EIR. The mitigation program serves as a means to reduce or avoid any identified potentially significant adverse impacts from implementation of the Proposed Project. When these potentially significant adverse impacts remain significant, even after imposing the mitigation program, such impacts are identified as significant and unavoidable. (State CEQA Guidelines §§15091, 15097, and 15126.4). Refer to **Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR Mitigation Monitoring and Reporting Program**.

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
AIR QUALITY / GREENHOUSE GASES / ODORS / HEALTH RISK ASSESSMENT				
MM AQ-1	<p>Dust Control / SCAQMD Rules 402 and 403 In order to offset potential impacts that could occur without compliance with Rules 402 and 403, the City shall ensure the Proposed Project adheres to the provisions of SCAQMD Rules 402 and 403 regarding construction-related fugitive dust control by implementing a dust control program pursuant to the provisions of SCAQMD Rules 402 and 403. The Applicant shall ensure that contractors implement a fugitive dust control program pursuant to the provisions of SCAQMD Rules 402 and 403. This program shall include, but not limited to the following:</p> <ul style="list-style-type: none"> • Prior to issuance of any grading permit, the City Engineer and Senior Building Inspector shall confirm that the grading plan and building plans stipulate that, in compliance 	Athens Services / City of Irwindale City Engineer and Senior Building Inspector; to be observed during twice yearly inspections	Prior to issuance of grading permit	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program

Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	<p>with SCAQMD Rule 403, fugitive dust shall be controlled by the applicable best available control measures listed in Table 1 of Rule 403.</p> <ul style="list-style-type: none"> • Water or a stabilizing agent shall be applied at least three times daily, preferably in the mid-morning, afternoon, and after work is done for the day, to exposed surfaces including graded and disturbed areas in sufficient quantity to prevent generation of dust plumes. • Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday. The contractor shall use a gravel apron, 25 feet long by road width, or a pipe-grid track-out control device to reduce mud/dirt track-out from active operations and 			

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program

Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	<p>unpaved truck exit routes.</p> <ul style="list-style-type: none"> • A wheel washing system shall be installed and used to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site. • All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches. • Traffic speeds on unpaved roads shall be limited to 15 miles per hour. • Operations on unpaved surfaces shall be suspended when winds exceed 25 miles per hour. • On-site stock piles shall be covered or watered at least twice per day. 			

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
MM AQ-2	<p>Construction Equipment The Applicant shall ensure that construction equipment is properly tuned and maintained in accordance with manufacturer’s specifications to ensure minimum emissions under normal operations.</p>	Construction Contractor, reporting to City of Irwindale City Engineer	Construction	
MM AQ-3	<p>Electricity Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used, where available.</p>	Athens Services; subject to the review and approval of City of Irwindale Building Inspector	Construction	
MM AQ-4	<p>Diesel Trucks Heavy-duty diesel trucks shall be properly tuned and maintained to manufacturers’ specifications to ensure minimum emissions under normal operations.</p>	Athens Services; reporting to City of Irwindale City Engineer annually	Life of Project	
MM AQ-5	<p>Smog Alerts Heavy equipment operations shall be discontinued—during first and second stage smog alerts.</p>	Athens Services / City of Irwindale Code Enforcement to inspect site in the event of a smog alert.	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
MM AQ-6	Construction Equipment The use of 2010 model or newer construction equipment shall be required, where feasible.	Construction Contractor / City of Irwindale Code Enforcement	Construction	
MM AQ-7	Construction Equipment Older (prior to 2010 model year) construction equipment shall be retrofitted with appropriate emission control devices (Tier 2 or better) prior to onsite use.	Construction Contractor / City of Irwindale Code Enforcement	Construction	
MM AQ-8	Heavy Duty Equipment The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO _x reduction and 85 percent PM reduction compared to the most recent CARB fleet average (i.e., Tier 2 equipment or better). Acceptable options for reducing emissions include the use of late model engines, low-emission	Athens Services and City of Irwindale Senior Building Inspector	Construction	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such are available.			
MM AQ-9	<p>Truck Idling All construction vehicles, both on- and off-site, and construction equipment idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). The construction contractor shall post visible signage within construction equipment operator components notifying equipment operators of the prohibiting against idling in excess of five minutes. The construction contractor shall provide awareness training to equipment operators regarding idling limits.</p>	Athens Services and City of Irwindale Senior Building Inspector	Construction	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
MM AQ-10	Paint Contractors shall use varying-pressure-low-volume paint applicators or other application techniques with equivalent or higher transfer efficiency.	Athens Services and City of Irwindale Senior Building Inspector	Construction	
MM AQ-11	Paint Use super compliant VOC (and ROG) coatings for all architectural applications. (Rule 1113 of the SCAQMD established a schedule of VOC limits for architectural coatings. However, many manufacturers have reformulated their coatings to levels well below these limits. These are referred to as "Super-Compliant" and contain less than 10 grams of VOC per liter.)	Athens Services and City of Irwindale Senior Building Inspector	Construction	
MM AQ-12	Fueling Station Applicant shall properly maintain ROG emission control devices within the gasoline dispensing station pursuant to SCAQMD Rule 461.	Athens Services and City of Irwindale Senior Building Inspector City of Irwindale to observe during twice yearly inspections	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
MM AQ-13	Fueling Station All gasoline dispensing facilities shall meet the requirements of SCAQMD’s Rule 461 to limit ROG emissions from gasoline dispensing facilities, including but not limited to using CARB-certified vapor recovery systems and spill boxes and periodic testing of the equipment.	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	
MM AQ-14	Heavy Duty Diesel Trucks Heavy-duty diesel trucks shall be properly tuned and maintained to manufacturers’ specifications to ensure minimum emissions under normal operations.	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	
MM AQ-15	Transfer Trucks The use of 2010 model or newer transfer trucks shall be required whenever older vehicles are replaced or upgraded, per SCAQMD Rule 1193.	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
MM AQ-16	<p>Transfer Trucks Older (prior to 2010 model year) transfer trucks shall be equivalent to Tier 2 emission standards (such as particulate filter traps) prior to onsite use.</p>	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	
MM AQ-17	<p>Off –Road Heavy Duty Equipment The Project Applicant shall require all on-site off-road heavy-duty equipment (loaders, excavators, skid steer) to meet USEPA Tier 3 emissions standards. These on-site off-road construction equipment used in operation of the Project shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the applicant shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of the certified tier specification for each piece of heavy-duty equipment, BACT documentation, and CARB or SCAQMD operating permit shall be provided to the City prior to operation of the Project.</p>	Athens Services and City of Irwindale Senior Building Inspector	Prior to the operational phase	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
MM AQ-18	<p>Diesel Trucks Idling Times All diesel truck operators shall strictly abide by the applicable State law requirements for idling, as described in the Airborne Toxic Control Measure (CCR, Title 13, Section 2485), which limits vehicles with gross vehicular weight ratings of more than 10,000 pounds to no more than five minutes of idling of the primary engine or the diesel-fueled auxiliary power system at any location. Trucks engaging in unloading at the Project site and load weighing/financial transactions at the scale house shall be prohibited from idling in excess of five minutes. Visible signage notifying truck operators of idling limits shall be posted near all site entrances. In the event third party collection haulers were required, all diesel truck operators that use the facility would be encouraged, and if reasonably possible by Athens to require contractually, to apply in good faith for funding from an established CARB or SCAQMD funding program to either retrofit or replace engines.</p>	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
MM AQ-19	Odor Control Applicant shall minimize odors during operation of the MRF/TS by properly maintaining design features and equipment designed to reduce and eliminate odors and pursuant to provisions of SCAQMD Rule 410.	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	
MM AQ-20	Odor Control On-Site Management Plan No. 3; Athens Services Odor Control Program shall include a requirement that any and all odor complaints shall be referred directly to the City of Irwindale Community Development Department Code Enforcement Division. Odor complaints shall be substantiated by the City as follows: <ul style="list-style-type: none"> a. Inspection and confirmation by Code Enforcement Division Staff; and/or b. Inspection and confirmation by the SCAQMD; and/or c. A qualified consultant, as determined and selected by the City, will be retained to 	Athens Services and City of Irwindale Senior Building Inspector to observe during twice yearly inspections	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
	<p>collect samples to quantify odor intensity using a Nasal Ranger or other comparable instrument. Such consultant shall be retained by the City at the sole expense of the Applicant.</p> <p>Facility representatives shall conduct an odor survey as soon as practical, but not to exceed 2 hours after receiving an odor complaint or notification from the SCAQMD or the LEA. Upon substantiation of an odor complaint, Applicant shall meet with the City within 48 hours to determine actions to remedy the odor complaint. A detailed action plan shall be prepared within 72 hours of the meeting identifying the steps to be taken to remedy the issue. All remedies shall be at the sole expense of the Applicant, and shall be implemented / installed as soon as feasible.</p>			
MM AQ-21	<p>Odor Control As a means to address public concerns and complaints regarding odors, the Project Applicant</p>	Athens Services	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR Mitigation Monitoring and Reporting Program				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	<p>shall publicly post the SCAQMD odor complaint phone number [1-800-CUT-SMOG (1-800-288-7664)] and website address (http://www.aqmd.gov/complain/reporting_aq_problems.html) on signs that are visible from the street at all entrances to the MRF/TS facility.</p>			
BIOLOGY				
MM BIO-1	<p>Pre-Construction Survey The Applicant shall comply with the regulatory requirements of the federal Migratory Bird Treaty Act and California Fish and Game Codes §3503, §3503.5, and §3513 regarding Proposed Project grading and construction activities.</p> <p><i>Pre-construction Surveys for Nesting Birds</i> The Applicant shall implement the following protective measures to ensure implementation of the Migratory Bird Treaty Act and compliance with State regulations during construction. To the extent feasible, the Applicant and/or the construction contractor(s) shall trim/remove all vegetation/tree</p>	Athens Services / Qualified Biologist selected and overseen by City of Irwindale	Prior to initial grading permit	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	<p>limbs necessary for Proposed Project construction between September 1 and January 31. Should construction activities or vegetation removal commence between February 1 to August 31, pre-construction surveys for nesting birds shall be conducted for any affected tree(s) located within the public right of way by a qualified biologist to ensure that no active nests would be disturbed during project implementation. A preconstruction survey shall be conducted no more than 14 days prior to the initiation of demolition/construction activities. During this survey, the qualified person shall inspect the street trees located within the public right of way and areas immediately adjacent to the project site for nests. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist, in consultation with the California Department of Fish and Game, shall determine the extent of a construction-free buffer zone to be established around the nest until the young have fledged.</p>			

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
CULTURAL RESOURCES				
MM CR-1	<p>Native American Monitor The Applicant and City shall consult with the Gabrieleño Band of Mission Indian Tribe, prior to on-site earthwork activities, to invite a Native American Monitor at the project site for the excavation and ground disturbance activities.</p>	Athens Services / City of Irwindale Senior Planner / Gabrieleño Band of Mission Indian Tribe	Prior to earthwork	
MM CR-2	<p>Archaeological Resources In the event any previously undetected archaeological resources are encountered during project construction, all excavation and ground disturbance activities shall cease and a qualified archaeologist will be contacted within 24 hours to evaluate the nature and significance of any such discoveries. If a discovery proves to be significant, additional work (such as data recovery excavation) may be warranted. Work may be resumed with approval of the attending archeologist and City Staff. Further, should unforeseen artifacts become uncovered during site grading, the Applicant would be required to adhere to all City and State of California procedures, including Section 21083.2(i)</p>	Athens Services / City of Irwindale Senior Planner / City- approved qualified archeologist	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	of the CEQA Statutes and Section 15064.5 of the CEQA Guidelines regarding stoppage of work, handling of discovered materials, and notification of proper authorities to ensure that the construction/operation of the MRF/TS project would not have an adverse effect on cultural resources.			
MM CR-3	<p>Paleontological / Geological Resources</p> <p>In the event that any unknown (remaining) paleontological or geological resources are encountered during project implementation, the Applicant shall cease earthwork immediately and contact a qualified paleontologist or geologist within 24-hours to evaluate the nature and significance of any such discoveries. Work may be resumed with approval of the attending archeologist and City Staff.</p>	Athens Services / City of Irwindale Senior Planner / City- approved qualified paleontologist or geologist	Life of Project	
MM CR-4	<p>Human Remains</p> <p>If human remains are discovered during project activities, the City of Irwindale Planning Department and the Los Angeles County Coroner's office shall be notified within 24 hours under state law (California Health and Safety Code § 7050.5) and all</p>	Athens Services / City of Irwindale Senior Planner	Life of Project	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	<p>activities in the immediate area of the find shall cease until appropriate and lawful measures have been taken. If the Coroner determines that the remains are Native American, the NAHC shall also be contacted (California Public Resources Code § 5097.98). In accordance with Section 5097.98 of the <i>California Public Resources Code</i>, the NAHC shall designate a Most Likely Descendent, who may make recommendations concerning the disposition of the remains in consultation with the City and the project archaeologist.</p>			
GEOLOGY				
PDF GEO-1	<p>Geotechnical Report The Applicant shall have a California Registered Geotechnical Engineer prepare a site-specific Report to the satisfaction of the City Engineer prior to issuance of the grading permit. This report will be undertaken in accordance with the CGS Guidelines for Evaluating and Mitigating Seismic Hazards in California. This report will provide design specification to assure the Proposed Project is developed within accepted federal, State, and local laws, regulations, and guidelines.</p>	Athens Services / City of Irwindale Engineer	Prior to issuance of a grading permit	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
NOISE				
MM N-1	Ambient Noise Prior to construction, the construction contractor shall obtain authorization from Irwindale’s building inspector to exceed the ambient base noise level by more than five (5) dBA during construction activities at the property boundary for industrial zoned land use.	Athens Services / City of Irwindale Building Inspector	Prior to construction	
MM N-2	Construction Hours of Operation The construction contractor shall limit all construction activities from 7 a.m. to 7 p.m. Monday through Saturday. No construction activity shall be conducted on Sundays or during legal holidays.	City of Irwindale Building Inspector	During construction	
MM N-3	Soundwall The construction contractor shall construct the soundwall around the site perimeter during the initial construction phase to establish the means for noise reduction during subsequent construction and operations. In the event that the soundwall is not constructed prior to construction of the buildings, a	Athens Services / City of Irwindale Building Inspector	Initial construction phase [within first 30 days]	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
	temporary sound barrier or curtain shall be used as a temporary measure to reduce noise impacts (by at least 5 decibels) until the soundwall can be constructed.			
MM N-5	Haul Route The construction contractor shall operate and maintain a City-approved haul truck traffic route restricted to major traffic arteries, and prohibited from using Baldwin Park Boulevard south of Live Oak Avenue.	Athens Services, subject to review and approval of City Engineer	Prior to construction	
MM N-5	Construction Equipment The construction contractor shall provide construction equipment equipped, operated, and maintained with manufacturer recommended mufflers or the equivalent. The construction contractor shall locate staging and delivery areas as far as feasible from sensitive land uses or adjacent occupied buildings and schedule deliveries during daytime hours when residential areas south of the project site are less susceptible to annoyance from outside noise.	Athens Services / City of Irwindale Building Inspector	During construction	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
MM N-6	Idling Time The construction contractor shall post rules visible to drivers that require turning-off construction equipment when not in operation (for more than 5 minutes). The construction contractor shall shield stationary equipment operating under full power for more than 60 minutes that would otherwise not be shielded by the perimeter soundwall.	Athens Services / City of Irwindale Building Inspector	During construction	
MM N-7	Ambient Noise The Applicant shall implement all of the following: <ul style="list-style-type: none"> • For the western/southwestern property boundary (for approximately the first 450 feet of the property boundary north of Live Oak Avenue), the Applicant shall construct the 8-foot perimeter masonry soundwall on top of a two-foot berm so that the effective height of the soundwall would be 10 feet (with the exception that the berm is not required to be constructed on any utility easements). 	Athens Services / City of Irwindale Building Inspector and Senior Engineer	During construction	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
	<ul style="list-style-type: none"> • The Applicant shall modify nighttime operations (10 p.m. – 7 a.m.) that result in verified noise complaints to eliminate objectionable noise during the nighttime hours. The applicant shall notify the City of any noise complaints received within 24 hours of receiving the complaint and provide a proposed amendment to the On-Site Management Plans to demonstrate a reduction in ambient noise within one (1) week, subject to review and approval of the City upon a finding that the amendment will result in compliance with adopted noise standards of the City of Irwindale and the City of Baldwin Park. • The Applicant shall obtain authorization by permit from the City to exceed ambient noise levels from facility operations on the western/northwestern boundary and the 			

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	southern boundary (for 5 a.m. to 7 a.m.) pursuant to IMC Section 9.28.120. If the applicant does not obtain authorization by permit to exceed noise levels, the applicant will be required to modify operations to reduce noise levels between 5 a.m. to 7 a.m. to 65 dBA.			
TRAFFIC				
MM T-1	Off-Site Improvement To mitigate potential traffic impacts at I-605 NB Off-Ramp (NS) / Live Oak Avenue (EW)(#8), the developer will be required to construct or fund the following improvement: <ul style="list-style-type: none"> • Install a traffic signal. • Construct a 2nd northbound right turn lane. • Provide a 3rd westbound through lane by modifying the existing raised median. This will also provide additional queuing storage for the westbound left turn lane at the intersection of I- 	Athens Services, subject to review and approval of City Engineer and Senior Building Inspector and Caltrans		

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
	605 SB On-Ramp (NS) / Live Oak Avenue (EW).			
MM T-2	<p>Off-Site Improvement To mitigate potential traffic impacts to I-605 SB Off-Ramp (NS) / Arrow Highway (EW)(#3), the developer will be required to construct or fund the following improvements:</p> <ul style="list-style-type: none"> • Construct a 2nd southbound left turn lane. 	Athens Services, subject to review and approval of City Engineer and Senior Building Inspector and Caltrans		
MM T-3	<p>Off-Site Improvement To mitigate potential traffic impacts to Arrow Highway (NS) / Driveway 1 (EW), the Applicant shall be required to do the following:</p> <p>Prior to commencement of operations, the Applicant shall install a traffic signal and construct the intersection with the following geometrics:</p> <ul style="list-style-type: none"> • Northbound Approach: One left turn lane (two way turn lane) and two 	Athens Services, subject to review and approval of City Engineer and Senior Building Inspector and Caltrans	Prior to commencement of operations	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

<i>Mitigation Measure Number</i>	<i>Mitigation Measure</i>	<i>Monitoring/Reporting Responsibility</i>	<i>Mitigation Timing</i>	<i>Mitigation Verification Signature/Date</i>
	<p>through lanes.</p> <ul style="list-style-type: none"> • Southbound Approach: Two through lanes and one right turn lane. • Eastbound Approach: One left turn lane and one right turn lane. • Westbound Approach: N/A 			
MM T-4	<p>Off-Site Improvement</p> <p>To mitigate potential traffic impacts to Arrow Highway (NS) / Driveway 2 (EW), the Applicant shall be required to do the following:</p> <p>Prior to commencement of operations, the Applicant shall install a stop control on the eastbound approach and construct the intersection with the following geometrics:</p> <ul style="list-style-type: none"> • Northbound Approach: One left turn lane (two way turn lane) and two through lanes. • Southbound Approach: Two through 	<p>Athens Services, subject to review and approval of City Engineer and Senior Building Inspector and Caltrans</p>	<p>Prior to commencement of operations</p>	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR <i>Mitigation Monitoring and Reporting Program</i>				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	lanes and one right turn lane. <ul style="list-style-type: none"> • Eastbound Approach: One shared left turn and right turn lane. • Westbound Approach: N/A 			
MM T-5	<p>Off-Site Improvement</p> <p>To mitigate the potential impact to Driveway 3 – Baldwin Park Boulevard (NS) / Live Oak Avenue (EW), the Applicant shall be required to do the following:</p> <p>Prior to commencement of operations, the Applicant shall modify traffic signal to include Project Driveway 3 (north leg) and construct the intersection with the following geometrics:</p> <ul style="list-style-type: none"> • Northbound Approach: Two left turn lanes and one shared through-right turn lane. • Southbound Approach: One left turn lane and one shared through-right turn lane. • Eastbound Approach: One left turn lane (100-foot pocket length), two through lanes, and one defacto right turn lane. 	Athens Services, subject to review and approval of City Engineer and Senior Building Inspector and Caltrans	Prior to commencement of operations	

Chapter 9.0 Mitigation Monitoring and Reporting Program

**Table 9.0-1
Irwindale Materials Recovery Facility and Transfer Station Project EIR
Mitigation Monitoring and Reporting Program**

Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	<ul style="list-style-type: none"> • Westbound Approach: One left turn lane, two through lanes, and one right turn lane. 			
MM T-6	<p>Arrow Highway (NS) / Driveway 4 (EW) – Install stop control on the eastbound approach and construct the right in / right out driveway intersection with the following geometrics:</p> <ul style="list-style-type: none"> • Northbound Approach: Two through lanes (no left turn access). • Southbound Approach: One through lane and one shared through-right turn lane. • Eastbound Approach: One right turn lane. • Westbound Approach: N/A <p>Arrow Highway (NS) / Driveway 5 (EW) – Install stop control on the eastbound approach and construct the right in / right out driveway intersection with the following geometrics:</p> <ul style="list-style-type: none"> • Northbound Approach: Two through lanes (no left turn access). • Southbound Approach: One through lane 	Athens Services, subject to review and approval of City Engineer and Senior Building Inspector and Caltrans	Prior to commencement of operations	

Chapter 9.0 Mitigation Monitoring and Reporting Program

Table 9.0-1 Irwindale Materials Recovery Facility and Transfer Station Project EIR Mitigation Monitoring and Reporting Program				
Mitigation Measure Number	Mitigation Measure	Monitoring/Reporting Responsibility	Mitigation Timing	Mitigation Verification Signature/Date
	and one shared through-right turn lane. <ul style="list-style-type: none"> • Eastbound Approach: One right turn lane. • Westbound Approach: N/A 			
WATER QUALITY AND HYDROLOGY				
PDF WQ-1	The Proposed Project shall be conditioned by the City to be certifiable at the Silver level utilizing U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) green building rating systems. The LEED ¹ rating system requires water efficiency in the design of a project through water use reduction, efficient landscaping, and innovative wastewater treatment technologies, as well as sustainable site selection; energy performance standards; materials and resource selection criteria; and indoor air quality practices.	Athens Services / City of Irwindale Senior Planner	Life of Project	

¹ LEED is a building tool that addresses the entire building lifecycle recognizing best-in-class building strategies. The LEED certification of a project is a program that provides third-party verification of green buildings based on a credit system for the categories of: sustainable site selection; water efficiency; energy performance; materials and resource selection; and indoor air quality. (<http://www.usgbc.org/leed/rating-systems>)