City of Sunnyvale Materials Recovery and Transfer Station (SMaRT Station®)

Addendum to the Previously Certified Environmental Impact Report (SCH No. 89022812)

May 2025

Prepared for:
City of Sunnyvale
Environmental Services Department
P.O. Box 3707
Sunnyvale, CA 94088-3707

Sunnyvale

Prepared by:
Kimley-Horn and Associates
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Sunnyvale SMaRT Station®

Addendum to the Sunnyvale Materials Recovery and Transfer Station Final Environmental Impact Report

SCH NO. 89022812

Prepared for	City of Sunnyvale P.O. Box 3707 Sunnyvale, California 94088-3707
Prepared by	Kimley-Horn and Associates 555 Capitol Mall Sacramento, California 95814
Date	May 2025

TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

1.0 INTRODUCTION

This document is the third Addendum to the City of Sunnyvale Material Recovery and Transfer (SMaRT) Station project Environmental Impact Report (EIR) that was originally published in June 1990. The Final EIR for the project was certified by the City of Sunnyvale in September 1990 (State Clearinghouse #89022812). After the FEIR was certified, two Addendums to the document were prepared and approved, one in 1992 and one in 2016. The Addendums were prepared to account for minor changes to the SMaRT Station project. The following is a lists the previously prepared environmental documents.

- Final Environmental Impact Report (certified September 1990, State Clearinghouse Number 89022812 (1990 Final EIR); and,
- Addendum to the 1990 Final EIR, approved July 1992 (1992 Addendum).
- Addendum to the 1990 Final EIR, approved by December 2016 (2016 Addendum).

Since that time, new minor changes have been proposed and this addendum evaluates whether the new proposed modifications, (hereafter referred to as the "modified," or "updated project" would result in any new or substantially more significant effects or require any new mitigation measures not identified in the 1990 Final EIR and as discussed in the 1992 and 2016 Addendums.

This Addendum analyses the modifications as compared to the previous 1990 Final EIR, and as modified by the updates discusses in the 1992 and 2016 Addendum, which remain valid as the basis for analysis. Based on that analysis, it was determined that the new updates to the SMaRT Station would not cause any new significant effects not identified in the previous documentation nor would the update result in substantial or significant effects not previously disclosed. As such, no new mitigation measures would be required. In addition, there are no changes that have occurred with respect to circumstances surrounding the updated projected that would cause new or substantially more severe significant environmental effects that were identified in the previous documentation. In addition, no new information has become available that shows that the updated project would cause new or substantially more severe significant environmental effects which have not already been analyzed in the previous documentation.

This Addendum incorporates the mitigation measures detailed in the 1990 Final EIR. With this Addendum, the updated project would still be within the framework of the evaluation for the original project as documented in the 1990 Final EIR an further environmental review for this updated project is not required.

1.1 Purpose of this Addendum

The purpose of this Addendum is to evaluate whether the updated project as currently proposed would result in any new or substantially greater significant effects or require any new mitigation measures not identified in the 1990 Final EIR prepared for the original project. This Addendum, together with the 1990 Final EIR will be used by the City when considering approval of the updated project.

1.2 CEQA Framework for Addendum

For a project with modification from an original approved project, State CEQA Guidelines (Sections 15162 and 15164) discuss subsequent EIR's and Negative Declaration and provides that an Addendum to a certified EIR may be prepared if only minor technical changes or additions are necessary or none of the following conditions calling for the preparation of a subsequent EIR have occurred:

- Substantial changes are proposed in the project which require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of EIR certification, shows any of the following:
    A. The project will have one or more significant effects not discussed in the EIR,
    B. The project will result in impacts substantially more severe than those disclosed in the EIR,
    C. 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 proponent declines to adopt the mitigation measure or alternative, or
    D. Mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative.

Based on the analysis and evaluation provided in this Addendum, no new significant impacts would occur as a result of the minor modifications that are proposed as part of the updated project. Nor would there be any substantial increase in the severity of any previously-identified significant environmental impact. Lastly, there is no new information of substantial importance that shows the mitigation measures or alternatives that were previously found not to be feasible or that are considerably different from those analyzed in the 1990 Final EIR would substantially reduce one or more significant effects on the environment. Therefore, none of the conditions described in Section 15162 of the CEQA Guidelines has occurred. For this reason, an addendum, prepared in accordance with Section 15162, is the appropriate document that will comply with CEQA requirements for the updated project. This is consistent with Section 15164(a) – Addendum to an EIR or Negative Declaration, discussed as follows:

(a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, and

(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

(d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

(e) (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency‘s findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

1.3 Adoption and Availability of the Addendum

In accordance with the CEQA Guidelines, this addendum was prepared to account for updates to the SMaRT Station to include upgrades in equipment, removal of Palo Alto as the partner agency, an alteration to the air quality permit issued by the Bay Area Air Quality Management District (BAAQMD). None of the changes would result in new or more significant impacts, hence it is an appropriate document to disclose changes and be adopted. Accordingly, this addendum will be attached to the previously certified EIR and will be presented to the decision-making body. The decision-making body shall consider the Addendum with the certified EIR prior to making a decision on the updated project (CEQA Guidelines Section 15164(d)). If the decision-making body concludes the findings are correct, based on substantial evidence, they may approve the updated project. The Addendum will be made available as an Attachment to the Staff Report that will be provided when the project is scheduled for consideration by the decision-making body.

2.0 DESCRIPTION OF PROPOSED PROJECT

2.1 Project Setting and Location

The SMaRT Station® is located at 301 Carl Road, Sunnyvale, California 94089; and occupies an approximate 9-acre site within the footprint of the Sunnyvale Landfill. No undeveloped or undisturbed areas are proposed for use. Updated project operations would occur within the existing footprint of the site. See **Figures 1:** *Regional Location Map*, and **Figure 2:** *Aerial Map*. Access to Carl Road and the SMaRT Station is via Highway 237 (also called Southbay Freeway) and then to Caribbean Drive.

Updated Project Description

Since the previous Addendum (prepared in 2016) was presented to the Board for review and approval, the City of Palo Alto has withdrawn from the MOU between the partner agencies. With this action, the SMaRT Station would provide recycling services to the City of Sunnyvale and the City of Mountain View. See **Figure 3:** *Local Vicinity Map*.

The SMaRT Station is currently permitted to receive 1,500 tons per day of waste materials and this limit would not change. The updated project does not propose any new building construction, and the City is not requesting any permit or approval of or for land use changes, or expansion of other services within the City of Sunnyvale.

The SMaRT Station is currently operating below its permitted 1,500 peak daily tonnage limit under the current Solid Waste Facility Permit. The SMaRT Station is currently receiving approximately 700-800 tons of materials per day. It is anticipated that intake at the SMaRT Station may increase due to regulations requiring additional recycling, population increase, new development, or use by other local areas. It should be noted that while additional refuse materials may be received, the total permitted tonnage (1,500 tons per day) is not proposed to be increased, would not change, and would not be exceeded under the updated project.

Under the updated project there would not be an expansion of the site or of the volume of waste material that could be processed, but the equipment upgrades would increase efficiency of waste stream separation resulting in an increase in the diversion of traditional MSW and recyclable materials from landfills. Waste materials would be disposed of at the Kirby Canyon Landfill in Santa Clara County.

The updated project proposes to make the following improvement.

- Replace existing and outdated electrically powered equipment with new modern electrically powered equipment. The anticipated needed and proposed equipment would sort Municipal Solid Waste (MSW) and recyclable material on a single integrated system. This would include outfeed equipment to process MSW and recyclable material. The following provides a list of the needed machinery but may be modified slightly depending on future demands, needs, and efficiencies:
    - Install new modern electrical Equipment/Machinery
        - Waste Sorting Machines
            - Trommel screens
            - Disc screens
            - 2D/3D screen separators

- Optical sorters to sort:
  - Compostable paper
  - Recyclable paper
  - Plastics including rigid plastic
- Magnet separators (Ferrous)
- Eddy Current separator (Non-Ferrous)
- Conveyors (transfer and quality control) for:
  - MSW
  - 2-inch organics (MRF Fines)
  - Compostable paper
  - 2-inch mixed broken glass
  - Paper
  - Plastics
  - Ferrous
  - Nonferrous (aluminum)
  - Residual
  - Balers (to feed)
- Storage silo blowers
- Walking floors for fiber containers
- Storage silos for containers
- Baler
- Compactor (residual)
- Air compressors for optical sorters

- Install new onsite 3,000 AMP electricity supply.
- Alter the existing permit with the Bay Area Air District (BAAD) to account for the updated machinery.
- Minor material movement and leveling of ground surface to enable setting of new machinery.
- Maintain the existing permitted hours of operation.
  - Continue operations Monday through Sunday; 8:00 AM to 5:00 PM.
  - Processing, removal and equipment maintenance would still be permitted 24 hours a day, seven days a week.
  - Truck operation updated from 4:00 AM to 9:00 PM
- Permitted Traffic Volumes (total vehicles entering the site): 760 daily trips on weekdays, 519 daily trips on regular weekends, and 1,390 daily trips on extra dump weekend events.
- Apply for a modification to the Conditional Use Permit (CUP) with the City.
- Update Solid Waste Facility permit issued by CalRecycle to account for the updated machinery.

Comparison of Project Updates

In addition to the proposed updates listed above, the following list is provided to discuss the project operational elements that would not change.

- No additional employees would be needed. Approximately 20 employees will be eliminated due to the installation of new and more efficient equipment and machinery.
- Employee vehicle trips would be reduced by approximately half due to reduction in employees.
- No new buildings are proposed.
- The 1,500 ton per day limit would not be increased.
- Increased diversion of traditional recyclable materials, organic and compostable materials.
- No changes to the existing Solid Waste Facility Permit conditions would occur

SOURCE: ESRI, 2022

Figure 1: Regional Location Map

Sunnyvale SMaRT Station

Addendum to the Sunnyvale Materials Recovery and Transfer Station EIR

Not to scale

Kimley»Horn
Expect More. Experience Better.

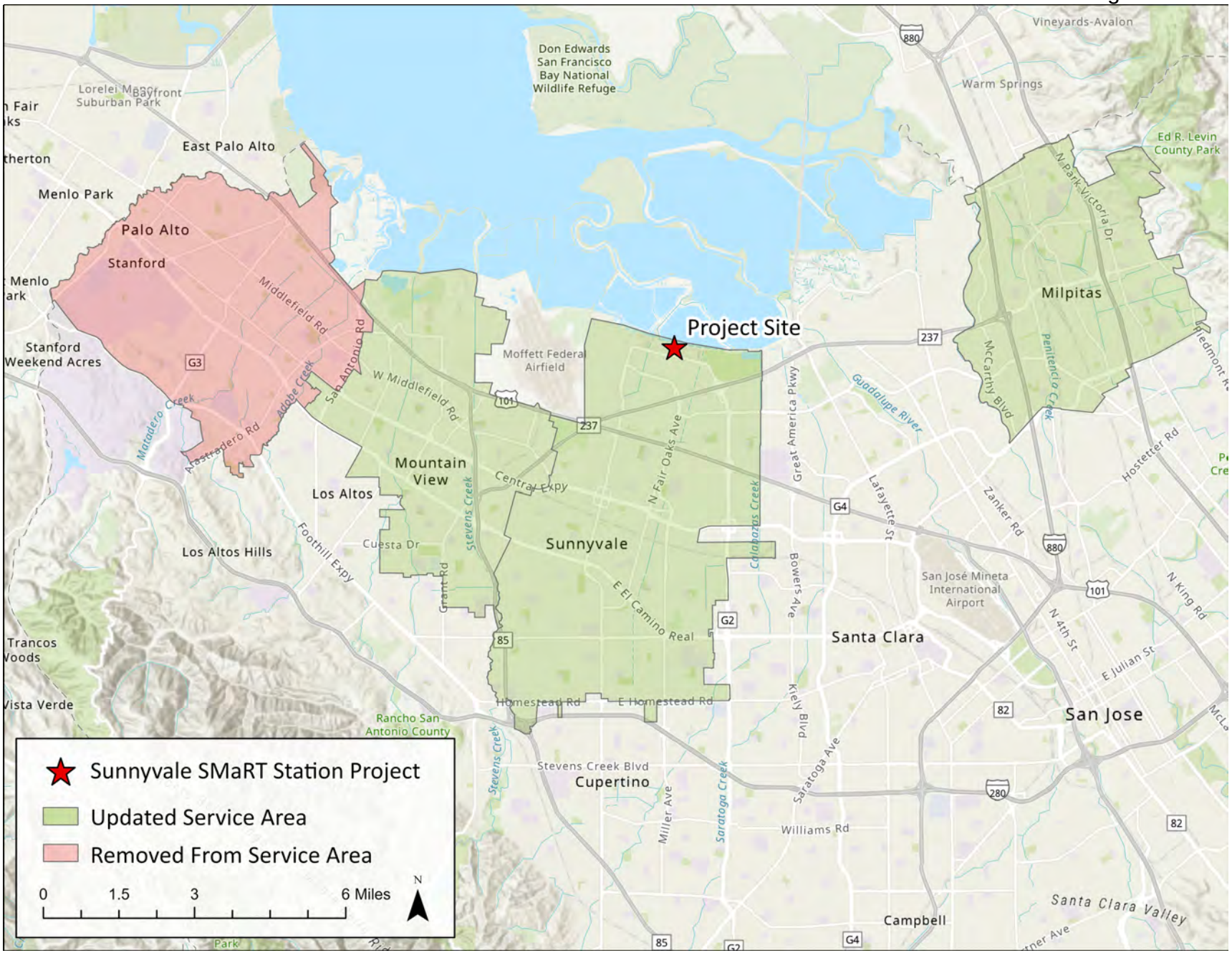
SOURCE: ESRI, 2022

Figure 2: Aerial Map

Sunnyvale SMaRT Station
Addendum to the Sunnyvale Materials Recovery and Transfer Station EIR

Not to scale

Kimley»Horn
Expect More. Experience Better.



SOURE: ESRI, 2022

Figure 3: Local Vicinity Map

Sunnyvale Smart Station

Addendum to the Sunnyvale Materials Recovery and Transfer Station EIR

Not to scale

Kimley»Horn
Expect More. Experience Better.

Analysis of Potential Environmental Effects

Previous review under the California Environmental Quality Act (CEQA) for the SMaRT Station was completed with an EIR certified by the City of Sunnyvale in 1990 (State Clearinghouse No. 89022812). The EIR evaluated the construction of the SMaRT Station and a service area covering three cities and an "extended service area" that included part or all of some adjacent/nearby jurisdictions.

Potentially significant impacts identified in the EIR included traffic impacts, fire hazard, wash-down water quality, impacts related to safety and seismic safety, dust emissions during updated project construction and operation, local impacts to biological resources, and nuisance impacts. Mitigation measures were adopted to reduce these potentially significant impacts to nonsignificant. All measures adopted in the certified EIR have been or will be implemented and the impacts will be mitigated to less than significant.

The 1990 EIR found two areas of environmental impact to be significant and unavoidable. Air quality impacts were determined to be significant and unavoidable because of short-term dust impacts during project construction and because of the potential release of hazardous landfill gas during excavation of the landfill. The EIR also found that the SMaRT Station would have significant unavoidable aesthetic impacts on recreationalists using levees to the north of the project site. A screening fence and landscaping along the north side of the project-site were required to help reduce aesthetic impacts. However, even with this mitigation the impacts were determined to remain significant and unavoidable.

In 1992 the project was modified to include a reduction in the size and design capacity of the station, reconfiguration of the main station building and relocation of the wood waste processing and public buy back areas. Additionally, the station design capacity was reduced to receiving 1,500 peak tons per day. This was a result of more accurate waste volume figures from each city in the service area, and re-evaluation of the assumptions made in estimating growth in the waste stream. In addition to a reduction in the design capacity of the station, the project was also modified to reduce the project footprint, and reduce operational limits to what was actually built and permitted.

The 1992 Addendum concluded that the then proposed modifications to the SMaRT Station project would not require any change in the mitigation measures adopted to reduce project impacts. All adopted mitigation measures were incorporated into the modified project. The then modified project did not result in new impacts which required additional mitigation measures.

For the most recent updates to the SMaRT Station, this third Addendum has been prepared. Like the 2016 Addendum, it uses the format provided in the CEQA Environmental Checklist. The Checklist was completed and provides a comprehensive analysis of the updated project as compared by the analysis in the 1990 EIR, the 1992 Addendum, and 2016 Addendum. The current checklist is provided in the following pages and the previous Addendums are attached as Appendices.

3.0 Recommendation

Based on the updated project as descried above, and analysis in the checklist below, It is recommended that the City of Sunnyvale finds on the basis of substantial evidence in the light of the whole record that the proposed modifications to the SMaRT Station are within the scope of the previous analysis and will not cause any new significant environmental impacts, substantially increase previously identified impacts, nor require any new or modified mitigation.

In making this finding, the City of Sunnyvale has considered evidence presented by City Staff, and other interested parties and has determined the updated project and analysis contained herein is consistent with the requirements of CEQA Sections 15162 and 15164. It was further determined that:

(1) NO substantial changes are proposed in the project which will require major revisions of the previously certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

(2) NO substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previously certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information which was not known and could not have been known with the exercise of reasonable diligence at the time the previously adopted EIR was adopted, does NOT show any of the following:

(A) The project will have one or more significant effects not discussed in the previously certified EIR;

(B) Significant effects previously examined will be substantially more severe than shown in the previously certified EIR;

(C) 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

(D) 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.

Based on the above, and discussion, comparison, and analysis contained in the subsequent checklist, it is concluded that the previous disclosures and the conclusions reached in the EIR certified September 1990, and other Addendums referenced herein as applicable, remains valid. The proposed revisions to the updated project would not cause new significant impacts not identified in the 1990 EIR and as modified by the 1992 and 2016 Addendums, and no new mitigation measures would be necessary to reduce impacts. Accordingly, the updated project would not result in any significant impact, and in some instances would likely reduce impacts. Although some regulations and new laws have been enacted to which the updated project is in conformance (e.g. percentage of materials jurisdictions must recycle), there are no substantial changes directly applicable to the SMaRT Station or its operations that have occurred that would result in a new or previously unidentified significant environmental impact. In

addition, the updated project would not contribute considerably, and no new information has become available that shows the updated project would cause significant environmental impacts. Therefore, no supplemental environmental review is required beyond this addendum. Lastly, as discussed above and pursuant to CEQA Guidelines Section 15164, an addendum need not be circulated for public review but can be included in or attached to the certified Environmental Impact Report. Thus, the Addendum has been attached and is presented to City of Sunnyvale Council for review.

4.0 SUPPLEMENTAL ENVIRONMENTAL CHECKLIST FORM

For use when reviewing subsequent discretionary documents pursuant to a previously approved or certified environmental document

PROJECT TITLE:

SMaRT Station Update

LEAD AGENCY NAME AND ADDRESS:

City of Sunnyvale – Environmental Services Department
P.O. Box 3707, Sunnyvale, CA 94088-3707

CONTACT PERSON AND PHONE NUMBER:

Deepti Jain, Environmental Programs Manager (408) 730-7791

PROJECT LOCATION:

The SMaRT Station is located at 301 Carl Road, Sunnyvale, CA 94089.

PROJECT SPONSOR'S NAME AND ADDRESS:

City of Sunnyvale – Environmental Services Department
P.O. Box 3707, Sunnyvale, CA 94088-3707

GENERAL PLAN DESIGNATION: Public Facilities **ZONING:** P-F (Public Facilities)

PREVIOUS ENVIRONMENTAL DOCUMENT: Previous review under the California Environmental Quality Act (CEQA) for the SMaRT Station was completed with an EIR certified by the City of Sunnyvale in 1990 (State Clearinghouse No. 89022812). The EIR evaluated the construction of the SMaRT Station and a service area covering three cities (Sunnyvale, Palo Alto, and Mountain View), and an "extended service area" that included a portion or all of some adjacent/nearby jurisdictions.

Potentially significant impacts identified in the EIR include traffic impacts, fire hazard, wash-down water quality, impacts related to safety and seismic safety, dust emissions during project construction and operation, local impacts to biological resources, and nuisance impacts. Mitigation measures were adopted to reduce these potentially significant impacts to less than significant. All measures adopted in the certified EIR were implemented for the initial construction efforts and those measures, as applicable, continued to be implemented through project operation such that all but two impacts were mitigated less than significant.

The EIR found two areas of environmental impact to be significant and unavoidable. Air quality impacts were determined to be significant and unavoidable because of short-term dust impacts during project construction and because of the potential release of hazardous landfill gas during excavation of the landfill. The EIR also found that the SMaRT Station would have significant unavoidable aesthetic impacts on recreationalists using levees to the north of the project site. A screening fence and landscaping along

the north side of the project-site were required to help reduce aesthetic impacts. However, even with this mitigation the impact would remain significant and unavoidable.

In 1992 proposed modifications to the SMaRT Station included a reduction in the size and design capacity of the station, reconfiguration of the main station building and relocation of the wood waste processing and public buy back areas. The station design capacity was reduced to 1,500 peak tons per day. These changes were made because of the actual waste volumes that were received from the cities being served.

In 2016 an Addendum to the EIR was prepared. This was done to add the City of Milpitas to the service area. Although Milpitas did not ultimately join, the analysis from the previous documents which remain pertinent, found that effects from the increase in vehicle trips and processing volumes were less than significant. Further, the current project, as shown through analysis in the Addendum, is consistent with the impacts originally disclosed. Similar to the findings in the 1992 and 2016 Addendum, this addendum has found that continued operation of the SMaRT Station would not result in any greater impacts and would not require any change in the mitigation measures adopted to reduce project impacts. All adopted and applicable mitigation measures were incorporated into the 2016 project as applicable, and those measures did not result in any impacts not previously disclosed.

DESCRIPTION OF UPDATED PROJECT: The current proposal for the updates and improvements to the SMaRT Station would not result in an expansion of the facility and would maintain 1,500 peak tons per day as the maximum allowed intake of materials. The proposed project would occur within the currently permitted site and within existing buildings. The updated project does not propose the construction of any new buildings, and the City is not requesting any new permits or approval of or for any land use changes, or expansion of other services within the City of Sunnyvale. The updated project would require minor changes to the CUP but does not propose nor permit any physical changes to the site. The updated project also does not propose any changes to the Solid Waste Facility Permit in terms of tonnage limit. Currently, the SMaRT Station is operating approximately 60 percent below its permitted 1,500 peak daily tonnage limit as allowed under the current Solid Waste Facility Permit.

The SMaRT Station is currently operating below its permitted 1,500 peak daily tonnage limit under the current Solid Waste Facility Permit. The SMaRT Station is currently receiving approximately 700-800 tons of materials per day. It is anticipated that intake at the SMaRT Station may increase due to regulations requiring additional recycling, population increase, new development, or use by other local areas. It should be noted that the while additional refuse materials may be received, the total permitted tonnage (1,500 tons per day) is not proposed to be increased, would not change, and would not be exceeded under the updated project.

Under the updated project there would not be an expansion of the site or of the volume of waste material process, but the equipment upgrades would increase efficiency of waste stream separation resulting in the diversion of traditional MSW and recyclable materials from landfills. Waste materials would be disposed of at Kirby Canyon Landfill in Santa Clara County.

It is anticipated that intake at the SMaRT Station may increase due to regulations requiring additional recycling, population increase, new development, or use by other local areas. It should be noted that while additional refuse materials may be received, the total permitted tonnage (1,500 tons per day) is not proposed to be increased and would not change.

To improve SMaRT Station efficiency and meet diversion and recycling requirements, the updated project proposes to do the following:

- Replace existing and outdated electrically powered equipment with new modern electrically powered equipment. The anticipated needed and proposed equipment would sort MSW and recyclable material on a single integrated system. This would include infeed and outfeed equipment to process MSW and recyclable material. The following provides a list of the needed machinery, but may be modified slightly depending on future demands, needs, and efficiencies:
    - Install new modern electrical Equipment/Machinery
        - Waste Sorting Machines
            - Trommel screens
            - Disc screens
            - 2D/3D screen separators
            - Optical sorters to sort:
                - Compostable paper
                - Recyclable paper
                - Plastics
            - Magnet separators (Ferrous)
            - Eddy Current separator (Non-Ferrous)
            - Conveyors (transfer and quality control) for:
                - MSW
                - 2-inch organics (MRF Fines)
                - Compostable paper
                - 2-inch mixed broken glass
                - Paper
                - Plastics
                - Ferrous
                - Nonferrous (aluminum)
                - Residual material
                - Baler (to feed)
            - Storage silo blowers
            - Walking floors for fiber containers
            - Storage silos for containers
            - Baler
            - Compactor(residual)
            - Air compressors for optical sorters
- Install onsite 3,000 AMP electricity supply.
- Alter the existing permit with the Bay Area Air Quality Management District (BAAQMD) to account for the updated machinery.
- Minor material removal and leveling of the ground surface to enable setting of new machinery.
- Maintain the existing permitted hours of operation.
    - Continue operations Monday through Sunday; 8:00 AM to 5:00 PM.
    - Truck operation updated from 4:00 AM to 9:00 PM
    - Processing, removal and equipment maintenance would still be permitted 48 hours a day, seven days a week

- Maintain Permitted Traffic Volumes (total vehicles entering the site): 760 daily trips on weekdays, 519 daily trips on regular weekends, and 1,390 daily trips on extra dump weekend events.
- Apply for a modification to the Conditional Use Permit (CUP) with the City.
- Update Solid Waste Facility permit issued by CalRecycle to account for the updated machinery.

Comparison of Project Updates

In addition to the proposed updates listed above, the following list is provided to highlight the important comparisons of operational elements considered in the environmental analysis.

- No additional employees would be needed. Approximately 21 employees will be eliminated due to installation of new and more efficient equipment and machinery.
- Vehicle trips would be reduced by approximately half due to a reduction in employees.
- No new buildings are proposed.
- The 1,500 ton per day limit would not be increased.
- Increased diversion of traditional recyclable materials, organic materials, and compostable materials from landfills.
- No changes to the existing Solid Waste Facility Permit would occur.

SURROUNDING LAND USES AND SETTING: The existing SMaRT Station is located on a city-owned site adjacent to the Sunnyvale Landfill, the Sunnyvale Water Pollution Control Plant (WPCP), and San Francisco Bay. The existing facility is currently in operation 7 days a week, except certain holidays, from 8:00 AM to 5:00 PM.

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (E.G., PERMITS, FINANCING APPROVAL, OR PARTICIPATION AGREEMENT):

- Bay Area Air Quality Management District
- CalRecycle/Local Enforcement Agency (LEA)

The environmental factors checked below would be potentially affected by this updated project, involving at least one impact that would represent a new significant environmental effect, a substantial increase in the severity of a significant impact previously identified, or new information of substantial importance, as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation/Traffic	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

5.0 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the Modified Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Modified Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the Modified Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the Modified Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the Modified Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Modified Project, nothing further is required.

Ramana Chinnakotla	5/7/2025
Signature	Date
Ramana Chinnkotla	
Printed Name	For: City of Sunnyvale

EVALUATION OF ENVIRONMENTAL IMPACTS:

A finding of “No New Impact/No Impact” means that the potential impact was fully analyzed and/or mitigated in the prior CEQA document, and no new or different impacts will result from the proposed activity. A brief explanation is required for all answers except "No New Impact/No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No New Impact/No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No New Impact/No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

A finding of “New Mitigation is Required” means that the project would have a new potentially significant impact on the environment or a substantially more severe impact than analyzed in the previously approved or certified CEQA document and that new mitigation is required to address the impact.

A finding of “New Potentially Significant Impact” means that the project may have a new potentially significant impact on the environment or a substantially more severe impact than analyzed in the previously approved or certified CEQA document that cannot be mitigated to below a level of significance or be avoided.

A finding of “Reduced Impact” means that a previously infeasible mitigation measure is now available, or a previously infeasible alternative is now available that will reduce a significant impact identified in the previously prepared environmental document.

5.1 Aesthetics

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
AESTHETICS -Would the project:						
a) Have a substantial adverse effect on a scenic vista?				**X**		
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State-designated scenic highway?				**X**		
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				**X**		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				**X**		

Discussion: The Final EIR certified in 1990 identified significant and unavoidable impacts on aesthetic views from recreational areas to the north of the SMaRT Station site. Mitigation measures were included to construct a screening wall and plant trees along the northern boundary of the project area to screen views of people using the recreational facilities north of the project site. However, the potential impacts remained significant with the implementation of the adopted mitigation measures. The screen wall and vegetation remain in place and impacts are no greater today than those previously disclosed. It should be noted that the updated project does not change any perimeter berms or vegetative screening measures that were implemented as part of the original project and have been in place since they were installed and/or planted.

The updated SMaRT Station project does not propose, nor would it require substantial physical changes to the existing project site. The continued operations of the SMaRT Station would occur within the existing buildings and project footprint with minimal new construction proposed within the interior of the site. The updated project would include removal of the existing processing equipment and installation of new and comparably sized equipment. This would occur within areas already heavily disturbed as part of

current operations and would occur over the short term (approximately 3-6 months). These activities could require minor removal of existing ground or concrete, and/or placement of new footings to create level pads for the placement of new equipment and machinery. All work would occur within the existing footprint of the original project and would be screened from view from West Caribbean Drive to the south and partially blocked by the existing buildings and vegetation from the levee trail to the north. Public views from the east and west are not afforded due to the landfill to the east and water pollution control plant to the west.

The updated project would serve existing facilities within the City of Sunnyvale and City of Mountain View. As previously noted, Milpitas was considered but didn't join the service area in 2016, and Palo Alto has withdrawn from their contract. The updated project would not require or permit any physical changes to any properties or existing structures outside the existing station within the existing service area. The updates to the SMaRT Station are minimal and consistent with the existing site and its operations and would not result in any new adverse impacts or increase the severity of any previously identified impacts to any aesthetic resources within the updated project site or surrounding area. Thus, not substantial changes, including new impacts, compared to the previous analysis would occur.

This is consistent with the analysis in the Land Use and Transportation Element (LUTE) EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR found that impacts to aesthetic and visual resources would be less than significant or have no impact. This finding considered that projects would conform with the current Citywide Design Guidelines. As discussed above, this addendum does recognize and disclose the previous significant unavoidable impact would occur as the SMaRT Station would be visible to viewers from the adjacent levee trail. These were disclosed as part of the site-specific review.

Although this was not a part of the LUTE analysis, because it was considered as part of the SMaRT Station project, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for the SMaRT Station or those discussed in the LUTE EIR would occur. Thus, the previous findings remain valid, and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and operations. Mitigation for construction was previously satisfied. Operational measures remain in place. No new mitigation is required.

5.2 Agricultural and Forestry Resources

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
AGRICULTURAL AND FORESTRY RESOURCES-Would the project:						
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**		
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**		
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**		
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**		

Discussion: The updated SMaRT Station project would not result in additional impacts to agricultural and forest resources beyond those identified in the 1990 EIR or other environmental documentation because there are no prime, unique, or statewide important farmlands in the updated project site or any surrounding area. Neither the 1990 EIR nor subsequent Addendums identified any impacts to agricultural uses; therefore, mitigation was not required. The updated SMaRT Station project would not expand its service area and the existing service to Palo Alto would be removed while service to the City of Sunnyvale and Mountain View would continue. The updated project would replace existing outdated equipment and machinery in the SMaRT with modern electric equipment to facilitate processing of materials. All improvements would occur within the existing heavily disturbed SMaRT Station site and no farmland, forest or timber resources, or farmland under Williamson Act Contract would be affected. Thus, the

updated project would not result in any new adverse impacts or increase the severity of any previously identified impacts on agricultural resources. While discussion of forest resources was not previously required, the SMaRT Station site does not contain any area with forest or timberland resources and no trees would be directly affected as part of the proposed improvements. In addition, the updates to the SMaRT Station would not result in any off-site impacts to these types of resources. No further analysis is required, and no mitigation measures are required for the modified project.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. No new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or as discussed in the LUTE EIR would occur. Thus, the previous findings related to agricultural and timberland resources remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR or subsequent Addendums. No new mitigation is required.

5.3 Air Quality

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant	No Impact
AIR QUALITY-Would the project:						
a) Conflict with or obstruct implementation of the applicable air quality management district or air pollution control district may be relied upon to make the following determinations?				**X**		
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?				**X**		
c) Expose sensitive receptors to substantial pollutant concentrations?				**X**		
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?				**X**		

Discussion: Air quality-related impacts were addressed in the 1990 Final EIR at pages IV-87 through IV-93. The analysis identified that all air quality-related topics would be less than significant with the exception of construction-related impacts associated with short-term dust emissions. The 1990 Final EIR identified mitigation to reduce the potential to release hazardous landfill gas during excavation activities to a less than significant level. Mitigation was also identified to reduce short-term dust emissions, yet not to a level below significance. Short-term dust emissions were determined to be significant and unavoidable.

The updated project proposes to replace outdated equipment and machinery within the project site. The proposed project would not expand the service area of the SMaRT Station and would not make any other physical alterations to the site. This effort would include removal of select equipment and machinery to be upgraded and minor leveling would be required for setting the new modern electric equipment.

Table 1 – Air Quality Construction Emissions shows that emissions are well below current BAAQMD thresholds. Although minor emissions would occur during the upgrades, it would not result in substantial generation of construction-related air pollutant emissions. Thus, these impacts would remain less than significant. It also is important to note that as shown in the table, construction emissions were calculated using emissions factors in 2023 for inclusion to the Addendum prepared in that year. However, as discussed, that Addendum was not presented for approval. CalEEMod accounts for lower emissions in future years due to technology advancements and use of cleaner construction equipment. Hence, the

2023 construction emissions reflected in the table are conservative and the emissions for construction of the updated project would be less than what is shown.

Table 1 – Air Quality Construction Emissions

Construction Year	Pollutant				
	Reactive Organic Gases (ROG)lbs/day	**Nitrogen Oxide (NO_x) lbs/day**	**Carbon Monoxide (CO) lbs/day**	**Coarse Particulate Matter(PM_{10}) lbs/day**	**Particulate Matter($PM_{2.5}$) lbs/day**
2025	1.45	14.97	9.11	0.46	0.42
Maximum	1.45	14.97	9.11	0.46	0.42
BAAD Significance Threshold [2, 3]	*54*	*54*	-	*82*	*54*
Exceed BAAD Threshold?	**No**	**No**	**-**	**No**	**No**

Source: Refer to the Air Quality, Greenhouse Gas Emissions, and Energy Memorandum Sunnyvale SMaRT Station 2022 Addendum Memorandum as Appendix to this document.
* "Construction emissions were originally calculated using emissions factors from 2023 for the previous Addendum prepared in 2023 but due to project updates and refinements in design it was not presented for approval. Because CalEEMod accounts for lower emissions in future years due to cleaner technology, which the project is incorporating, the 2023 construction emissions are conservative and would be higher than emissions for 2025 when the updated project would be constructed.

In terms of air pollutant emissions generated during SMaRT Station operations, the 1990 EIR evaluated the SMaRT Station with a permitted intake of 2,200 tons of refuse per day and the project is currently permitted to receive 1,500 tons per day established in the 1992 Addendum. The 1990 evaluation also anticipated the generation of a maximum number of 1,832 weekday vehicle trips, and 1,514 weekend vehicle trips. Additionally, as noted, the 2016 Addendum contemplated 1,246 daily trips, which was 646 to 546 trips less than in the 1990 EIR.

Compared to the 1,246 daily trips analyzed in the 2016 Addendum, the SMaRT Station (with weekend event trips amortized over the course of the year) is currently generating fewer trips than contemplated under that document. The SMaRT Station is not reducing the existing 1,500 tons per day capacity and would maintain the previously accounted for 1,246 trips to ensure future services could be provided. Thus, the project would not increase the current daily-maximum 1,500 tons processing limit and would not result in an unanticipated number of vehicle trips that would increase air emissions. This would ensure impacts remain less than what was analyzed in the 1990 EIR. Impacts would be further reduced from the previous level because the updated SMaRT project would comply with new regulations that require use of cleaner vehicles and more efficient diesel trucks compared to .

It should be noted that with the efficiency improvements, the number of employee trips would be reduced from approximately 41 trips to 20 trips. This is due to the efficiency improvements that would be enabled by the new machinery reducing the demand for employees. Further, all machinery improvements would be electric, and the project would not include natural gas. Accordingly, the proposed project would not violate any significance thresholds promulgated by the Bay Area Air District (BAAD),[1] which is the air pollution control officer for the project site and surrounding areas. Therefore, air quality-related impacts

1 BAAQMD significance thresholds for criteria air pollutants are 54 daily pounds of reactive organic gases, nitrogen oxides, or fine particulate matter; and 82 daily pounds of course particulate matter.

would not be greater than originally determined in the 1990 Final EIR nor 1992 Addendum. No new impacts have been identified, and no new mitigation measures are required.

This also is consistent with the analysis in the LUTE Final EIR, adopted in 2017, and the 2024 update to the City of Sunnyvale Land Use and Transportation Section of the General Plan, which contemplates existing land uses and continued operation of the SMaRT. The LUTE EIR found that air quality impacts related to conflicts with the Bay Area 2010 Clean Air Plan, that it would support CIty strategies and goals, and exposure of sensitive receptors to carbon monoxide concentrations, would be less than significant and would be the same as with the project due to its location and lack of new construction, similar operational capacities, and lack of sensitive receptors in the vicinity.

The LUTE EIR does includes mitigation to minimize exposure of sensitive receptors from toxic air contaminants during construction and operation. These, and/or other similar mitigation would not be needed or applicable to the project and additional impacts would not occur. Additionally, the project is not located near sensitive receptors and it would not contribute to an exceedance of the maximum intersection volumes per hour (44,000 and/or 24,000 vehicles per hour).

The LUTE EIR did find that impacts from new development (operationally and construction) and the contribution of additional vehicle trips, however, would exceed standards and would be significant and unavoidable. The project, however, is and has been in operation thus is accounted for, would not contribute any additional trips and would not contribute to this impact.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and operations. Mitigation for construction was previously satisfied. Operational measures remain in place. No new mitigation is required.

5.4 Biological Resources

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES-Would the project:						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				**X**		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				**X**		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				**X**		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				**X**		

Discussion: The 1990 Final EIR and subsequent environmental documentation found that the SMaRT Station would not have impacts to biological resources. This was because the SMaRT Station site was heavily disturbed as a result of previous landfill operations and continued SMaRT Station operations at the site would not disturb on-site resources. The 1990 Final EIR included mitigation measures to address indirect impacts on wildlife in the area. The updated SMaRT Station project would not result in the expansion of the site or extend the service boundaries such that any off-site area would be disturbed. Physical changes to the existing SMaRT Station site would occur within the existing project footprint and would include replacement of outdated machinery and equipment with electric modern machinery and equipment. Minor material movement and leveling of ground surface to enable setting of new machinery. All work would occur within the site boundaries and areas without any sensitive biological resources. The modified project would serve existing uses within the City of Sunnyvale and Mountain View and would not require or permit any physical changes to properties or existing structures within the service area. The updated project would not require changes to the mitigation measures presented in the 1990 Final EIR and no additional measures are needed because there are no previously undisclosed impacts that would occur under the updated project.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts to biological resources and finds that impacts would be less than significant or less than significant with mitigation. Similar to the discussion in the LUTE EIR, the updated project is located within a heavily disturbed site, would maintain uses consistent with those that currently occur, does not contain any wetlands, would not interfere with wildlife movement, would not conflict with any HCP, and would comply with applicable regulations pertaining to the protection of biological resources. Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for the SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to biological resources remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and operations. Mitigation for construction was previously satisfied. Operational measures remain in place.

5.5 Cultural Resources

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
CULTURAL RESOURCES-Would the project:						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				**X**		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				**X**		
c) Disturb any human remains, including those interred outside of formal cemeteries?				**X**		

Discussion: The 1990 Final EIR and subsequent environmental document found that the SMaRT Station project would not result in impacts to cultural resources because the SMaRT Station site was heavily disturbed as a result of previous landfill and continued SMaRT Station operations at the site. The updated SMaRT Station project would not result in the expansion of the site footprint or extend the service boundary that would result in disturbance to any off-site area. Physical changes to the existing SMaRT Station site would include replacement of outdated machinery and equipment with modern machinery and equipment and minor material movement and leveling of ground surface to enable setting of new machinery would be needed. All work would occur within the site boundaries and areas that have been heavily disturbed and modified over the last 20 years. The updated SMaRT Station project would serve existing uses within the City's of Sunnyvale and Mountain View and would not require or permit any physical changes to properties or existing structures within the service area.

The analysis in the LUTE EIR contemplated existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts to cultural resources and found that impacts to historic structures, historic resources, archaeological, or human remains would be significant and unavoidable. These findings, however, are not comparable and would not be directly applicable to the SMaRT Station site as it exists within a previously used heavily disturbed site, is completely developed, would not include substantial ground disturbance, and most importantly, was found to not contain any archaeological or cultural resources.

Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to archaeological and historic resources remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and operations. Mitigation for construction was previously satisfied. Operational measures remain in place.

5.6 Energy

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
ENERGY -Would the project:						
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?					**X**	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?					**X**	

Discussions of energy resources were not required at the time the Final EIR was prepared; however, revisions to the CEQA checklist that included additional environmental categories of review became effective in January 2019.

The updated project would include an new 3,000-amp service line to supplement operational demand of the additional electric equipment at the SMaRT Station. Removal and replacement of the machinery would occur over a short period of time and would involve minor material movement and leveling of ground surface to enable setting of new machinery. The updated project also would remove the City of Palo Alto from the service area but would maintain the 1,500 total allowable tons per day. Thus, given the reduced employee vehicle trips, the increased waste diversion from landfills that could increase landfill lifespan, reduced methane produced from decomposition of buried materials, and increased diversion of materials that can be recycled. Thus, the installation of new more energy efficient equipment associated with the updated project would not result in wasteful or inefficient use of energy resources.

Overall Energy Impacts Conclusion

The 1990 Final EIR did not evaluate the effects of energy resources. At the time of approval of the 1990 Final EIR, impacts related to energy were not an element of the State CEQA Guidelines. On December 28, 2018, amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of Energy under CEQA. The Final EIR was already certified; therefore, the determination of whether energy needs to be analyzed for the proposed project is governed by the law on supplemental or subsequent EIRs (PRC § 21166 and CEQA Guidelines §§15162 and 15163). Energy resources are not required to be analyzed under those standards unless it constitutes “new information of substantial importance, which was not known and could not have been known at the time” the 1990 Final Plan EIR was approved (State CEQA Guidelines §15162(a)(3)).

The issue of energy is not new information that was not known or could not have been known at the time of the certification of the 1990 Final EIR. For example, the California Energy Code was created by the California Building Standards Commission in 1978 in response to a legislative mandate to reduce California's energy consumption. Therefore, while energy impacts were known at the time of adoption of

the 1990 Final EIR, an evaluation was not required as part of the CEQA process. Additionally, as discussed above and throughout this document, the project would does not propose any off-site physical changes or modifications that would result in any new impacts, or that would cause wasteful inefficient use of energy or violate energy standards. Under CEQA standards, there is no new information that requires analysis in a subsequent environmental document.

The updated project would not require expanded energy supplies or the construction of new off-site energy infrastructure and would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The updated project also would not conflict with any state or local plans related to energy efficiency but would be supportive of such laws.

Thus, with regard to CEQA Section 21166 and CEQA Guidelines Section 15162(a), the updates to the updated project would not result in any new impacts, or increase the severity of the previously identified impacts, to other resource elements as a result of increased energy demand.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR or subsequent Addendums.

5.7 Geology and Soils

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS -Would the project:						
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				**X**		
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				**X**		
ii. Strong seismic ground shaking?				**X**		
iii. Seismic-related ground failure, including liquefaction?				**X**		
iv. Landslides?				**X**		
b) Result in substantial soil erosion or the loss of topsoil?				**X**		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				**X**		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				**X**		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers				**X** **X**		

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS -Would the project:						
are not available for the disposal of waste water?						
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				**X**		

Discussion: The 1990 Final EIR identified potential impacts as a result of geologic hazards and unstable soils. Mitigation measures were identified for implementation during the construction of the SMaRT Station facility and operations areas. The impacts also were considered as part of subsequent environmental documents, however, mitigation pertained to building of structures and earthwork in relation to construction of the SMaRT Station. All measures were implemented as part of the development process and were not applicable upon completion of construction.

Regarding the potential for additional impacts, the updated SMaRT Station project would result in minimal ground disturbance to remove existing machinery and equipment and create level spaces on which to place the modern machinery and equipment. The updated project does not propose any grading that would alter subsurface conditions and does not propose the construction of any new, or modification to the existing physical or structural support of existing buildings. Accordingly, the updated project would not exacerbate any condition associated with seismically induced ground shaking, ground failure, landslides, soil erosion, unstable geologic units, or expansive soils. The updated machinery and equipment would be installed in accordance with all required safety standards and would not require changes to the mitigation measures presented in the 1990 Final EIR. No additional measures related to the proposed updates are required.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts to geology and soils. The discussion found that impacts would be less than significant or less than significant with mitigation similar to that originally proposed as part of the SMaRT Station project. Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to geologic and soil resources remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and was previously satisfied.

5.8 Greenhouse Gas Emissions

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS -Would the project:						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	**X** ☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	**X** ☐	☒	☐

Discussion: Discussions of greenhouse gasses were not required at the time the Final EIR was prepared. Since that time, however, revisions to the CEQA checklist that included additional environmental categories of review became effective. More detail is provided below.

The 1990 Final EIR does not evaluate the effects of greenhouse gas (GHG) emission generation. At the time of certification of the Final EIR, the issue of contribution of GHG emissions to climate change was a prominent issue of concern. On March 18, 2010, amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of GHG emissions under CEQA. Since the SMaRT Station EIR has already been approved, the determination of whether GHG emissions and climate change needs to be analyzed for this specific development is governed by the law on supplemental or subsequent EIRs (Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15163). GHG emissions and climate change are not required to be analyzed under those standards unless it constitutes "new information of substantial importance, which was not known and could not have been known at the time" the 1990 Final EIR was certified (CEQA Guidelines Section 15162(a)(3)).

The issue of GHG emissions and climate change impacts is not new information that was not known or could not have been known at the time of the approval of the SMaRT Station Final EIR. While the issue of climate change and GHG emissions was discussed and known prior to the 1990 Final EIR certification an evaluation of was not required as part of the CEQA process. Thus, although the regulation of GHG emissions to reduce climate change impacts was extensively debated and analyzed throughout the early 1990s, CEQA did not require discussions or disclosures.

GHG emissions are generally associated with the generation of electricity using fossil fuels and emissions from vehicles. As discussed above, the updated project would not result in wasteful or inefficient use of energy resulting in such emissions. The updated project would use equipment to remove existing machinery and equipment to create level pads on which to set modern electrically powered processing machinery. The updated project would not result in any new building construction, new uses, or new employees that would generate substantial volumes of GHG.

The 1990 DEIR accounted for 1,832 average daily solid waste collection trips and the 1992 Addendum considered 1,246 average daily solid waste collection trips. If the updated project operates at capacity and receives up to 1,500 tons per day instead of the receiving 700-800 tons per day and it would generate a comparable number of trips and have similar operational hours compared to what was identified in the 2016 Addendum. This would ensure impacts remain less than what was analyzed in the 1990 EIR. Impacts would be further reduced from the previous level because the updated SMaRT project would comply with new regulations that require the use of clean vehicles and more efficient diesel trucks.

The implementation of the City of Sunnyvale Climate Action Plan (CAP) has assisted in the reduction of GHG emissions in the city by approximately 15.8 percent from 2008 emissions. The Draft LUTE noted that anticipated development could result in comparable GHG emission efficiencies as anticipated by the CAP for the year 2035 and meet GHG reduction percentages specified in the CAP. Implementation of mitigation measure would ensure that the CAP incorporated growth productions in the Draft LUTE ensures GHG emissions are reduced consistent with CAP greenhouse gas reduction targets and percentages. This is consistent with state reduction targets and the project would result in a less than cumulatively considerable impact.

The analysis in the LUTE EIR contemplated existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts associated with GHG and includes mitigation requiring the City to ensure the Climate Action Plan (CAP) incorporates the Draft LUTE growth projections to ensure GHG emissions are reduced consistent with CAP greenhouse gas reduction targets and percentages that are consistent with state reduction targets. As the updated SMaRT project does not include any new development and supports GHG reductions through recycling waste materials, improvements are consistent with these findings.

Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. No further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR or subsequent Addendums.

5.9 Hazards and Hazardous Materials

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS-Would the project:						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				**X**		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				**X**		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				**X**		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				**X**		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**		
f) Impair implementation of or physically interfere with an adopted emergency				**X**		

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS-Would the project:						
response plan or emergency evacuation plan?						
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				**X**		

Discussion: The 1990 Final EIR and subsequent environmental documentation did not identify any significant impacts as a result of handling hazardous or toxic materials at the SMaRT Station. The SMaRT Station currently does not accept, handle, or process hazardous or toxic waste from either public or private sources. The updated SMaRT Station project does not propose to change or loosen any existing restrictions regarding the handling of hazardous materials. Trash and recyclable collection would follow the same methodology and provide the same service and will be subject to the same prohibitions regarding hazardous materials that are currently in place. The updated SMaRT Station project will not change or permit any current restrictions regarding the handling or transport of hazardous waste and will not change or modify the SMaRT Stations current preemption to receiving hazardous materials or change its conformance to any other local, State, or federal laws that restrict or control the handling of hazardous.

The updated project also does not include any physical development or substantial changes in the operations of the existing SMaRT Station facility. The upgraded equipment and machinery would be electric and function in a similar capacity as the existing but outdated equipment and machinery. The updated project site is located within the same area as previously analyzed and would not conflict with any airport land use plan or airport operations either private or public or the implementation of an adopted emergency response plan. The updated project site is not located near any wildlands and would not result in the exposure of people or property to wildfires.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts involving hazards and hazardous materials. The discussion found that impacts would be less than significant. The updated project would transport waste materials but does not propose nor is it permitted for receiving or disposal of hazardous materials and impacts would be less than significant in this regard. Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to hazards and hazardous materials remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and operations. Mitigation for construction was previously satisfied. Operational measures remain in place.

5.10 Hydrology and Water Quality

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY-Would the project:						
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				**X**		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that that the project may impede sustainable groundwater management of the basin?				**X**		
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				**X**		
i) result in substantial erosion or siltation on- or off-site?				**X**		
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				**X**		
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				**X**		
iv) Impede or redirect flood flows?				**X**		
d) In flood hazard, tsunami, or seiche zones, risk release of				**X**		

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY-Would the project:						
pollutants due to project inundation?						
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				**X**		

Discussion: The 1990 Final EIR and subsequent environmental documentation did not identify any significant impacts on water quality or from flooding at the SMaRT Station. The 1990 Final EIR concluded that the risks from flooding because of a 100-year high tide or tsunami were sufficiently low that no mitigation was required. The current FEMA flood map (06085C0045H) on the City of Sunnyvale Flood zone viewer shows the updated project site as outside the existing flood hazard areas. Previous potential impacts to water quality were addressed through the management of groundwater that could be encountered during the original construction activities and mitigation that required treatment and disposal of the groundwater in accordance with Regional Water Quality Control Board (RWQCB) standards. The updated SMaRT Station project would not add to the area served and does not include any physical development or substantial changes in the operations of the existing facility. In addition, construction measures consistent with the Sunnyvale Water Pollution Control Plan (SWPCP) would be implemented and would minimize polluted runoff. Under the updated SMaRT Station Project, the current requirements set forth by the RWQCB would be applied as applicable and would the minimize the potential for polluted runoff to be discharged from the updated project site. Thus, no changes or potentially greater impacts on water quality would occur.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts to hydrology and water quality and the discussion found that impacts would be less than significant or less than significant with mitigation. As discussed in the LUTE, mitigation would reduce city wide impacts. As discussed above, the SMaRT Station is an existing use and would maintain all existing water quality control measures such as using detention basins and best management practices (BMPs) to control rainwater on-site and prevent discharge to downstream receiving waters as conditions of continued operations. It should be noted that no construction outside the existing project footprint and there is no need to include water treatment measures in these areas that could result in off-site impacts. Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to hydrology and water quality remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR related to hydrology and water quality. Mitigation was implemented for construction and operations. Mitigation for construction was previously satisfied. Operational measures remain in place.

5.11 Land Use and Planning

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
LAND USE AND PLANNING-Would the project:						
a) Physically divide an established community?				**X**		
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				**X**		

Discussion: The 1990 Final EIR does not identify or evaluate any significant conflicts with land use or other planning documents as a result of developing the SMaRT Station. The updated project would not involve additional construction outside the existing SMaRT Station footprint, anywhere else in the City, or any work in an outside jurisdiction that would conflict with a land use plan resulting in any impact. The updated project would replace outdated equipment and machinery with modern electrical equipment and machinery, and a new pit for SSO/food scraps, but does not include any new physical development such as structures or substantial changes in the operations of the existing facility. The updated project would occur within the existing site and is not surrounded by any other community and does not have the potential to result in physical division. The modified project also does not propose any development or land use changes that would conflict with an existing habitat plan or impede the development of a future habitat conservation plan. No mitigation measures are required.

This is consistent with the analysis in the LUTE EIR which contemplates the existing land uses in the City and continued operation of sites such as the SMaRT Station. The LUTE EIR discusses impacts to land use and planning and in the discussion found that impacts to the physical division of a community, consistency with land use plans, policies, and regulations, and conflicts with City land Use Plans would be less than significant or not occur. Further, the updated SMaRT Station project would not result in conflicts with any of these thresholds such that an impact would occur. Thus, no new or more significant impacts, previously unidentified significant impacts on-site or off-site, and no cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to land use and planning remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

5.12 Mineral Resources

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
MINERAL RESOURCES-Would the project:						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				**X**		
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**		

Discussion: The 1990 Final EIR does not evaluate the effects of mineral resources. The version of the City of Sunnyvale General Plan that was in effect at the time the original EIR was written as well as the current General Plan written in 2011, do not identify any regionally or locally important mineral resources on the updated project site. The updated project site is located in a Mineral Resource Zone (MRZ) 1, which indicates that adequate information shows no significant mineral deposits exist. The updated SMaRT Station project also would not preclude access to any important mineral resources and would inhibit the development of any locally or regionally important mineral resources from being used for resource production. Accordingly, the updated project does not occur within any area, nor would it provide services to any areas that would result in any additional off-site physical development or changes in any land use that would conflict with mineral resource production.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR noted that there are no active mines and no known areas with mineral resource deposits in the City. In addition, there are no minerals or aggregate resources of statewide importance located in the City. Therefore, the updated SMaRT Station project would not result in new or more significant impacts, previously unidentified significant impacts on-site or off-site, and would not result in any cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR. The previous findings related to land use and planning remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

5.13 Noise

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
NOISE -Would the project:						
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				**X**		
b) Generation of excessive groundborne vibration or groundborne noise levels?				**X**		
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**		

Discussion: Noise resulting from on-site traffic at the SMaRT Station, off-site traffic, and transferring materials and disposal operations of the adjacent Kirby Landfill were determined to be less than significant in the 1990 Final EIR. Subsequent findings in later environmental documentation were consistent with these findings. The 1990 Final EIR, however, determined that significant noise impacts would occur to users of the levee trails north of the updated project site as well as future visitors of a planned park. The noise source affecting the levee trail and planned park was identified as SMaRT Station operations and impact from noise was determined to be significant and unavoidable.

The updated SMaRT Station would not expand the project service area as it would serve the City of Sunnyvale and Mountain View. As noted, the City of Milpitas did not join in 2016, and Palo Alto is no longer served. The project would temporarily use heavy equipment during normal business hours and in accordance with the City Noise Ordinance to remove the existing outdated equipment and replace it with the new modern equipment. All work would occur within the footprint of the existing SMaRT Station site. The updated SMaRT Station project would not result in construction of new structures or require sustained use of heavy equipment that would generate noise that would be disruptive to off-site locations.

Construction activities would be minimal and short-term in nature occurring over the course of 3-6 months and would not require typical heavy equipment associated with excavation and grading that typically generate a majority of construction noise. In addition, audible noise generated by heavy equipment when used would be internment and only occur during weekdays and during daytime and

normal operational hours of the facility. Noise generated by the upgrade would be consistent with exiting work efforts such as the use of machinery and trucks to move and haul materials. These activities are not expected to result in substantial noise increases over ambient or existing levels.

The noise generated by the updated SMaRT Station project operations would be substantially the same as are currently existing. This would include noise from the updated equipment and truck trips associated with the transportation of waste materials. According to the Traffic Memo prepared for the previous Addendum in 2016, the SMaRT Station generated approximately 898 daily trips, 72 trips in the AM peak hour, and 28 trips in the PM peak hour. The updated project would not increase the service area, would maintain the 1,500-gross ton in take capacity, and would not result in an increase of truck trips. Thus, the updated project would not result in an increase in decibels (dB) that would be audible to off-site areas and are not a perceptible increase in traffic noise levels.

Regarding the operations of a public or private airport, because the updated project would be in the same location as it currently operates, the updated SMaRT Station project would not result in the exposure of people to excessive noise levels from these sources.

These findings also are consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR found that noise impacts would not exceed existing standards as the LUTE would not make any changes to current City noise standards and compliance with existing regulations would address noise impacts such that residents would not be exposed to traffic noise or stationary sources of noise in excess of established standards. The LUTE found that construction noise and noise and vibration could be reduced through mitigation.

Lastly, the LUTE did find that traffic noise levels on a citywide basis may result in an exceedance of standards and impacts would be significant and unavoidable. As discussed above, however, the noise generated from the updated SMaRT Station would be consistent with the noise generated from the existing operations. As such, the updated SMaRT Station project would not result in new or more significant impacts, previously unidentified significant impacts on-site or off-site, and would not result in any cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to land use and planning remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for operations and the measures remain in place.

5.14 Population and Housing

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
POPULATION AND HOUSING -Would the project:						
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				**X**		
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**		

Discussion: The 1990 Final EIR does not evaluate the effects on population and housing. However, the updated SMaRT Station project would occur within the existing SMaRT Station site, would not result in the construction of any new additional housing units or habitable structures, and does not include any use or service that would indirectly increase population as it would maintain the peak daily tonnage limit of 1,500 and does not include any physical development or substantial changes in the operations of the existing facility. The updated project would upgrade the outdated equipment and machinery with new electric equipment and machinery. None of these updates would result in any new adverse impacts resulting in the displacement of any existing housing or the displacement of people at the existing project site, or within any existing service area.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR found that implementation of the Draft LUTE would not directly or indirectly induce population growth that is not already anticipated in ABAG regional growth protections. These impacts as well the potential for displacement and physical divisions would be less than significant. Therefore, the updated SMaRT Station project would not result in new or more significant impacts, previously unidentified significant impacts on-site or off-site, and would not result in any cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to land use and planning remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

5.15 Public Services

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
PUBLIC SERVICES -Would the project:						
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for: fire protection, police protection, schools, parks, and other public facilities?				**X**		

Discussion: The 1990 Final EIR did not identify any significant impacts on public services that would occur from implementation or operation of the SMaRT Station. The updated SMaRT Station project does not include any additional physical development of structures or site expansion, nor does it include any other substantial changes to the operations of the existing facility that would affect any public service. The updated SMaRT Station project would not result in any changes to any current land use within the City or within any service area that could affect public services. The updated project would maintain a 1,500 daily gross ton intake limit; thus it would not remove an existing barrier to growth that would result in an increased need for public services that could result in an off-site impact from construction of such a new use.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR evaluated impacts to public services and concluded that with the conformance to applicable City policies related to the provision of the listed services, the impacts to would be less than significant. The SMaRT Station would conform to all associated City policies and other provisions. Therefore, the updated SMaRT Station project would not result in new or more significant impacts, previously unidentified significant impacts on-site or off-site, and would not result in any cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to public services remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

5.16 Recreation

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less than Significant Impact	No Impact
RECREATION -Would the project:						
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				**X**		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				**X**		

Discussion: The 1990 Final EIR and subsequent environmental documentation did not identify any significant impacts on recreation that would result from implementation of the SMaRT Station project. The updated SMaRT Station project would add new electrically powered equipment and machinery to replace the outdated equipment and machinery within the updated project site. The updated project would not expand service or increase the 1,500 daily tonnage limit or result in any other changes that would include growth and increase demand for recreational resources. The updated SMaRT Station project does not include any physical development or construction of new structures within the project site. The updated project also would not change current land use within the city or any service areas such that additional demand for recreational facilities would occur. The updated project would not authorize any new or additional development, and it would not remove an existing barrier to growth.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR evaluated impacts to recreational resources and concluded that with the conformance to applicable City policies related to the provision of the resources, the impacts to would be less than significant. The SMaRT Station would conform to all associated City policies and other provisions. Therefore, the updated SMaRT Station project would not result in new or more significant impacts, previously unidentified significant impacts on-site or off-site, and would not result in any cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR. The previous findings related to recreational resources remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

5.17 Transportation

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
TRANSPORTATION-Would the project:						
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	**X** ☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b?	☐	☐	☐	**X** ☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	**X** ☒	☐	☐
d) Result in inadequate emergency access?	☐	☐	☐	**X** ☒	☐	☐

Discussion: The 1990 EIR for the SMaRT Station was prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines in effect at that time. Two subsequent EIR Addendums, one in 1992 and one in 2016 were prepared to account for minor changes to the SMaRT Station. Additional minor changes have been proposed to the SMaRT Station for which this Addendum has been prepared. 1990 Final EIR concluded that the SMaRT Station would not have significant traffic impacts because the projected number of traffic trips would not have a significant adverse impact on the level of service operations at the study intersections or significantly increase traffic volumes on roadways within the study area. Nonetheless, mitigation measures were proposed that would further reduce traffic impacts. The 1992 Addendum reflected a reduced number of traffic trips generated by the SMaRT Station by reducing the permitted capacity of the facility from 2,000 peak daily tonnage to 1,500 peak daily tonnage. The 1992 Addendum concluded that the proposed 32% reduction in capacity also resulted in a 32% reduction in SMaRT Station generated traffic, that the proposed revisions SMaRT Station did not result in any new or more significant impacts, and that no new mitigation measures were required.

The 2016 Addendum evaluated the potential for traffic impacts from the addition of the City of Milpitas to the service area and for that project, a traffic analysis was prepared to assess the potential for new or increased traffic impacts as a result the then expanded service area.

The original evaluation of the SMaRT Station project in the 1990 EIR assumed a maximum permitted intake take of in 2,200 tons of refuse per day. This also assumed the generation of a maximum number of 1,832 weekday vehicle trips, and 1,514 weekend vehicle trips. It was concluded that the SMaRT Station would not have a significant adverse impact on the LOS and roadway operations or turning movements at the study intersections. Mitigation was added to further ensure impacts remained less than significant.

Mitigation included lengthened turn-pockets, signal timing improvements, stop controls, and signage to clarify circulation patterns and to prevent driver confusion.

Subsequent revisions to the SMaRT Station project in the 1992 Addendum included a reduced permitted capacity to 1,500 tons per day, and a corresponding 32% reduction in traffic (586 fewer trips) for a total of 1,246 daily trips maximum weekday trips. It was found that no new or more significant impacts and no new mitigation measures were required because of this revision.

The 2016 Addendum considered the addition of the City of Milpitas to the service area, which would have resulted in the addition of approximately 70 additional truck trips per day. Although Milpitas did not ultimately join the service area, the analysis related to trips remains valid for comparison. *Table 2 – Year 2016 and Milpitas Project Trip Generation*, shows the number of vehicle trips that were occurring in 2016, as well as the additional trips that were anticipated to be generated with the addition of the Milpitas service area. It should be noted that the 898 daily trips are less than the 1,246 daily trips analyzed in the 1992 EIR Addendum. The SMaRT Station project is currently receiving 230 trips per weekday day and 80 weekend trips, which is substantially less than the 1,246 trips considered in the 2016 Addendum and the 1,832 considered for the SMaRT Station project evaluated in 1990. This is also 530 less trips than the currently permitted 760 trips.

Table 2 – Year 2016 and Milpitas Project Trip Generation

2016 Daily Trips	**AM Peak**			**PM Peak**		
	Total	**In**	**Out**	**Total**	**In**	**Out**
898	72	42	30	28	8	20
Milpitas Service Area (Truck Trips)	Total`	In	Out	Total	In	Out
70	4	4	8	1	1	2
TOTALS						
968	**76**	**46**	**38**	**29**	**9**	**22**

Discussion of Vehicle Miles Travelled (VMT)

Since certification of the EIR and subsequent addendums, the issue of vehicle miles traveled (VMT) has become a more prominent issue of concern as evidenced by passage of SB 743 in 2013. Previous CEQA analysis was conducted using a level of service (LOS) measurement that evaluated traffic delays. SB 743 was implemented under Section 15064.3 of the State CEQA Guidelines (effective December 28, 2018) and required evaluations of impacts and mitigation based on VMT. In December 2018, the Office of Planning and Research (OPR) published a Technical Advisory on Evaluating Transportation Impacts, including guidance for VMT analysis. The Office of Administrative Law approved the updated CEQA Guidelines and lead agencies were given until July 1, 2020, to implement the updated guidelines for VMT analysis.

Because an EIR for the SMaRT Station was certified prior to the adoption of the VMT standard, the determination of whether VMT needs to be analyzed for this project is governed by the law on supplemental or subsequent EIRs (Public Resources Code section 21166 and CEQA Guidelines, Sections 15162 and 15163). VMT is not required to be analyzed under those standards unless it constitutes "new information of substantial importance, which was not known and could not have been known at the time the previous EIRs were certified as complete" (CEQA Guidelines Sec. 15162 (a) (3)).

VMT impacts were not analyzed in the prior environmental documentation; however, these impacts are not new information that was not known or could not have been known at the time these previous EIRs were certified. The issue of VMT as a metric for analyzing traffic was widely known prior to the certification of the previous EIR.

Therefore, the impact of VMT was known at the time of the certification of the EIR. Under CEQA standards, it is not new information that requires analysis in a supplemental EIR or Negative Declaration. No supplemental environmental analysis of the project's impacts on this issue is required under CEQA.

Nonetheless, and even considering the above, the following paragraphs provides a generalized discussion of project level VMT and indicates that there would be a reduction in VMT considering the reduced service area under the updated SMaRT Station project. This, however, does not preclude future service to other nearby cities, or a resumption of services to Palo Alto or Milpitas. Resumption of services would likely not result in a significant increase in VMT as the distances travelled would be substantially the same as that evaluated in previous documents.

More specifically, the current update to the SMaRT Station project does not include the previously evaluated Milpitas service area and hence would result in a reduction of truck trips by the same values as shown in the table, 70 total truck trips. Comparatively, this would result in a reduction of trips and temporarily reduce the overall VMT to what was previously anticipated. The SMaRT Station currently receives approximately 700-800 tons per day. It is important to note that the operation of the SMaRT Station under the current update does not change and does not propose to change or reduce the total allowable capacity of 1,500 tons per day.

Thus, while the updated SMaRT Station project would reduce vehicle trips and overall VMT compared to those previously analyzed, this is anticipated to be a temporary reduction as the service capacity of 1,500 tons per day would remain. Therefore, this addendum considers that the remaining capacity (approximately 700-800 tons per day) would be available to accommodate increased demand from either the existing service areas (City of Sunnyvale and Mountain View) or that capacity could be used to provide services to other areas in the future and if that occurs. Thus, the updated project would not result in a substantial increase in VMT.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures were proposed in the Final EIR. Mitigation was implemented for construction and operations. Mitigation for construction and operation were previously satisfied.

5.18 Tribal Cultural Resources

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCES-Would the project:						
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or					X	
b) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					X	

Discussion. The Final EIR for the SMaRT Station was prepared before Assembly Bill 52 (AB 52) and the tribal notification process became a requirement and was included in the CEQA Guidelines and Checklist. On July 1, 2015, AB 52 amended CEQA to require that: 1) a lead agency provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead

agency must consult with the tribe. Accordingly, AB 52 applies to projects with a Notice of Preparation (NOP) or notice of a Negative Declaration (ND) or Mitigated Negative Declaration (MND) issued on or after July 1, 2015.

The updated SMaRT Station project would occur within the boundaries of the existing SMaRT Station which is heavily disturbed and modified over the course of its service. It is further noted that the SMaRT Station was constructed within a portion of the Sunnyvale Landfill that has been in operation over the course of the last 20 years. The updated SMaRT Station project includes installation of new modern electrical equipment and machinery within the footprint of the existing SMaRT Station site. All disturbances would occur within areas that have undergone substantial alteration. The updated project contains no known cultural resources and the potential to disturb an unknown resource is remote.

AB 52 requires lead agencies to consider whether an updated project may cause a substantial adverse change in the significance of a tribal cultural resource and to consider a tribe's cultural values when determining the appropriate environmental assessment, impacts and mitigation. Tribal cultural resources, as defined in Public Resources Code section 5020.1(k), have not been previously identified within the updated project site. The updated project site is developed with a waste material recycling facility, landfill, and associated infrastructure and does not contain any existing structures or extant historical tribal cultural resources with the potential for inclusion in the California Register of Historical Resources or a local register. It should be noted that AB 52 is related to California State Senate Bill 18 (SB 18 which has similar considerations as AB 52.

SB 18 amended state laws to provide California Native American tribes an opportunity to participate in local land use decisions at early planning stages for certain types of projects. More specifically, SB-18 requires that, prior to the adoption or amendment of a city or county's general plan, the city or county conduct consultations with California Native American tribes for the purpose of preserving specified places, features, and objects that are located within the city or county's jurisdiction. Similar to AB 52 the Bill requires consultation to help protect and preserve California Native American historical, cultural, and sacred sites. The proposed project would not meet the requirement for tribal consultation under SB 18. As the proposed project does not propose changes to land use or any land use policy and planning document that has the potential to affect a tribal of cultural resource.

Therefore, with regard to CEQA Section 21166 and CEQA Guidelines Section 15162(a), the changes proposed by the project would not result in any new impacts, or increase the severity of the previously identified impacts, with respect to Tribal cultural resources.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

5.19 Utilities and Service Systems

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Impact	No Impact
Utilities and Service Systems-Would the project:						
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				**X**		
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				**X**		
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				**X**		
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				**X**		
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?				**X**		

Discussion: The 1990 Final EIR and subsequent environmental documentation did not identify any significant impacts on utilities and services from implementation or continued operations of the SMaRT Station or within the service area. The updated SMaRT Station project would occur wholly within the existing footprint of the SMaRT Station and would not expand the service area resulting in increased demand for utility services. The updated project does not include any physical development or substantial changes in the operations of the existing facility. The updated project would update the existing equipment and machinery with modern electrical equipment. It would not increase demand for services such that new public water, sewer, wastewater treatment, or storm drain facilities would be required. Further, the updated project and maintenance of existing service area does not authorize any new or additional development, nor does it remove an existing barrier to growth that would result in an increased need for utilities and service systems. The updated project does not increase the capacity or daily peak tonnage at either the SMaRT Station or any landfill or facility that would be used as part of the waste disposal process. As such, no new or expanded solid waste facilities are proposed or required.

This is consistent with the analysis in the LUTE EIR which contemplates existing land uses and continued operation of sites such as the SMaRT Station. The LUTE EIR found that impacts from the potential need for new utilities and infrastructure would be less than significant. This is consistent with the proposed improvements to the SMaRT Station as it would not require expansion of, or installation of any new utility infrastructure outside the updated project footprint. Therefore, the updated SMaRT Station project would not result in new or more significant impacts, previously unidentified significant impacts on-site or off-site, and would not result in any cumulative impacts not previously disclosed in the environmental documentation for SMaRT Station or discussed in the LUTE EIR would occur. The previous findings related to recreational resources remain valid and no further analysis is required.

Mitigation Program

Mitigation Measures from the Final EIR

Mitigation measures proposed in the Final EIR have previously been satisfied or remain in place.

5.20 Wildfire

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change from Previous Analysis	Less Than Significant Impact	No Impact
Wildfire -Would the project:						
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**		
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**		
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**		
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**		

Discussion. The 1990 Final EIR and other subsequent environmental documentation did not evaluate the effects of wildfires. At the time of approval of the 1990 Final EIR, although wildfire was a known danger, impacts related to wildfire were not an issue of concern in terms of CEQA and was not included to the environmental checklist. On December 28, 2018, amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of wildfires under CEQA. The Final EIR was already certified; therefore, the determination of whether wildfires needed to be analyzed for this project is governed by the law on supplemental or subsequent EIRs (PRC § 21166 and CEQA Guidelines §§15162 and 15163). Wildfire impacts are not required to be analyzed under those standards unless it constitutes "new information of substantial importance, which was not known and could not have been known at the time" the 1990 Final Plan EIR was approved (State CEQA Guidelines §15162(a)(3)).

The issue of wildfires is not new information that was not known or could not have been known at the time of the certification of the 1990 Final EIR. For example, prior to the adoption of the amended CEQA guidelines on December 28, 2018, the prior CEQA guidelines required evaluation to determine if a project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, wildfire impacts were known at the time of adoption of the 1990 Final EIR and therefore, under CEQA standards, it is not new information that requires analysis in a supplemental EIR or negative declaration.

Nonetheless, the following discussion is provided to address the listed thresholds related to wildfire. The updated SMaRT Station project operations would occur within the existing buildings and no new construction is proposed. All work for the updated project would occur within the existing footprint of the SMaRT Station which is not in a fire hazard zone, is not surrounded by a fire hazard zone, and is not at substantial risk of experiencing wildfire. The updated project would not result in increased vehicle trips or expand the service area resulting in an increase in the number of trucks or vehicles on the roadways. The updated SMaRT Station project would not increase congestion on any roadways that would be used for evacuation. Lastly, the updated project is not located in an area that would be prone to wildfires or adjacent to an area with. The updated SMaRT Station project also would not exacerbate post fire hazards such as landslides or flooding. The project is on an existing waste transfer station and is built on a landfill that does not contain any wildlands with thick fire prone vegetation. Thus, the project upgrades would result in or exacerbate any existing wildfire hazards.

With regard to CEQA Section 21166 and CEQA Guidelines Section 15162(a), the changes proposed by the project would not result in any new impacts, or increase the severity of the previously identified impacts, with respect to wildfires. Therefore, preparation of a subsequent environmental analysis is not warranted.

Mitigation Program

Mitigation Measures from the Final EIR

No mitigation measures were proposed within the Final EIR.

7.0 DETERMINATION OF APPROPRIATE CEQA DOCUMENTATION

The following discussion lists the appropriate subsections of Sections 15162 and 15164 of the State CEQA Guidelines and provides justification for the City of Sunnyvale to make a determination of the appropriate CEQA document for the updated SMaRT Station project, based on the environmental analysis provided in the preceding chapter.

Section 15162 – Subsequent EIRs and Negative Declarations

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one of more of the following:

(1) 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.

- *The City of Sunnyvale proposes to implement the updated SMaRT Station project within the same site and area as described in this Addendum. As discussed in the Environmental Impact Analysis section of this Addendum, no new or substantially more severe significant environmental effects beyond what was evaluated in the Final EIR or other environmental documentation would occur.*

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken 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.

- *As documented herein, no circumstances associated with the location, type, setting, or operations of the updated SMaRT Station project have substantively changed beyond what was evaluated in the Final EIR; and none of the project elements would result in new or substantially more severe significant environmental effects than previously identified and not major revisions or clarifications are required.*

(3) New information of substantial importance, 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:

(A) The project will have one or more significant environmental effects not discussed in the previous EIR or negative declaration;

- *No new significant environmental effects beyond those previously addressed in the Final EIR or subsequent environmental documents were identified.*

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

- *Significant updated project-related effects previously examined would not be substantially more severe than were disclosed in the Final EIR or subsequent environmental documents as a result of the updated SMaRT Station project. Previously identified significant adverse impacts were minimized through the implementation of mitigation measures discussed in the respective sections of the Final EIR but some were found to remain significant and*

unavoidable. Implementation of the updated project not substantially increase the severity of the previously identified impacts and all of the impacts from the proposed improvements would not occur or be less than significant, and no new or modified mitigation would be required.

(C) 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

- *No mitigation measures or alternatives were found infeasible in the certified Final EIR*.

(D) 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.

- *No other mitigation measures or feasible alternatives have been identified that would substantially reduce significant impacts*.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subsection (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

- *Based on the analysis in this document, the updated SMaRT Station project would not result in any new significant environmental effects nor would it substantially increase the severity of significant effects previously identified in the Final EIR or subsequent environmental documents. None of the conditions listed under subsection (a) would occur that would require preparation of a subsequent EIR.*

(c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subsection (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other Responsible Agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

- *None of the conditions listed in subsection (a) would occur as a result of the updated project. No subsequent EIR is required.*

Section 15164 – Addendum to an EIR or Negative Declaration

(a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

As described above, none of the conditions described in the State CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred.

(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

- *None of the conditions described in Section 15162 calling for preparation of a subsequent EIR would occur as a result of the updated project. Therefore, an addendum to the certified Final EIR is the appropriate CEQA document for the updated project*.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

- *This Addendum will be attached to the Final EIR and maintained in the administrative record files at the City of Sunnyvale*.

(d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

- *The City of Sunnyvale will consider this Addendum with the Final EIR prior to making a decision on the updated project.*

(e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the updated SMaRT Station or elsewhere in the record. The explanation must be supported by substantial evidence.

- *This document provides substantial evidence for City of Sunnyvale records to support the preparation of this Addendum for the updated SMaRT Station project.*

8.0 Conclusion

This Addendum has been prepared in accordance with the provisions of the State CEQA Guidelines to document the finding that none of the conditions or circumstances that would require preparation of a subsequent EIR, pursuant to Sections 15162 and 15164 of the State CEQA Guidelines, exist in connection with the updated project. No major revisions would be required to the Final EIR prepared for The SMaRT Station project a result of the proposed improvements to the site. No significant new environmental impacts have been identified. Since the certification of the Final EIR and subsequent environmental documentation, there has been no new information showing that mitigation measures or alternatives once considered infeasible are now feasible or showing that there are feasible new mitigation measures or alternatives substantially different from those analyzed in the EIR that the City declined to adopt. Therefore, preparation of a subsequent EIR is not required and the appropriate CEQA document for the updated SMaRT Station project is this Addendum to the Final EIR. No additional environmental analysis or review is required for the proposed updated SMaRT Station Project. This document will be maintained in the administrative record files at City of Sunnyvale offices.

9.0 Preparers

City of Sunnyvale (Lead Agency)

City of Sunnyvale – Environmental Services Department
P.O. Box 3707, Sunnyvale, CA 94088-3707

Deepti Jain, Environmental Engineering Coordinator

Kimley-Horn and Associates, Inc.

555 Capital Mall, Suite 300
Sacramento, California 95814

Brad Stoneman, Senior Project Manager
Noemi Wyss, Project Manager
Addie Sedoff, Project Analyst

10.0 References

California, State of, Department of Transportation. 2022. California State Scenic Highway Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa Accessed July 5, 2022.

City of Sunnyvale, Flood Zone Viewer, 2025. Available: https://gis.sunnyvale.ca.gov/portal/apps/webappviewer/index.html?id=400921aa19964c21be82807aed8c9879 Accessed: March 10, 2025.

City of Sunnyvale General Plan, 2011. Available: https://www.sunnyvale.ca.gov/your-government/codes-and-policies/general-plan, Accessed: July 5, 2022.

City of Sunnyvale Land Use Transportation Element EIR, 2016 https://www.sunnyvale.ca.gov/home/showpublisheddocument/608/637819113538930000 Accessed: April 4, 2022.

City of Sunnyvale, 1990. Final Environmental Impact Report, Sunnyvale Material Recovery and Transfer Station (SMaRT), September 14. SMaRT Station Final EIR

City of Sunnyvale, 1992. Addendum to the Final Environmental Impact Report, Sunnyvale Materials Recovery and Transfer Station (SMaRT), July 21. SMaRT Station EIR Addendum

City of Sunnyvale, 2016. Addendum to the Final Environmental Impact Report, Sunnyvale Materials and Recovery and Transfer Station (SMaRT). December 2016. SMaRT Station Final Addendum

Kimley-Horn, 2022. Letter for Vehicle Miles Travelled. July 2022.

California Department of Conservation (CDOC), 2016. California Important Farmland Finder. Available: https://maps.conservation.ca.gov/DLRP/CIFF/ Accessed: July 5, 2022.

APPENDIX A

Air Quality Analysis Memorandum

MEMORANDUM

To:	City of Sunnyvale Attn: Deepti Jain
From:	Noemi Wyss, AICP Kimley-Horn and Associates, Inc.
Date:	April 2025
Subject:	Air Quality, Greenhouse Gas Emissions, and Energy Memorandum Sunnyvale SMaRT Station® 2025 Addendum

Summary

This memorandum has been prepared to document the potential changes in Air Quality, Greenhouse Gas Emissions (GHG) and Energy that could occur from implementation of the proposed updates to the Sunnyvale SMaRT Station (updated SMaRT Station project). This memorandum provides background information related to the above listed resource areas and impacts that were discussed in the original 1990 EIR for the SMaRT Station. The EIR for the original SMaRT Station project in 1990 was prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines in effect at that time. Two subsequent EIR Addendums, one in 1992 and one in 2016, were prepared to account for minor changes to the operations and service area of the SMaRT Station. Additional minor changes have been proposed for the SMaRT Station for which a new Addendum is being prepared.

The SMaRT Station is located at 301 Carl, Drive in the City of Sunnyvale (City) and is located within the boundaries of and is a part of the operations of the Sunnyvale Landfill. The SMaRT Station was originally constructed in 1993 under a 30-year Memorandum of Understanding (MOU) between the member cities of Sunnyvale, Mountain View, and Palo Alto. The SMaRT stations' main functions include recovery of compostable materials and processing of mixed organics, processing of source-separated recyclables for market, pre-processing of separated food scraps, community drop off, and transport of non-recyclables to landfills. The SMaRT station will continue operations but is proposed to be upgraded with new equipment to be more efficient, streamline services, and to better meet current and future needs.

This memorandum briefly discusses and summarizes the past findings in relation to Air Quality, Greenhouse Gas Emissions and Energy, and discusses the anticipated emissions and energy use that could result from implementation of the proposed changes. Relation to the more recent state and Bay Area Air District (BAAD) requirements and thresholds. Using the previous documents as references, this memorandum discusses the potential for the updated SMaRT Station project to result in new or more significant impacts to Air Quality, Greenhouse Gas Emissions and Energy. The memorandum is intended to inform the analysis for the 2025 Addendum.

Project Location and Access

The SMaRT Station is located at 301 Carl Road, in the City of Sunnyvale CA. The proposed project takes primary access via Carl Road from Caribbean Drive for both public and truck access. Trucks not accessing the SMaRT station can continue on Carl Road past the station and proceed directly to the Sunnyvale landfill

as needed. Further from the site Caribbean Drive is accessed from Lawrence Expressway to the east and Mathilda Avenue to the west. These roadways also provide regional links to State Route 237 (SR 237).

Carl Road would remain the primary roadway used for direct ingress and egress to the SMaRT Station site. This has not changed since the project was proposed and evaluated in the 1990 EIR. To exit, the vehicles would initially use Carl Road and then turn left to Borregas Avenue to return to Caribbean Drive. Borregas Avenue and Carl Ave are parallel one-ways roadways and are separated by a landscaped median. No changes to this roadway configuration or any other are proposed as part of the updated SMaRT Station project.

Project Components

The updated SMaRT Station project includes the following elements:

Permits and Memorandum of Understanding

- Alter the existing permit with BAAD to account for the updated machinery.
- Modify the existing Conditional Use Permit (CUP) with the City.

Construction

The project would include minor excavation to remove existing equipment to enable placement of new machinery and installation of supporting bases. No import or export of soil materials would occur. The construction/installation phase is anticipated to last approximately six months.

Project Description

The proposed improvements to the SMaRT Station would update outdated electrical equipment and machinery used to process waste materials, require minor ground disturbance for leveling of pads to enable installation of the new modern electrically powered equipment. Equipment updates would include new waste sorting machines (trommel screens, disc screens, 2D/3D screen separators, optical sorters to sort: compostable and recyclable paper, and plastic, magnet separators for ferrous metals, eddy current separators for non-ferrous metals, conveyors for municipal solid waste including 2-inch organics (MRF Fines), compostable paper, 2-inch mixed broken glass, paper, plastics, ferrous, nonferrous (aluminum), residual, and balers to feed. Other equipment includes storage silo blowers, walking floors for fiber containers, storage silos for containers, baler, compactor (residual), and air compressors for optical sorters. It is important to note that the project would maintain the existing 1,500 gross tons per day processing limit and would not change the service area. The project would not increase the employee vehicle trips during construction and would result in a reduction of 21 employee trips per day due to efficiency improvements.

The project also includes a new onsite 3,000 AMP electricity supply, update to the Bay Area Air District (BAAD) and minor material movement and leveling of ground surface to enable setting of new machinery. Minor changes to the hours of operation, including allowing trucks to operate from 4:00 A.M. to 9:00 P.M. The project would permitted traffic volumes (total vehicles entering the site) at 760 daily trips on weekdays, 519 daily trips on regular weekends, and 1,390 daily trips on extra dump weekend events.

Vehicle Trips and Hours of Operation

The project would maintain the permitted traffic volumes that allows 760 daily trips on weekdays, 519 daily trips on regular weekends, and 1,390 daily trips on extra dump weekend events (over two days). Employee trips would be reduced from 40 to 20 daily trips as a result of increased equipment efficiency. The project

would require approximately 14 daily truck trips (based on 22.3-ton loads) to haul residue to Kirby Canyon Landfill. The project would maintain the existing public hours of operation in accordance with the existing permit from 8:00 A.M. to 5:00 P.M, but would change the hours of truck operation by one hour earlier to 4:00 A.M. to 9:00 P.M.

Regulatory Setting

Listed below are applicable federal, regional, and local plans, policies, and regulations for Air Quality, GHG, and Energy that may apply to the project.

Federal

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the U.S. Environmental Protection Agency (U.S. EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone, NO2, CO, SO2, PM10, PM2.5, and lead. Depending on whether the standards are met or exceeded, the local air basin is classified as in “attainment” or “nonattainment.” Some areas are unclassified, which means no monitoring data are available. Unclassified areas are considered to be in attainment. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires that each state prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in **Table 1 – State and Federal Ambient Air Quality Standards.**

California Air Resources Board

CARB administers California’s air quality policy. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 1**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. In general, the Bay Area experiences low concentrations of most pollutants when compared to federal standards, except for O_3 and PM, for which standards are exceeded periodically. With respect to federal standards, the Bay Area’s attainment status for 8-hour ozone is classified as “marginal nonattainment” and “nonattainment” for $PM_{2.5}$. The region is also considered to be in nonattainment with the CAAQS for PM_{10} and $PM_{2.5}$. Area sources generate the majority of these airborne particulate emissions. The Basin is considered in attainment or unclassified with respect to the CO, NO_2 and SO_2 NAAQS and CAAQS.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in **Table 1.**

Table 1: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards[1]		Federal Standards[2]	
		Concentration	Attainment Status	Concentration[3]	Attainment Status
Ozone (O_3)	8 Hour	0.070 ppm (137 µg/m^3)	N[9]	0.070 ppm	N[4]
	1 Hour	0.09 ppm (180 µg/m^3)	N	NA	N/A[5]
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	A	9 ppm (10 mg/m^3)	A[6]
	1 Hour	20 ppm (23 mg/m^3)	A	35 ppm (40 mg/m^3)	A
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	A	0.100 ppm[11]	U
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	-	0.053 ppm (100 µg/m^3)	A
Sulfur Dioxide[12] (SO_2)	24 Hour	0.04 ppm (105 µg/m^3)	A	0.14 ppm (365 µg/m^3)	A
	1 Hour	0.25 ppm (655 µg/m^3)	A	0.075 ppm (196 µg/m^3)	A
	Annual Arithmetic Mean	NA	-	0.03 ppm (80 µg/m^3)	A
Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	N	150 µg/m^3	-U
	Annual Arithmetic Mean	20 µg/m^3	N[7]	NA	-
Fine Particulate Matter ($PM_{2.5}$) [15]	24-Hour	NA	-	35 µg/m^3	U/A
	Annual Arithmetic Mean	12 µg/m^3	N[7]	12 µg/m^3	N
Sulfates (SO_{4-2})	24 Hour	25 µg/m^3	A	NA	-
Lead (Pb)[13, 14]	30-Day Average	1.5 µg/m^3	-	NA	A
	Calendar Quarter	NA	-	1.5 µg/m^3	A
	Rolling 3-Month Average	NA	-	0.15 µg/m^3	-
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 µg/m^3)	U	NA	-
Vinyl Chloride (C_2H_3Cl)	24 Hour	0.01 ppm (26 µg/m^3)	-	NA	-
Visibility Reducing Particles[8]	8 Hour (10:00 to 18:00 PST)	-	U	-	-

A = attainment; N = nonattainment; U = unclassified; N/A = not applicable or no applicable standard; ppm = parts per million; µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; – = not indicated or no information available.

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
2. National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m_3. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m^3.
   Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
3. National air quality standards are set by the U.S. EPA at levels determined to be protective of public health with an adequate margin of safety.

4. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. U.S. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.
5. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
6. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
7 In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}.
8 Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
9. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006.
10. On January 9, 2013, U.S. EPA issued a final rule to determine that the Bay Area attains the 24-hour $PM_{2.5}$ national standard. This U.S. EPA rule suspends key SIP requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this U.S. EPA action, the Bay Area will continue to be designated as "nonattainment" for the national 24-hour $PM_{2.5}$ standard until such time as the Air District submits a "redesignation request" and a "maintenance plan" to U.S. EPA, and U.S. EPA approves the proposed redesignation.
11. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100ppm (effective January 22, 2010). The U.S. EPA expects to make a designation for the Bay Area by the end of 2017.
12. On June 2, 2010, the U.S. EPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO_2 NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO_2 NAAQS.
13. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.
14. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.
15. In December 2012, U.S. EPA strengthened the annual $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) from 15.0 to 12.0 micrograms per cubic meter ($\mu g/m^3$). In December 2014, U.S. EPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

Source: Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status*, 2017. http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence, it found that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Regional

Bay Area Air District

The BAAD is the regional agency with jurisdiction over the nine-county region located in the Basin. The Association of Bay Area Governments (ABAG), Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various nongovernmental organizations also join in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs.

Clean Air Plan

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The federal and state Clean Air Acts require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM10 standard). The BAAD is responsible for developing a Clean Air Plan, which guides the region's air quality planning efforts to attain the CAAQS. The BAAD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate on April 19, 2019 (Clean Air Plan), by the BAAD.

BAAD periodically develops air quality plans that outline the regional strategy to improve air quality and protect the climate. The most recent plan, 2017 Bay Area Clean Air Plan, includes a wide range of control measures designed to reduce emissions of air pollutants and GHGs, including the following examples that may be relevant to this project: reduce emissions of toxic air contaminants by adopting more stringent limits and methods for evaluating toxic risks; implement pricing measures to reduce travel demand; accelerate the widespread adoption of electric vehicles; promote the use of clean fuels; promote energy efficiency in both new and existing buildings; and promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the BAAD will continue progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The 2017 Clean Air Plan contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_X), particulate matter, TACs, and greenhouse gas emissions. The Bay Area 2017 Clean Air Plan updates the Bay Area 2010 Clean Air Plan in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone; provides a control strategy to reduce ozone, PM, TACs, and greenhouse gases in a single, integrated plan; reviews progress in improving air quality in recent years; and establishes emission control measures to be adopted or implemented in both the short term and through 2050.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The following BAAD rules would limit emissions of air pollutants from construction and operation of the project:

- Regulation 8, Rule 3 – Architectural Coatings. This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases content in paints and paint solvents. Although this rule does not directly apply to the project, it does dictate the ROG content of paint available for use during the construction.
- Regulation 8, Rule 15 – Emulsified and Liquid Asphalts. This rule dictates the reactive organic gases content of asphalt available for use during construction through regulating the sale and use

of asphalt and limits the ROG content in asphalt. Although this rule does not directly apply to the project, it does dictate the ROG content of asphalt for use during the construction.

- Regulation 9, Rule 8 – Organic Compounds. This rule limits the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower.

BAAD prepared an Ozone Attainment Demonstration Plan to satisfy the federal 1-hour ozone planning requirement because of the Air Basin's nonattainment for federal and State ozone standards. The U.S. EPA revoked the 1-hour ozone standard and adopted an 8-hour ozone standard. The BAAD will address the new federal 8-hour ozone planning requirements once they are established.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the state's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of California's long-term commitment to AB 32 implementation.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated considering current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO_2e (MMTCO2e) to 545 $MMTCO_2e$. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990

levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated state-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. By 2016, California had reduced GHG emissions below 1990 levels, achieving AB 32's 2020 goal four years ahead of schedule.

In January 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB, 2017). The Second Update sets forth CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The Second Update was approved by CARB's Governing Board on December 14, 2017.

Senate Bill 32 California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan (CARB, 2017b). The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat, even with rapid population growth.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and took effect on January 1, 2020. Under the 2019 standards, residential dwellings are required to use approximately 53 percent less energy and nonresidential buildings are required to use approximately 30 percent less energy than buildings under the 2016 standards. The CEC adopted the 2022 Energy Code on August 11, 2021, which was subsequently approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as CALGreen, is a statewide mandatory construction code

developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and nonresidential buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The latest CALGreen Code took effect on January 1, 2020 (2019 CALGreen). The 2019 CALGreen standards improve upon the previous standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The new 2019 CALGreen standards require residential buildings are required to be solar ready through solar panels (refer to Section 110.10 in the 2019 Building Energy Efficiency Standards for more details). The CEC adopted the 2022 CALGreen Code, which will go into effect on January 1, 2023.

CARB Advanced Clean Truck Regulation. CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- Zero-Emission Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Local

Santa Clara County Climate Action Plan

The Santa Clara County Climate Action Plan (CAP) approved in 2009 focuses on County operations, facilities and employee actions that will reduce not only GHG emissions but also energy and water consumption, solid waste and fuel consumption. The GHG emission reduction goals require a change from "business as usual" to attain them. The goals were to stop increasing the amount of emissions by 2010, decrease emissions by 10 percent every 5 years from 2010 – 2050, and reach an 80 percent reduction by 2050. The CAP is being issued in the context of legislative and regulatory action at the federal and state level. California's climate change goals are set forth in AB 32, the Global Warming Solutions Act of 2006. This legislation requires a reduction of California GHG emissions to 1990 levels by 2020. In December 2008, CARB approved the Climate Change Scoping Plan Document required by AB 32. The Scoping Plan Document, which provides a roadmap for California to reduce its GHG emissions, recognizes the importance of development and implementation of Climate Action Plans by California cities and counties. Executive Order S-03-05 goes even further by requiring statewide reductions in GHG emissions to 80 percent below 1990 by the year 2050.

Sunnyvale Climate Action Playbook

The Climate Action Playbook is the City of Sunnyvale's plan to reduce greenhouse gas (GHG) emissions and address climate change. The Climate Action Playbook contains strategies to meet California's new targets for deeper emissions reductions. The Climate Action Playbook reduce emissions by:

- 56 percent below 1990 levels by 2030 (exceeding the State's 40 percent by 2030 target), and
- 80 percent below 1990 levels by 2050.

CEQA Summary

The potential environmental effects of the SMaRT Station were originally contemplated in 1990. At that time, the environmental review process was completed pursuant to the requirements of the then current California Environmental Quality Act (CEQA). The Draft Environmental Impact Report (EIR) was circulated for public review and comment. The document was subsequently certified and the Final EIR was published in September of 1990. Two addendums to the project (one in 1992 and one in 2016) were prepared to account for minor changes to the SMaRT Station. The changes did not have the potential to increase the significance of any previously disclosed impact or require additional mitigation that could have an effect on the environment.

Summary of Previous Analysis

The 1990 EIR evaluated impacts to air quality and noise. At the time, greenhouse gas emissions and energy were not components of the CEQA analysis. The following summarizes the previous analysis of each of these listed resource areas.

Air Quality

The 1990 EIR identified air quality impacts with regard to landfill gas released during excavation and additional dust emissions at Kirby Canyon landfill. Air Quality impacts analyzed in the 1990 EIR found dust emissions from construction and dust emissions from project operations and traffic to be a potentially significant impact. Mitigation was proposed to reduce the potential to release hazardous landfill gas during excavation activities to a less than significant. Mitigation was also identified to reduce short-term dust emissions, yet not to a level below significance. Short-term fugitive dust emissions were determined to be significant and unavoidable. Impacts from dust with standard watering are anticipated to be below thresholds.

The 2016 Addendum found that even with the addition of Milpitas to the service area, that project would result in 278 fewer collection trips, which is the primary source of criteria air pollutant emissions, than what was accounted for in the 1992 Addendum. The analysis found that impacts would not be greater than originally determined in the 1990 Final EIR and the 1992 Addendum. No new impacts were identified and no new mitigation was required.

Energy

The 1990 Final EIR nor the subsequent Addendums did not evaluate the effects of energy resources. At the time of approval of the 1990 Final EIR, impacts related to energy was not an issue of concern and was not an element of the State CEQA Guidelines. On December 28, 2018, amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of Energy under CEQA. Energy impacts evaluated under CEQA are primarily focused on the wasteful or inefficient use of energy and conflicts with regulations requiring the use of renewable energy.

Greenhouse Gas Emissions

The 1990 Final EIR did not evaluate the effects of greenhouse gas (GHG) emission generation. At the time of certification of the Final EIR, the issue of contribution of GHG emissions to climate change was a prominent issue of concern. On March 18, 2010, amendments to the State CEQA Guidelines took effect which set forth requirements for the analysis of GHG emissions under CEQA.

The most recent 2016 Addendum found that even with the addition of Milpitas to the service area there would be a negligible increase of GHG emissions (274 metric tons annually) compared with the regional significance threshold of 1,100 metric tons annually promulgated by the BAAD regulations at the time. The Addendum further noted because the 1990 DEIR accounted for 1,832 average daily solid waste collection trips and the 1992 Addendum considered 1,246 average daily solid waste collection trips, and the modified project (in 2016) would result in a total of 968 daily trips, 278 fewer collection trips, the primary source of GHG emissions was then accounted for in the Final EIR.

Thresholds

Air Quality Thresholds

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan?

AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

AQ-3 Expose sensitive receptors to substantial pollutant concentrations?

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Under CEQA, the BAAD is an expert commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Pursuant to the FCAA, the BAAD has adopted Federal attainment plans for O_3 and $PM_{2.5}$. The BAAD reviews projects to ensure that they would not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan.

The BAAD Options and Justification Report (dated October 2009) establishes thresholds based on substantial evidence, and the thresholds are consistent with the thresholds outlined within the 2010/2011 BAAD CEQA Air Quality Guidelines (and current 2017 CEQA Air Quality Guidelines). The thresholds have been developed by the BAAD in order to attain State and Federal ambient air quality standards. Therefore, projects below these thresholds would not violate air quality standards and would not contribute substantially to an existing or projected air quality violation.

The BAAD CEQA Air Quality Guidelines provides significance thresholds for both construction and operation of projects. Ultimately the lead agency determines the thresholds of significance for impacts. However, if a project proposes development in excess of the established thresholds, as outlined in **Table 2 - Bay Area Air District Emissions Thresholds**, a significant air quality impact may occur, and additional analysis is warranted to fully assess the significance of impacts.

Table 2 - Bay Area Air District Emissions Thresholds

Criteria Air Pollutants and Precursors (Regional)	Construction-Related	Operational-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emission (pounds/day)	Annual Average Emission (tons/year)

Reactive Organic Gases (ROG)	54	54	10
Nitrogen Oxides (NO_X)	54	54	10
Coarse Particulates (PM_{10})	82 (exhaust)	82	15
Fine Particulates ($PM_{2.5}$)	54 (exhaust)	54	10
PM_{10} / $PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average) 20.0 ppm (1-hour average)	
Source: Bay Area Air Quality Management District, 2017 CEQA Air Quality Guidelines, 2017.			

Energy Thresholds

Based upon the criteria derived from State CEQA Guidelines Appendix G, a project normally would have a significant effect on the environment if it would:

ENG-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

ENG-2 Conflict with or obstruct a state or local plan for renewable energy or efficient energy?

In terms of analysis for CEQA, energy implications are considered and requires a discussion of the potential energy impacts of projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

Greenhouse Gas Thresholds

Based upon the criteria derived from State CEQA Guidelines Appendix G, a project normally would have a significant effect on the environment if it would:

GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The BAAD approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute considerably to a significant cumulative impact. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate. If annual emissions of operational-related GHGs exceed these levels, the proposed project would result in a cumulatively considerable contribution to a cumulatively significant impact to global climate change. The BAAD is currently working to provide updated threshold guidance to address updated GHG regulations such as SB 32 and case law that has found efficiency metric thresholds based on state-wide data must be supported by substantial evidence that the threshold is appropriate for a specific location and specific project type.

The BAAD does not have an adopted threshold of significance for construction-related GHG emissions. However, BAAD recommends quantification and disclosure of construction GHG emissions. BAAD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. In April 2022, BAAD adopted new CEQA thresholds for evaluating climate impacts from land use projects and plans. The BAAD

Thresholds for land use projects must either comply with a qualified CAP or include a number of project design features such as no natural gas, reduce VMT, and exceed certain EV charging requirements.

Impact Evaluation

Air Quality and Greenhouse Gas

Construction

The proposed project includes minimal construction to support the new electric machinery. The project would include a new on-site 3,000-amp line within the building would be needed to electrify the equipment. **Table 3 – Air Quality Construction Emissions**.

Table 3 – Air Quality Construction Emissions

Construction Year	Pollutant				
	Reactive Organic Gases (ROG) lbs/day	**Nitrogen Oxide (NO_x) lbs/day**	**Carbon Monoxide (CO) lbs/day**	**Coarse Particulate Matter (PM_{10}) lbs/day**	**Particulate Matter ($PM_{2.5}$) lbs/day**
2023	1.45	14.97	9.11	0.46	0.42
Maximum	1.45	14.97	9.11	0.46	0.42
BAAD Significance Threshold [2, 3]	*54*	*54*	-	*82*	*54*
Exceed BAAD Threshold?	**No**	**No**	**-**	**No**	**No**

1. Emissions were calculated using CalEEMod. Mitigated emissions include compliance with the BAAD's Basic Construction Mitigation Measures Recommended for All projects and the City of San José Environmental Standard Conditions. These measures include the following: water exposed surfaces two times daily; cover haul trucks; clean track outs with wet powered vacuum street sweepers; limit speeds on unpaved roads to 15 miles per hour; complete paving as soon as possible after grading; limit idle times to 5 minutes; properly maintain mobile and other construction equipment; and post a publicly visible sign with contact information to register dust complaints and take corrective action within 48 hours.
2. Bay Area Air District, California Environmental Quality Act Air Quality Guidelines, updated May 2017.
3. BMPs = Best Management Practices. BAAD recommends the implementation of all Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable significance thresholds. Implementation of Basic Construction Mitigation measures are considered to mitigate fugitive dust emissions to be less than significant.

Source: Refer to the CalEEMod outputs provided in Appendix A.

BAAD does not have a threshold for construction GHG emissions, which are one-time, short-term emissions and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the proposed project. However, the BAAD advises that construction GHG should be disclosed and a determination on the significance of construction GHG emissions in relation to meeting AB 32 GHG reduction goals should be made. Total GHG emissions generated during all phases of construction were combined and are presented in **Table 4 – GHG Construction Emissions**.

Table 4 – Greenhouse Gas Construction Emissions

Construction Year	CO_2e Emissions, metric tons/year
2023	27.07

Table 4 – Greenhouse Gas Construction Emissions

Construction Year	CO_2e Emissions, metric tons/year
Emissions amortized over 30 years	0.90
Source: CalEEMod version 2020.4.0. Refer to Appendix B for model outputs.	

It is important to note that construction emissions were originally calculated using emissions factors from 2023 for the previous Addendum prepared in 2023 but due to project updates and refinements in design it was not presented for approval. Because CalEEMod accounts for lower emissions in future years due to cleaner technology, which the project is incorporating, the 2023 construction emissions are conservative and would be higher than emissions for 2025 when the updated project would be constructed. Thus, as shown in the two tables above, emissions from construction activities would be minimal and would not exceed thresholds set forth by the BAAD related to air quality or GHG emissions.

Operations

As discussed above, the 1990 EIR evaluated the SMaRT Station with a permitted intake of 2,200 tons of refuse per day and the project is currently permitted to receive 1,500 tons per day. The 1990 evaluation also anticipated the generation of a maximum number of 1,832 weekday vehicle trips, and 1,514 weekend vehicle trips. Additionally, as noted, the 2016 Addendum contemplated 1,246 daily trips, which was 646 to 546 trips less than in the 1990 EIR.

Compared to the 1,246 daily trips analyzed in the 2016 Addendum, the SMaRT station (with weekend event trips amortized over the course of the year) is currently generating approximately 1,008 fewer trips than contemplated under that document. It should be noted, however, the SMaRT Station is not reducing the existing 1,500 tons per day capacity and would maintain the previously accounted for 1,246 trips to ensure future services could be provided. Offsite trips would be the same as existing and would not result in an impact greater than what was previously analyzed.

It should be noted, with the improvements, the number of employee trips would be reduced from approximately 41 trips to 20 trips (a reduction in 21 trips) with the efficiency improvements enabled by the new machinery. All machinery improvements would be electric, and the project would not include natural gas. Therefore, project operations would not have a greater impact than previous analyzed.

Energy

In terms of analysis for CEQA, energy implications are considered and requires a discussion of the potential energy impacts of projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. With respect to the proposed project, the SMaRT station is used to facilitate recycling of materials and reduce the volumes of materials that are disposed of in landfills. This is by default, an energy saving use as it reduces truck trips to landfills and prolongs the life of existing landfills reducing the need for the development of new landfills.

As outlined above, the project proposes updating existing machinery by replacing outdated machines and adding new modern electric machines to enable more efficient processing. The on-site improvements would also include would require minor construction that would include improvements to the foundation to support the machines. These activities would have an extremely nominal effect on the local and regional energy supplies. Fuel consumption to enable these improvements not be inefficient, wasteful, or unnecessary.

Fuel required to power the equipment and truck trips would be less than previously analyzed as the equipment is cleaner and more fuel efficient. While the SMaRT Station does anticipate increasing the volumes of water

material they take in in the future, the SMaRT Station operations would comply with applicable energy standards and would not result in the need for new energy capacity.

Overall, the proposed project would not require expanded energy supplies or the construction of new infrastructure and would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The project also would not conflict with any state or local plans related to energy efficiency. Thus, with regard to CEQA Section 21166 and CEQA Guidelines Section 15162(a), the updates to the project would not result in any new impacts, or increase the severity of the previously identified impacts, to other resource elements as a result of increased energy demand.

Conclusion

As discussed above, the updated SMaRT Station project does not propose nor would it result in any additional vehicle trips and would not result in a greater construction or operational impacts to Air Quality, GHG, or Energy.

References

Bay Area Air Quality Management District, CEQA Air Quality Guidelines, 2017.

Bay Area Air Quality Management District, Clean Air Plan, 2017.

Bay Area Air Quality Management District, Air Quality Standards and Attainment Status, 2017.

Bay Area Air Quality Management District, Current Rules, 2017.

California Air Pollution Control Officers Association (CAPCOA), Health Effects, 2018.

California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, 2005.

California Air Resources Board, Current Air Quality Standards, 2016.

California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, 2000.

City of Sunnyvale, Addendum to the Sunnyvale SMaRT Station EIR, 1992

City of Sunnyvale, Land Use and Transportation Element DEIR, 2016

City of Sunnyvale, Sunnyvale Materials Recovery and Transfer Station (SMaRT) Draft Environmental Impact Report, 1990

United States Environmental Protection Agency, National Ambient Air Quality Standards Table, 2016.

United States Environmental Protection Agency, Nonattainment Areas for Criteria Pollutants, 2018.

United States Environmental Protection Agency, Policy Assessment for the Review of the Lead National Ambient Air Quality Standards, 2013.

Appendix A

Air Quality Modeling Data

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Sunnyvale SMART Station Construction

Santa Clara County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated area for new equipment

Construction Phase - estimated construction schedule

Off-road Equipment - estimated construction equipment

Grading -

Demolition -

Architectural Coating -

Vehicle Trips -

Fleet Mix -

Area Coating -

Construction Off-road Equipment Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	6/21/2023	2/22/2023
tblConstructionPhase	PhaseEndDate	6/14/2023	2/15/2023
tblConstructionPhase	PhaseStartDate	6/15/2023	2/16/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	1/19/2023
tblGrading	MaterialExported	0.00	555.00
tblOffRoadEquipment	OffRoadEquipmentType		Cranes

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.4458	14.7113	9.1112	0.0355	6.0126	0.4583	6.4709	2.7562	0.4230	3.1792	0.0000	3,698.8128	3,698.8128	0.5206	0.3623	3,819.7908
Maximum	**1.4458**	**14.7113**	**9.1112**	**0.0355**	**6.0126**	**0.4583**	**6.4709**	**2.7562**	**0.4230**	**3.1792**	**0.0000**	**3,698.8128**	**3,698.8128**	**0.5206**	**0.3623**	**3,819.7908**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2023	1.4458	14.7113	9.1112	0.0355	2.9295	0.4583	3.3878	1.2714	0.4230	1.6944	0.0000	3,698.8128	3,698.8128	0.5206	0.3623	3,819.7908
Maximum	**1.4458**	**14.7113**	**9.1112**	**0.0355**	**2.9295**	**0.4583**	**3.3878**	**1.2714**	**0.4230**	**1.6944**	**0.0000**	**3,698.8128**	**3,698.8128**	**0.5206**	**0.3623**	**3,819.7908**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.28**	**0.00**	**47.65**	**53.87**	**0.00**	**46.70**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	**7.1700e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**	**0.0000**	**3.5000e-003**

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

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Area	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	**7.1700e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**	**0.0000**	**3.5000e-003**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/14/2023	1/16/2023	5	1	
3	Grading	Grading	1/17/2023	1/18/2023	5	2	
4	Paving	Paving	1/19/2023	2/15/2023	5	20	
5	Architectural Coating	Architectural Coating	2/16/2023	2/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 900 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cranes	1	7.00	231	0.29

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	4	10.00	0.00	57.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	69.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					1.2411	0.0000	1.2411	0.1879	0.0000	0.1879			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**1.2411**	**0.2821**	**1.5233**	**0.1879**	**0.2698**	**0.4577**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

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	0.0122	0.7468	0.1787	3.4500e-003	0.0997	6.2600e-003	0.1060	0.0273	5.9900e-003	0.0333		376.1197	376.1197	0.0128	0.0596	394.2105
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
Worker	0.0264	0.0156	0.2426	7.0000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.9096	71.9096	1.8100e-003	1.7200e-003	72.4674
Total	**0.0386**	**0.7624**	**0.4213**	**4.1500e-003**	**0.1819**	**6.6500e-003**	**0.1885**	**0.0491**	**6.3500e-003**	**0.0555**		**448.0293**	**448.0293**	**0.0147**	**0.0614**	**466.6779**

Mitigated Construction On-Site

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5250	0.0000	0.5250	0.0795	0.0000	0.0795			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**0.5250**	**0.2821**	**0.8071**	**0.0795**	**0.2698**	**0.3493**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

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	0.0122	0.7468	0.1787	3.4500e-003	0.0997	6.2600e-003	0.1060	0.0273	5.9900e-003	0.0333		376.1197	376.1197	0.0128	0.0596	394.2105
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
Worker	0.0264	0.0156	0.2426	7.0000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.9096	71.9096	1.8100e-003	1.7200e-003	72.4674
Total	**0.0386**	**0.7624**	**0.4213**	**4.1500e-003**	**0.1819**	**6.6500e-003**	**0.1885**	**0.0491**	**6.3500e-003**	**0.0555**		**448.0293**	**448.0293**	**0.0147**	**0.0614**	**466.6779**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0132	7.7900e-003	0.1213	3.5000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		35.9548	35.9548	9.0000e-004	8.6000e-004	36.2337
Total	**0.0132**	**7.7900e-003**	**0.1213**	**3.5000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**35.9548**	**35.9548**	**9.0000e-004**	**8.6000e-004**	**36.2337**

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

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Fugitive Dust					0.2243	0.0000	0.2243	0.0242	0.0000	0.0242			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.2243**	**0.2266**	**0.4509**	**0.0242**	**0.2084**	**0.2327**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0132	7.7900e-003	0.1213	3.5000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		35.9548	35.9548	9.0000e-004	8.6000e-004	36.2337
Total	**0.0132**	**7.7900e-003**	**0.1213**	**3.5000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**35.9548**	**35.9548**	**9.0000e-004**	**8.6000e-004**	**36.2337**

3.4 Grading - 2023

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					

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fugitive Dust					5.3433	0.0000	5.3433	2.5733	0.0000	2.5733			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3433**	**0.4201**	**5.7634**	**2.5733**	**0.3865**	**2.9598**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

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	0.0740	4.5200	1.0816	0.0209	0.6036	0.0379	0.6415	0.1655	0.0363	0.2017		2,276.5139	2,276.5139	0.0777	0.3609	2,386.0106
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
Worker	0.0211	0.0125	0.1941	5.6000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		57.5277	57.5277	1.4500e-003	1.3800e-003	57.9739
Total	**0.0951**	**4.5324**	**1.2757**	**0.0214**	**0.6693**	**0.0382**	**0.7075**	**0.1829**	**0.0365**	**0.2194**		**2,334.0415**	**2,334.0415**	**0.0792**	**0.3623**	**2,443.9846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2602	0.0000	2.2602	1.0885	0.0000	1.0885			0.0000			0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**2.2602**	**0.4201**	**2.6803**	**1.0885**	**0.3865**	**1.4750**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

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	0.0740	4.5200	1.0816	0.0209	0.6036	0.0379	0.6415	0.1655	0.0363	0.2017		2,276.5139	2,276.5139	0.0777	0.3609	2,386.0106
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
Worker	0.0211	0.0125	0.1941	5.6000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		57.5277	57.5277	1.4500e-003	1.3800e-003	57.9739
Total	**0.0951**	**4.5324**	**1.2757**	**0.0214**	**0.6693**	**0.0382**	**0.7075**	**0.1829**	**0.0365**	**0.2194**		**2,334.0415**	**2,334.0415**	**0.0792**	**0.3623**	**2,443.9846**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9186	8.8431	8.6261	0.0163		0.4037	0.4037		0.3748	0.3748		1,525.0546	1,525.0546	0.4600		1,536.5534
Paving	0.0445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.9632**	**8.8431**	**8.6261**	**0.0163**		**0.4037**	**0.4037**		**0.3748**	**0.3748**		**1,525.0546**	**1,525.0546**	**0.4600**		**1,536.5534**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0528	0.0311	0.4852	1.4100e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		143.8191	143.8191	3.6100e-003	3.4400e-003	144.9348
Total	**0.0528**	**0.0311**	**0.4852**	**1.4100e-003**	**0.1643**	**7.9000e-004**	**0.1651**	**0.0436**	**7.2000e-004**	**0.0443**		**143.8191**	**143.8191**	**3.6100e-003**	**3.4400e-003**	**144.9348**

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	0.9186	8.8431	8.6261	0.0163		0.4037	0.4037		0.3748	0.3748	0.0000	1,525.0546	1,525.0546	0.4600		1,536.5534
Paving	0.0445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9632**	**8.8431**	**8.6261**	**0.0163**		**0.4037**	**0.4037**		**0.3748**	**0.3748**	**0.0000**	**1,525.0546**	**1,525.0546**	**0.4600**		**1,536.5534**

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0528	0.0311	0.4852	1.4100e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		143.8191	143.8191	3.6100e-003	3.4400e-003	144.9348
Total	**0.0528**	**0.0311**	**0.4852**	**1.4100e-003**	**0.1643**	**7.9000e-004**	**0.1651**	**0.0436**	**7.2000e-004**	**0.0443**		**143.8191**	**143.8191**	**3.6100e-003**	**3.4400e-003**	**144.9348**

3.6 Architectural Coating - 2023

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	1.2515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**1.4431**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	2.6400e-003	1.5600e-003	0.0243	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.1910	7.1910	1.8000e-004	1.7000e-004	7.2467
Total	**2.6400e-003**	**1.5600e-003**	**0.0243**	**7.0000e-005**	**8.2100e-003**	**4.0000e-005**	**8.2500e-003**	**2.1800e-003**	**4.0000e-005**	**2.2200e-003**		**7.1910**	**7.1910**	**1.8000e-004**	**1.7000e-004**	**7.2467**

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	1.2515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**1.4431**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	2.6400e-003	1.5600e-003	0.0243	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.1910	7.1910	1.8000e-004	1.7000e-004	7.2467
Total	**2.6400e-003**	**1.5600e-003**	**0.0243**	**7.0000e-005**	**8.2100e-003**	**4.0000e-005**	**8.2500e-003**	**2.1800e-003**	**4.0000e-005**	**2.2200e-003**		**7.1910**	**7.1910**	**1.8000e-004**	**1.7000e-004**	**7.2467**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.571175	0.055403	0.188166	0.116095	0.020429	0.005041	0.007817	0.006362	0.000912	0.000389	0.024445	0.000927	0.002838

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Unmitigated	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**7.1600e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-003**

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					

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**7.1600e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

Sunnyvale SMART Station Construction - Santa Clara County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Sunnyvale SMART Station Construction

Santa Clara County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated area for new equipment

Construction Phase - estimated construction schedule

Off-road Equipment - estimated construction equipment

Grading -

Demolition -

Architectural Coating -

Vehicle Trips -

Fleet Mix -

Area Coating -

Construction Off-road Equipment Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	6/21/2023	2/22/2023
tblConstructionPhase	PhaseEndDate	6/14/2023	2/15/2023
tblConstructionPhase	PhaseStartDate	6/15/2023	2/16/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	1/19/2023
tblGrading	MaterialExported	0.00	555.00
tblOffRoadEquipment	OffRoadEquipmentType		Cranes

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.4458	14.9724	9.0852	0.0355	6.0126	0.4584	6.4710	2.7562	0.4231	3.1793	0.0000	3,696.7726	3,696.7726	0.5205	0.3628	3,817.9127
Maximum	**1.4458**	**14.9724**	**9.0852**	**0.0355**	**6.0126**	**0.4584**	**6.4710**	**2.7562**	**0.4231**	**3.1793**	**0.0000**	**3,696.7726**	**3,696.7726**	**0.5205**	**0.3628**	**3,817.9127**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2023	1.4458	14.9724	9.0852	0.0355	2.9295	0.4584	3.3879	1.2714	0.4231	1.6945	0.0000	3,696.7726	3,696.7726	0.5205	0.3628	3,817.9127
Maximum	**1.4458**	**14.9724**	**9.0852**	**0.0355**	**2.9295**	**0.4584**	**3.3879**	**1.2714**	**0.4231**	**1.6945**	**0.0000**	**3,696.7726**	**3,696.7726**	**0.5205**	**0.3628**	**3,817.9127**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.28**	**0.00**	**47.65**	**53.87**	**0.00**	**46.70**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	**7.1700e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**	**0.0000**	**3.5000e-003**

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

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Area	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	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	**7.1700e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**	**0.0000**	**3.5000e-003**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/14/2023	1/16/2023	5	1	
3	Grading	Grading	1/17/2023	1/18/2023	5	2	
4	Paving	Paving	1/19/2023	2/15/2023	5	20	
5	Architectural Coating	Architectural Coating	2/16/2023	2/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 900 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cranes	1	7.00	231	0.29

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	4	10.00	0.00	57.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	69.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					1.2411	0.0000	1.2411	0.1879	0.0000	0.1879			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**1.2411**	**0.2821**	**1.5233**	**0.1879**	**0.2698**	**0.4577**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

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	0.0115	0.7895	0.1812	3.4500e-003	0.0997	6.2700e-003	0.1060	0.0273	6.0000e-003	0.0333		376.4761	376.4761	0.0128	0.0597	394.5833
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
Worker	0.0272	0.0190	0.2296	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.6623	66.6623	2.0400e-003	1.9700e-003	67.2990
Total	**0.0386**	**0.8085**	**0.4108**	**4.1000e-003**	**0.1819**	**6.6600e-003**	**0.1885**	**0.0491**	**6.3600e-003**	**0.0555**		**443.1385**	**443.1385**	**0.0148**	**0.0617**	**461.8823**

Mitigated Construction On-Site

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5250	0.0000	0.5250	0.0795	0.0000	0.0795			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**	**0.5250**	**0.2821**	**0.8071**	**0.0795**	**0.2698**	**0.3493**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

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	0.0115	0.7895	0.1812	3.4500e-003	0.0997	6.2700e-003	0.1060	0.0273	6.0000e-003	0.0333		376.4761	376.4761	0.0128	0.0597	394.5833
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
Worker	0.0272	0.0190	0.2296	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.6623	66.6623	2.0400e-003	1.9700e-003	67.2990
Total	**0.0386**	**0.8085**	**0.4108**	**4.1000e-003**	**0.1819**	**6.6600e-003**	**0.1885**	**0.0491**	**6.3600e-003**	**0.0555**		**443.1385**	**443.1385**	**0.0148**	**0.0617**	**461.8823**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0136	9.5000e-003	0.1148	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.3312	33.3312	1.0200e-003	9.8000e-004	33.6495
Total	**0.0136**	**9.5000e-003**	**0.1148**	**3.3000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**33.3312**	**33.3312**	**1.0200e-003**	**9.8000e-004**	**33.6495**

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

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Fugitive Dust					0.2243	0.0000	0.2243	0.0242	0.0000	0.0242			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.2243**	**0.2266**	**0.4509**	**0.0242**	**0.2084**	**0.2327**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0136	9.5000e-003	0.1148	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.3312	33.3312	1.0200e-003	9.8000e-004	33.6495
Total	**0.0136**	**9.5000e-003**	**0.1148**	**3.3000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**33.3312**	**33.3312**	**1.0200e-003**	**9.8000e-004**	**33.6495**

3.4 Grading - 2023

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					

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fugitive Dust					5.3433	0.0000	5.3433	2.5733	0.0000	2.5733			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3433**	**0.4201**	**5.7634**	**2.5733**	**0.3865**	**2.9598**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

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	0.0695	4.7784	1.0968	0.0209	0.6036	0.0380	0.6415	0.1655	0.0363	0.2018		2,278.6714	2,278.6714	0.0775	0.3613	2,388.2673
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
Worker	0.0217	0.0152	0.1837	5.2000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.3299	53.3299	1.6300e-003	1.5700e-003	53.8392
Total	**0.0912**	**4.7936**	**1.2804**	**0.0214**	**0.6693**	**0.0383**	**0.7075**	**0.1829**	**0.0366**	**0.2195**		**2,332.0012**	**2,332.0012**	**0.0791**	**0.3628**	**2,442.1065**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2602	0.0000	2.2602	1.0885	0.0000	1.0885			0.0000			0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**2.2602**	**0.4201**	**2.6803**	**1.0885**	**0.3865**	**1.4750**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

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	0.0695	4.7784	1.0968	0.0209	0.6036	0.0380	0.6415	0.1655	0.0363	0.2018		2,278.6714	2,278.6714	0.0775	0.3613	2,388.2673
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
Worker	0.0217	0.0152	0.1837	5.2000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.3299	53.3299	1.6300e-003	1.5700e-003	53.8392
Total	**0.0912**	**4.7936**	**1.2804**	**0.0214**	**0.6693**	**0.0383**	**0.7075**	**0.1829**	**0.0366**	**0.2195**		**2,332.0012**	**2,332.0012**	**0.0791**	**0.3628**	**2,442.1065**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9186	8.8431	8.6261	0.0163		0.4037	0.4037		0.3748	0.3748		1,525.0546	1,525.0546	0.4600		1,536.5534
Paving	0.0445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.9632**	**8.8431**	**8.6261**	**0.0163**		**0.4037**	**0.4037**		**0.3748**	**0.3748**		**1,525.0546**	**1,525.0546**	**0.4600**		**1,536.5534**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0543	0.0380	0.4591	1.3000e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		133.3246	133.3246	4.0800e-003	3.9300e-003	134.5979
Total	**0.0543**	**0.0380**	**0.4591**	**1.3000e-003**	**0.1643**	**7.9000e-004**	**0.1651**	**0.0436**	**7.2000e-004**	**0.0443**		**133.3246**	**133.3246**	**4.0800e-003**	**3.9300e-003**	**134.5979**

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	0.9186	8.8431	8.6261	0.0163		0.4037	0.4037		0.3748	0.3748	0.0000	1,525.0546	1,525.0546	0.4600		1,536.5534
Paving	0.0445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9632**	**8.8431**	**8.6261**	**0.0163**		**0.4037**	**0.4037**		**0.3748**	**0.3748**	**0.0000**	**1,525.0546**	**1,525.0546**	**0.4600**		**1,536.5534**

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	0.0543	0.0380	0.4591	1.3000e-003	0.1643	7.9000e-004	0.1651	0.0436	7.2000e-004	0.0443		133.3246	133.3246	4.0800e-003	3.9300e-003	134.5979
Total	**0.0543**	**0.0380**	**0.4591**	**1.3000e-003**	**0.1643**	**7.9000e-004**	**0.1651**	**0.0436**	**7.2000e-004**	**0.0443**		**133.3246**	**133.3246**	**4.0800e-003**	**3.9300e-003**	**134.5979**

3.6 Architectural Coating - 2023

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	1.2515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**1.4431**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	2.7100e-003	1.9000e-003	0.0230	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.6662	6.6662	2.0000e-004	2.0000e-004	6.7299
Total	**2.7100e-003**	**1.9000e-003**	**0.0230**	**7.0000e-005**	**8.2100e-003**	**4.0000e-005**	**8.2500e-003**	**2.1800e-003**	**4.0000e-005**	**2.2200e-003**		**6.6662**	**6.6662**	**2.0000e-004**	**2.0000e-004**	**6.7299**

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	1.2515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**1.4431**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	2.7100e-003	1.9000e-003	0.0230	7.0000e-005	8.2100e-003	4.0000e-005	8.2500e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.6662	6.6662	2.0000e-004	2.0000e-004	6.7299
Total	**2.7100e-003**	**1.9000e-003**	**0.0230**	**7.0000e-005**	**8.2100e-003**	**4.0000e-005**	**8.2500e-003**	**2.1800e-003**	**4.0000e-005**	**2.2200e-003**		**6.6662**	**6.6662**	**2.0000e-004**	**2.0000e-004**	**6.7299**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.571175	0.055403	0.188166	0.116095	0.020429	0.005041	0.007817	0.006362	0.000912	0.000389	0.024445	0.000927	0.002838

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Unmitigated	7.1700e-003	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**7.1600e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-003**

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					

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**7.1600e-003**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

Sunnyvale SMART Station Construction - Santa Clara County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Appendix B

Model Outputs for GHG

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Sunnyvale SMART Station Construction

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated area for new equipment

Construction Phase - estimated construction schedule

Off-road Equipment - estimated construction equipment

Grading -

Demolition -

Architectural Coating -

Vehicle Trips -

Fleet Mix -

Area Coating -

Construction Off-road Equipment Mitigation -

Waste Mitigation -

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	PhaseEndDate	6/21/2023	2/22/2023
tblConstructionPhase	PhaseEndDate	6/14/2023	2/15/2023
tblConstructionPhase	PhaseStartDate	6/15/2023	2/16/2023
tblConstructionPhase	PhaseStartDate	6/8/2023	1/19/2023
tblGrading	MaterialExported	0.00	555.00
tblOffRoadEquipment	OffRoadEquipmentType		Cranes

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0185	0.1429	0.1431	3.0000e-004	0.0150	6.2400e-003	0.0212	4.3900e-003	5.8400e-003	0.0102	0.0000	26.7287	26.7287	5.8700e-003	6.4000e-004	27.0669
Maximum	**0.0185**	**0.1429**	**0.1431**	**3.0000e-004**	**0.0150**	**6.2400e-003**	**0.0212**	**4.3900e-003**	**5.8400e-003**	**0.0102**	**0.0000**	**26.7287**	**26.7287**	**5.8700e-003**	**6.4000e-004**	**27.0669**

Mitigated Construction

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0185	0.1429	0.1431	3.0000e-004	8.1500e-003	6.2400e-003	0.0144	2.3500e-003	5.8400e-003	8.1900e-003	0.0000	26.7287	26.7287	5.8700e-003	6.4000e-004	27.0669
Maximum	**0.0185**	**0.1429**	**0.1431**	**3.0000e-004**	**8.1500e-003**	**6.2400e-003**	**0.0144**	**2.3500e-003**	**5.8400e-003**	**8.1900e-003**	**0.0000**	**26.7287**	**26.7287**	**5.8700e-003**	**6.4000e-004**	**27.0669**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**45.56**	**0.00**	**32.15**	**46.47**	**0.00**	**19.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-2-2023**	**4-1-2023**	0.1557	0.1557
		Highest	0.1557	0.1557

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	1.3000e-003	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3000e-003**	**0.0000**	**1.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

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	1.3000e-003	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.3000e-003**	**0.0000**	**1.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

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

3.0 Construction Detail

Construction Phase

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/14/2023	1/16/2023	5	1	
3	Grading	Grading	1/17/2023	1/18/2023	5	2	
4	Paving	Paving	1/19/2023	2/15/2023	5	20	
5	Architectural Coating	Architectural Coating	2/16/2023	2/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.34

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 900 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cranes	1	7.00	231	0.29

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	4	10.00	0.00	57.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	69.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

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					6.2100e-003	0.0000	6.2100e-003	9.4000e-004	0.0000	9.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	**3.2300e-003**	**0.0289**	**0.0370**	**6.0000e-005**	**6.2100e-003**	**1.4100e-003**	**7.6200e-003**	**9.4000e-004**	**1.3500e-003**	**2.2900e-003**	**0.0000**	**5.2091**	**5.2091**	**9.5000e-004**	**0.0000**	**5.2328**

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6.0000e-005	3.8700e-003	9.0000e-004	2.0000e-005	4.8000e-004	3.0000e-005	5.1000e-004	1.3000e-004	3.0000e-005	1.6000e-004	0.0000	1.7067	1.7067	6.0000e-005	2.7000e-004	1.7888
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	1.2000e-004	9.0000e-005	1.1200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3057	0.3057	1.0000e-005	1.0000e-005	0.3084
Total	**1.8000e-004**	**3.9600e-003**	**2.0200e-003**	**2.0000e-005**	**8.8000e-004**	**3.0000e-005**	**9.1000e-004**	**2.4000e-004**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**2.0124**	**2.0124**	**7.0000e-005**	**2.8000e-004**	**2.0972**

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					2.6300e-003	0.0000	2.6300e-003	4.0000e-004	0.0000	4.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0289	0.0370	6.0000e-005		1.4100e-003	1.4100e-003		1.3500e-003	1.3500e-003	0.0000	5.2091	5.2091	9.5000e-004	0.0000	5.2328
Total	**3.2300e-003**	**0.0289**	**0.0370**	**6.0000e-005**	**2.6300e-003**	**1.4100e-003**	**4.0400e-003**	**4.0000e-004**	**1.3500e-003**	**1.7500e-003**	**0.0000**	**5.2091**	**5.2091**	**9.5000e-004**	**0.0000**	**5.2328**

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6.0000e-005	3.8700e-003	9.0000e-004	2.0000e-005	4.8000e-004	3.0000e-005	5.1000e-004	1.3000e-004	3.0000e-005	1.6000e-004	0.0000	1.7067	1.7067	6.0000e-005	2.7000e-004	1.7888
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	1.2000e-004	9.0000e-005	1.1200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3057	0.3057	1.0000e-005	1.0000e-005	0.3084
Total	**1.8000e-004**	**3.9600e-003**	**2.0200e-003**	**2.0000e-005**	**8.8000e-004**	**3.0000e-005**	**9.1000e-004**	**2.4000e-004**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**2.0124**	**2.0124**	**7.0000e-005**	**2.8000e-004**	**2.0972**

3.3 Site Preparation - 2023

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

Unmitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0153	0.0153	0.0000	0.0000	0.0154
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0153**	**0.0153**	**0.0000**	**0.0000**	**0.0154**

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					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**1.1000e-004**	**1.1000e-004**	**2.2000e-004**	**1.0000e-005**	**1.0000e-004**	**1.1000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

Mitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0153	0.0153	0.0000	0.0000	0.0154
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0153**	**0.0153**	**0.0000**	**0.0000**	**0.0154**

3.4 Grading - 2023

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					5.3400e-003	0.0000	5.3400e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	**9.3000e-004**	**0.0102**	**5.5500e-003**	**1.0000e-005**	**5.3400e-003**	**4.2000e-004**	**5.7600e-003**	**2.5700e-003**	**3.9000e-004**	**2.9600e-003**	**0.0000**	**1.2381**	**1.2381**	**4.0000e-004**	**0.0000**	**1.2481**

Unmitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	7.0000e-005	4.6900e-003	1.0900e-003	2.0000e-005	5.9000e-004	4.0000e-005	6.2000e-004	1.6000e-004	4.0000e-005	2.0000e-004	0.0000	2.0660	2.0660	7.0000e-005	3.3000e-004	2.1654
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	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0489	0.0489	0.0000	0.0000	0.0493
Total	**9.0000e-005**	**4.7000e-003**	**1.2700e-003**	**2.0000e-005**	**6.5000e-004**	**4.0000e-005**	**6.8000e-004**	**1.8000e-004**	**4.0000e-005**	**2.2000e-004**	**0.0000**	**2.1150**	**2.1150**	**7.0000e-005**	**3.3000e-004**	**2.2148**

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					2.2600e-003	0.0000	2.2600e-003	1.0900e-003	0.0000	1.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	**9.3000e-004**	**0.0102**	**5.5500e-003**	**1.0000e-005**	**2.2600e-003**	**4.2000e-004**	**2.6800e-003**	**1.0900e-003**	**3.9000e-004**	**1.4800e-003**	**0.0000**	**1.2381**	**1.2381**	**4.0000e-004**	**0.0000**	**1.2481**

Mitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	7.0000e-005	4.6900e-003	1.0900e-003	2.0000e-005	5.9000e-004	4.0000e-005	6.2000e-004	1.6000e-004	4.0000e-005	2.0000e-004	0.0000	2.0660	2.0660	7.0000e-005	3.3000e-004	2.1654
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	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0489	0.0489	0.0000	0.0000	0.0493
Total	**9.0000e-005**	**4.7000e-003**	**1.2700e-003**	**2.0000e-005**	**6.5000e-004**	**4.0000e-005**	**6.8000e-004**	**1.8000e-004**	**4.0000e-005**	**2.2000e-004**	**0.0000**	**2.1150**	**2.1150**	**7.0000e-005**	**3.3000e-004**	**2.2148**

3.5 Paving - 2023

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	9.1900e-003	0.0884	0.0863	1.6000e-004		4.0400e-003	4.0400e-003		3.7500e-003	3.7500e-003	0.0000	13.8351	13.8351	4.1700e-003	0.0000	13.9394
Paving	4.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6400e-003**	**0.0884**	**0.0863**	**1.6000e-004**		**4.0400e-003**	**4.0400e-003**		**3.7500e-003**	**3.7500e-003**	**0.0000**	**13.8351**	**13.8351**	**4.1700e-003**	**0.0000**	**13.9394**

Unmitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.5000e-004	4.4800e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2227	1.2227	3.0000e-005	3.0000e-005	1.2336
Total	**5.0000e-004**	**3.5000e-004**	**4.4800e-003**	**1.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.2227**	**1.2227**	**3.0000e-005**	**3.0000e-005**	**1.2336**

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	9.1900e-003	0.0884	0.0863	1.6000e-004		4.0400e-003	4.0400e-003		3.7500e-003	3.7500e-003	0.0000	13.8351	13.8351	4.1700e-003	0.0000	13.9394
Paving	4.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6400e-003**	**0.0884**	**0.0863**	**1.6000e-004**		**4.0400e-003**	**4.0400e-003**		**3.7500e-003**	**3.7500e-003**	**0.0000**	**13.8351**	**13.8351**	**4.1700e-003**	**0.0000**	**13.9394**

Mitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.5000e-004	4.4800e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2227	1.2227	3.0000e-005	3.0000e-005	1.2336
Total	**5.0000e-004**	**3.5000e-004**	**4.4800e-003**	**1.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.2227**	**1.2227**	**3.0000e-005**	**3.0000e-005**	**1.2336**

3.6 Architectural Coating - 2023

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	3.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**3.6100e-003**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Unmitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0153	0.0153	0.0000	0.0000	0.0154
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0153**	**0.0153**	**0.0000**	**0.0000**	**0.0154**

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	3.1300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**3.6100e-003**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Mitigated Construction Off-Site

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0153	0.0153	0.0000	0.0000	0.0154
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0153**	**0.0153**	**0.0000**	**0.0000**	**0.0154**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.571175	0.055403	0.188166	0.116095	0.020429	0.005041	0.007817	0.006362	0.000912	0.000389	0.024445	0.000927	0.002838

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	1.3000e-003	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Unmitigated	1.3000e-003	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

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	3.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	**1.2900e-003**	**0.0000**	**1.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

Mitigated

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	3.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	**1.2900e-003**	**0.0000**	**1.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Sunnyvale SMART Station Construction - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

Vehicles Miles Traveled (VMT) Memorandum

MEMORANDUM

To:	City of Sunnyvale Attn: Deepti Jain
From:	Brad Stoneman
	Kimley-Horn and Associates, Inc.
Date:	April 2025
Subject:	Traffic Memorandum Sunnyvale SMaRT Station 2022 Addendum

Summary

This memorandum has been prepared to document the potential changes in traffic and circulation that could occur from implementation of the proposed updates to the Sunnyvale SMaRT Station (updated SMaRT Station project). This memorandum provides background information related to traffic impacts that were discussed in the original 1990 EIR for the SMaRT Station. The SMaRT Station is located at 301 Carl, Drive in the City of Sunnyvale (City) and is located within the boundaries of and is a part of the operations of the Sunnyvale Landfill. While this memorandum discusses the past findings in relation to traffic and project effects on level of service, it also discusses the newer requirements of Assembly Bill (AB 743). AB 743 required a discussion of traffic impacts in terms of vehicle miles travelled (VMT).

The EIR for the original SMaRT Station project in 1990 was prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines in effect at that time. Two subsequent EIR Addendums, one in 1992 and one in 2016 were prepared to account for minor changes to the operations and service area of the SMaRT Station. Additional minor changes have been proposed for the SMaRT Station for which a new Addendum is being prepared.

Using the previous documents as references, this memorandum discusses the potential for the updated SMaRT Station project to result in new or more significant traffic impacts. The memorandum is intended to inform the analysis for the 2025 Addendum. The updated SMaRT Station project includes the following elements as they relate to transportation.

- Replace the existing and outdated electrically powered equipment with new modern electrically powered equipment.
- Alter the permit with the Bay Area Air Quality Management District (BAAQMD) to account for the updated machinery.
- CalRecycle/Local Enforcement Agency (LEA)
- Update the municipal partnership Memorandum of Understanding (MOU) to remove the City of Palo Alto.

- Minor excavation to remove existing equipment and level the ground surface within the existing SMaRT Station footprint to enable set of new machinery.

- Maintain the existing hours of operation in accordance with the existing permit.

- Maintain the permitted traffic volumes (total vehicles entering the site) 760 daily trips on weekdays, 519 daily trips on regular weekends, and 1,390 daily trips on extra dump weekend events.

The updated SMaRT Station project would require approval from BAAQMD because the updates to the SMaRT Station and its operations would require an alteration to the existing BAQMND air quality permit. The proposed improvements would update outdated electrically powered equipment and machinery used to process waste materials. Minor ground disturbance and leveling of pads is needed to enable installation and setting of the new modern electrically powered equipment. The City of Palo Alto would be removed from the service area but the SMaRT station would continue to provide services to the City of Sunnyvale and City of Mountainview. To account for the changes issuance of a new conditional use permit (CUP) would be needed from the City and an updated solid waste facility permit issued by CalRecycle to account for the updated machinery.

The project does not propose any physical expansion of or modifications to the existing structures. The project would maintain the existing 1,500 gross tons per day processing limit and would not change the service area with the exception of the removal of Palo Alto. The project would not increase the vehicle trips either during construction or as a result of continued operations. The number of employee vehicle trips would temporarily decrease during the approximately 6–12-month construction period. This would be due to reduced intake capacity as machinery is switched out. After construction is complete, there would be a permanent decrease of approximately 21 employees because the new equipment and machinery would be more efficient. This would reduce vehicle trips by approximately 50%.

Project Location and Access

The SMaRT Station is located at 301 Carl Road, in the City of Sunnyvale CA. The proposed project takes primary access via Carl Road from Caribbean Drive for both public and truck access. Caribbean Drive is connected with Lawrence Expressway to the east and Mathilda Avenue to the west. These roadways also provide links to State Route 237 (SR 237).

Carl Road would remain the primary roadway used for direct ingress and egress to the SMaRT Station site. This has not changed since the project was proposed and evaluated in the 1990. Vehicles entering the SMaRT Station would turn north to Carl Road and then proceed east to access the SMaRT Station. To exit, the vehicles would initially use Carl Road and then turn left to Borregas Avenue to return to Caribbean Drive. Borregas Avenue and Carl Ave are parallel one-ways roadways and are separated by a landscaped median. No changes to this roadway configuration or any other are proposed as part of the updated SMaRT Station project.

Project History

The original SMaRT station service area consisted of the Cities of Sunnyvale, Mountain View, Palo Alto, and an extended service area. The 1990 EIR considered that the SMaRT Station project would result in the generation of approximately 1,832 trips (cars and trucks) per weekday and 1,514 trips on weekends. At that time, the 1990 EIR also contemplated a total intake capacity of 2,200 tons of refuse per day, not the current 1,500 tons per day.

In 1992, an addendum to the SMaRT Station project was prepared. The 1992 was needed to evaluate a reduction in the station size (10 to 9 acres), capacity reduction to 1,500 tons per day, a reconfiguration of the main building, and relocation of the wood waste processing and public buy back areas. The main building was proposed to be reduced from 128,000 square feet (sf) to 111,550 sf. The reduction of the intake capacity also would result in a reduction of vehicle trips by approximately 32% which is discussed in additional detail in the Traffic Impacts section, further below. None of these changes were found to result in additional impacts.

The 2016 Addendum was prepared to account for an increase of the SMaRT Station service area and addition of the City of Milpitas to the service area and associated changes to the Memorandum of Understanding (MOU). Although Milpitas ultimately chose not to be added, the potential increase was considered. The impacts associated with these changes were determined to not result in additional impacts.

CEQA Summary

The potential environmental effects of the SMaRT Station were originally contemplated in 1990. At that time, the environmental review process was completed pursuant to the requirements of the then current California Environmental Quality Act (CEQA). The Draft Environmental Impact Report (EIR) was circulated for public review and comment. The document was subsequently certified and the Final EIR was published in September of 1990. Two addendums to the project (one in 1992 and one in 2016) were prepared to account for minor changes to the SMaRT Station. The changes did not have the potential to increase the significance of any previously disclosed impact or require additional mitigation that could have an effect on the environment. Since the approval of the previous environmental documents, the CEQA Guidelines have been revised. One of the revisions relates to the analysis of traffic impacts and is based on the requirements of Senate Bill 743 and analysis of vehicle miles travelled (VMT). This bill and its requirements are discussed immediately following.

Senate Bill 743

SB 743 is part of a long-standing policy effort by the California legislature to improve California's sustainability and reduce greenhouse gas emissions through denser infill development, a reduction in single occupancy vehicles, improved mass transit, etc. At the time of the drafting and eventual passing of SB 743, the California legislature concluded that environmental analysis techniques could encourage development that was inconsistent with the above vision. This contributed to the decision to change the basis of environmental analysis for transportation impacts from Level of Service (LOS) to vehicle miles travelled (VMT).

VMT is understood to be a good proxy for evaluating air quality and other transportation related impacts that the State is actively trying to address. While the use of VMT to determine significant transportation, impacts has only been considered recently, it is not a new performance metric and has long been used as a basis for transportation system evaluations in the past and has been used to evaluate the performance of Travel Demand Models (TDMs).

While there are several ways to assess VMT, TDMs are often used as the basis for VMT evaluation. TDMs are used primarily because when compared to other VMT calculation tools, they are sensitive to local and regional conditions and are effective at evaluating land uses that are sensitive to the proximity of other land uses. In addition, TDMs consider other spatial and contextual considerations that other tools do not. TDMs are not without limitations, however, especially when they are used to evaluate a relatively small land use change in a regional context, such as the proposed project.

In accordance with the requirements of SB 743, CEQA guidelines underwent revisions that took effect on July 1, 2020. As part of the revision, transportation impacts were to be evaluated using VMT instead of the previously used and traditional LOS.

VMT is a measure of the actual miles that an individual in their vehicle travel as opposed to LOS which measures the relative flow of vehicles as determined by potential delays along roadways and at intersections, and the time it requires to travel from one point to the next. As part of the CEQA update, Jurisdictions were given until the July 1, 2020, date to implement new thresholds of significance based on the guidance. More specifically, the VMT thresholds are shown in the updated State CEQA § 15064.3 Determining the Significance of Transportation Impacts.

CEQA § 15064.3 (b)(3) provides for qualitative analysis of VMT impacts and notes that if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively.

At this time the City has not adopted thresholds or standards of significance that include an analysis of VMT. Therefore, due to the nature of the project (because it would not increase the scale or scope of the SMaRT Station operations and does not propose any new vehicle trips), a qualitative analysis of VMT is used as appropriate.

Summary of Previous Analysis

The 1990 EIR evaluated potential traffic impacts to local roadways and highways considering the service capacity and anticipated vehicle trips. The subsequent 1992 Addendum, and the 2016 Addendum considered traffic impacts also using LOS. To reduce impacts, from the project and ensure impacts remained less than significant and LOS was not substantially affected, the 1990 EIR proposed mitigation that was adopted as part of the SMaRT Station project. Mitigation included roadway improvements such as lengthened turn-pockets, signal timing improvements, introduction of stop controls, and signage to clarify circulation patterns and to prevent driver confusion and reduce the potential for delays. The mitigation was implemented and as applicable and if further improvements as part of other unrelated projects were not made, remains in place.

The 1992 Addendum evaluated a reduction in the SMaRT Station project footprint (from 10 to 9 acres). These modifications also reduced the operational limits and permitted tonnage from 2,200 tons per day to 1,500 tons per day.

The 2016 Addendum was prepared to account for an increase in the SMaRT Station service area with the addition of the City of Milpitas, although the city ultimately chose not to be included. In both instances, it was determined that no additional impacts would occur.

Traffic Impacts

As discussed above, the 1990 EIR evaluated the SMaRT Station with a permitted in take of 2,200 tons of refuse per day. This evaluation also anticipated the generation of a maximum number of 1,832 weekday vehicle trips, and 1,514 weekend vehicle trips. The 1990 Final EIR concluded that the SMaRT Station would not have significant traffic impacts because the projected number of traffic trips would not have a significant adverse impact on the LOS and operations at the study intersections. The document also concluded that the SMaRT Station project would not significantly increase traffic volumes on roadways within the study area. Nonetheless, mitigation measures were proposed and implement. The mitigation was used to further reduce impacts and impacts were found to be less than significant.

The revisions that were evaluated in the 1992 Addendum proposed to reduce the permitted capacity of the SMaRT Station to 1,500 tons per day. The 1992 Addendum concluded that the proposed 32% reduction in capacity also would result in a 32% reduction in traffic, and 586 fewer trips for a total of 1,246 daily trips. This revision was determined to not result in any new or more significant impacts because it would reduce the number of vehicles on the roadway. No new mitigation measures were proposed or required.

The revised project analyzed in the 2016 Addendum considered the addition of the City of Milpitas to the service area and although, as noted above, the city chose not to be served, the analysis remains valid and is considered for the purposes of this addendum and the current modifications to the SMaRT Station. The previous evaluation maintained the total capacity of 1,500 tons per day and resulted in the addition of approximately 70 additional truck trips. *Table -1 - 2016 and Milpitas Project Trip Generation*, shows the number of vehicle trips that were occurring in 2016, as well as the additional trips that were anticipated to be generated from Milpitas.

Table 1 – 2016 and Milpitas Project Trip Generation						
2016 Daily Trips	**AM Peak**			**PM Peak**		
	Total	**In**	**Out**	**Total**	**In**	**Out**
898	72	42	30	28	8	20
Milpitas Service Area (Truck Trips)	Total`	In	Out	Total	In	Out
70	4	4	8	1	1	2
TOTALS						
968	**76**	**46**	**38**	**29**	**9**	**22**

As shown in *Table 1*, the addition of the Milpitas service area was projected to add approximately 70 truck trips per day. It should be noted that although the 2016 trip counts did not differentiate between weekday and weekend trips (as was done in the previous evaluation), the total average trips, 968, was 278 fewer daily trips compared to the original 1990 estimate.

The current update to the SMaRT Station project would remove Palo Alto service area waste processed at the facility would only be received from the Cities of Mountain View and Sunnyvale. For the moment, this would result in a reduction of trips and reduce the overall VMT. In addition, according to the SMaRT Station, they are currently receiving approximately 700-800 tons per day and generates approximately 230 weekday trips, 80 weekend trips, in addition to the 600-700 trips that occur per day over four days for the weekend special events.

The SMaRT station also generates trips by providing recycling for approximately 35 tons per day of SSO/organic recycling that requires 10 – 11 trips per day. Approximately 3 trips are generated to transport materials to Sustainable Organic Solutions in Santa Clara – 8 miles, 5 trips are needed to take SSO/organic materials to ZBest in Gilroy – 44 miles away, and 2 trips to the Kirby Landfill – 27 miles away. The SMaRT station will increase these total trips to 14, but this trip increase would be short term and temporary as they would be phased out 95% in approximately 2-2.5 years (2024/2025) when the SSO/organic waste will pumped to the adjacent SWPCP. Although the tonnage of SSO may vary depending on materials received and disposal needs may fluctuate, the range of trips and VMT is not anticipated to fluctuate substantially from those listed above.

Thus, when the Palo Alto service area is removed the trips would be temporarily reduced further. It should be noted, however, the SMaRT Station is not reducing the existing 1,500 tons per day capacity and would maintain the previously accounted for 1,246 trips to ensure future services could be provided.

Conclusion

As discussed, the updated SMaRT Station project does not propose nor would it result in any additional vehicle trips and would not result in a greater VMT. The SMaRT Station project is currently receiving 230 trips per weekday day and 80 weekend trips which is substantially less than the 1,246 trips considered in the 2016 Addendum and the 1,832 considered for the SMaRT Station project evaluated in 1990. This is also 530 less trips than the currently permitted 760 trips.

As noted, the proposed project would not increase but maintain the 1,500 tons per day limit and would not increase VMT. It also would maintain the 1,246-trip standard under which it was previously evaluated to operates but generates substantially less. In addition, the service area from which additional VMT could be generated would not be expanded. It should be noted that the remaining capacity (approximately 700-800 tons) could be used in the future to provide continued recycling services which is within the scope of the previous analysis. Thus, services could be provided to other surrounding municipalities, or Milpitas if they wished to receive services without resulting in impacts greater than those previously disclosed. If this occurred, this would not result in additional impacts provided the daily trips do not exceed the volume previously evaluated. Lastly, with the improvements and use or modern equipment, the project would require approximately 21 fewer employees, which would reduce VMT from worker commutes by approximately half. Thus, under the updated SMaRT Project operations - no additional impacts to transportation and traffic would occur.

These conclusions and the information provided above, is consistent with the information available and from previous environmental documentation and planning documents. It is important to note that these conclusions are consistent with the former conclusion in the aforementioned environmental documents and impacts would remain less than significant.