# CALIFORNIA ENVIRONMENTAL QUALITY ACT
# STATEMENT OF FINDINGS

The Department of Toxic Substances Control (DTSC) has issued Findings for this project pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code, Division 13, Section 21081) and implementing Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15091 et seq.)

## A. PROJECT SUBJECT TO DTSC APPROVAL

| | | |
|---|---|---|
| PROJECT TITLE:<br>Union Pacific Property Response Plan | | SITE CODING:<br>202240 |
| PROJECT ADDRESS:<br>580 Dubuque Avenue | CITY:<br>South San Francisco | COUNTY:<br>San Mateo |
| PROJECT SPONSOR:<br>IQHQ Spur-PH I, LLC | CONTACT:<br>Kelley Gallese | PHONE/ EMAIL: 650-350-8801<br>kgallese@iqhqreit.com |

Approval Action Under Consideration by DTSC:

☐ Removal Action Workplan ☐ Interim Removal ☐ Initial Permit Issuance ☐ Permit Re-Issuance
☐ Corrective Measure Study/Statement of Basis ☐ Permit Modification ☐ Closure Plan
☐ Remedial Action Plan ☐ Regulations
☒ Other (specify): California Land Reuse and Revitalization Act (CLRRA) Response Plan

STATUTORY AUTHORITY:

☐ California H&SC, Chap. 6.5 ☒ California H&SC, Chap. 6.8 ☐ Other (specify):

PROJECT DESCRIPTION (List Specific Activities Proposed to be Undertaken):

The Department of Toxic Substances Control (DTSC) is considering approval of the Union Pacific Property (also referred to as the 580 Dubuque Avenue Site or Project Site) Response Plan. The Cleanup document, referred to as a Response Plan (RP), summarized and reported on previous environmental investigations. The RP concluded that remediation of soil and soil vapor at the Project Site is required to protect human health and the environment. The RP addressed the impacts of the chemicals of concern identified as metals, including arsenic, copper, chromium, lead, mercury, and zinc in soil, and Volatile Organic Compounds (VOCs) including benzene, chloroform, and tetrachloroethene (PCE) in soil vapor.

The RP proposes excavation and off-site disposal of approximately 12,367 cubic yards of Class 1 soil contaminated with metals. In addition, a Land Use Covenant (LUC) will be recorded with the San Mateo County Recorder which will prohibit residential or other sensitive land uses, require the implementation of a soil management plan if contaminated soil left in place will be disturbed, and require annual Site inspections to ensure compliance with the land use covenant. The excavation of soil will also remove the source area for the VOCs in soil vapor. The RP also proposes collecting soil and soil vapor samples to confirm the soil contamination and VOC source are removed. The proposed soil excavation will require approximately 1,100 truckloads over seven weeks.

**The City of South San Francisco 580 Dubuque Avenue Project**

The City of South San Francisco circulated an Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse Number 2022010277) for the 580 Dubuque Avenue Project (Redevelopment Project). The Redevelopment Project would consist of a new 295,000 square foot (sf), 8-story office/research and development (R&D) building and structured parking 4 stories below grade. The maximum height of the building would be 155 feet above the ground surface. Project site improvements would include sidewalks, landscaping, and lighting along Dubuque Avenue. While no end users have been identified, the building is targeting life science tenants.

The IS/MND and Appendices identified and analyzed the required Project Site remediation. Refer to Project Entitlements and Section 9 Hazards and Hazardous Materials in the IS/MND. The IS/MND concluded mitigation measures were required for Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Transportation and Traffic, and Tribal Cultural Resources. Refer to Attachment 1 for the approved mitigation measures.

The City of South San Francisco approved the redevelopment project on May 11, 2022, and certified the Initial Study and Mitigated Negative Declaration on May 12, 2022. The Notice of Determination was filed with the San Mateo

County Clerk Recorder's office on May 16, 2022. DTSC will file a Notice of Determination with the Office of Planning and Research/State Clearinghouse after the Response Plan is approved.

The City of South San Francisco IS/MND can be accessed at the Office of Planning and Research/State Clearinghouse - https://ceqanet.opr.ca.gov/2022010277

**Technical Memorandum 580 Dubuque Project – Assessment of CLRRA Response Plan**

The Project Sponsor prepared the *580 Dubuque Avenue Project – Assessment of CLRRA Response Plan Technical Memorandum* (Technical Memorandum) (Attachment 2) to assess whether the details of the Response Plan were sufficiently analyzed in the City of South San Francisco's IS/MND and Appendices.

The Technical Memorandum compared the estimated volumes for soil excavation and hauling presented in the IS/MND, specifically the Air Quality and Greenhouse Gas Assessment and compared those volumes to the Response Plan and the construction plans. The Technical Memorandum concluded that the estimates presented in the Air Quality and Greenhouse Gas Assessment were more conservative than those presented in the Response Plan and the construction plans. Refer to Attachment 2 which has excerpted pages from the IS/MND Attachment A: Air Quality and Greenhouse Gas Assessment highlighting the excavation volumes previously analyzed.

The Technical Memorandum concluded that the updated soil excavation and hauling estimates would not result in new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the IS/MND; that there are no changes in circumstances that would result in the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and that there is no new information resulting in a new significant environmental effects not discussed in the ISMND, a substantial increase in the severity of previously identified significant effects, or a change in the feasibility (or acceptance) of mitigation measures. DTSC concurred with the conclusions of the *580 Dubuque Avenue Project – Assessment of CLRRA Response Plan Technical Memorandum*.

DTSC will file a Notice of Determination with the Office of Planning and Research/State Clearinghouse after the Response Plan is approved.

## B. LEAD AGENCY ENVIRONMENTAL DOCUMENT REVIEWED

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| Lead Agency: City of South San Francisco |
| Lead Agency's Environmental Document: Initial Study and Mitigated Negative Declaration 580 Dubuque Avenue Project |
| Date Certified: 5/12/2022 |
| State Clearinghouse Number: 2022010277 |

## C. STATEMENT OF FINDINGS AND FACTS FOR ADEQUACY OF LEAD AGENCY ENVIRONMENTAL DOCUMENT

**Using its independent judgment, DTSC makes the following findings:**

☒ The Lead Agency Final Environmental Document includes a description of the Project now before DTSC for decision

☒ The Lead Agency Final Environmental Document adequately analyzed impacts associated with the Project before DTSC for decision.

☒ DTSC concurs with the findings made by the Lead Agency Final Environmental Document relating to the Project before DTSC for decision.

☒ Mitigation measures are included in the Lead Agency Final Environmental Document for the following resources that would potentially be affected by the DTSC project.

| | |
|---|---|
| ☐ Aesthetics | Mitigation Measure: None |
| ☐ Agricultural Resources | Mitigation Measure: None |
| ☒ Air Quality | Mitigation Measure: See Attachment 1. |
| ☐ Agricultural Resources | Mitigation Measure: None |
| ☒ Biological Resources | Mitigation Measure: See Attachment 1. |
| ☒ Cultural Resources | Mitigation Measure: See Attachment 1. |
| ☐ Energy | Mitigation Measure: None |
| ☒ Geology / Soils | Mitigation Measure: See Attachment 1. |
| ☐ Greenhouse Gas Emissions | Mitigation Measure: None |
| ☒ Hazards / Hazardous Materials | Mitigation Measures: See Attachment 1. |
| ☒ Hydrology / Water Quality | Mitigation Measure: See Attachment 1. The IS/MND identified the Geology/Soils Mitigation Measure Geo-1 and the Hazards/Hazardous Materials Mitigation Measure Haz-1 as applicable mitigation measures for Hydrology/Water Quality. |
| ☐ Land Use / Planning | Mitigation Measure: None |
| ☐ Mineral Resources | Mitigation Measure: None |
| ☐ Noise | Mitigation Measure: None |
| ☐ Population / Housing | Mitigation Measure: None |
| ☐ Public Services | Mitigation Measure: None |
| ☐ Recreation | Mitigation Measure: None |
| ☒Transportation / Traffic | Mitigation Measure: See Attachment 1. |
| ☒ Tribal Cultural Resources | Mitigation Measure: See Attachment 1. |
| ☐ Utilities / Service Systems | Mitigation Measure: None |
| ☐ Wildfire | Mitigation Measure: None |

☒ Mitigation measures identified in the Lead Agency Final Environmental Document have been adopted by DTSC for this Project and will be implemented to avoid, reduce, or substantially lessen the project impacts. No additional mitigation measures are necessary, and no additional mitigation monitoring plan is required pursuant to CEQA.

For each significant environmental effect identified for the Project:

☒ Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the Lead Agency Final Environmental Document.

☒ Such changes or alterations are within the responsibility and jurisdiction of the Lead Agency not DTSC.

☒ Such changes have been adopted by this public agency or can and should be adopted by this public agency.

☐ Mitigation measures included in the Lead Agency Final Environmental Document are infeasible, and therefore, will not be incorporated into the DTSC Project for the following reasons: N/A

**BASED ON THE ABOVE FINDINGS, DTSC CONCLUDES:**

☒ The proposed Project will not result in significant and unavoidable effects to the environment.

☐ The proposed Project will result in significant and unavoidable effects to the following environmental resources:

☐ Air Quality
☐ Agricultural Resources
☐ Biological Resources
☐ Cultural Resources
☐ Energy
☐ Geology/ Soils
☐ Greenhouse Gas Emissions
☐ Hazards/Hazardous Materials
☐ Hydrology/ Water Quality
☐ Mineral Resources
☐ Noise
☐ Population/Housing
☐ Public Services
☐ Recreation
☐ Transportation/Traffic
☐ Tribal Cultural Resources
☐ Utilities/ Service Systems
☐ Wildfire

Impacts to these resources would remain significant even after applying mitigation measures described in the Lead Agency Final Environmental Document, or there is no feasible mitigation available.

In accordance with Cal. Code of Regs., title 14, section 15093, a Statement of Overriding Considerations was adopted by the Lead Agency for these resources. DTSC adopts a Statement of Overriding Considerations for these resources having determined that the DTSC Project benefits outweigh the significant environmental effects for the following reasons: The DTSC remedial actions reduce the exposure of contaminated soil, soil gas, and groundwater in order to render it safe for Site occupants. The DTSC remedial project also serves to protect human health and the environment, which are DTSC's responsibilities under the California Health and Safety Code.

☒ None of the conditions requiring a subsequent EIR or Negative Declaration pursuant to Cal. Code Regs., tit. 14 Section 15162 exist.

☒ In accordance with Cal. Code of Regs., title 14, section 15093, a Notice of Determination indicating the results of said Findings will be filed with the Governor's Office of Planning and Research / State Clearinghouse.

## D. CERTIFICATION

11/2/2022

Project Manager's Signature | Date

| Nathan Unangst | Engineering Geologist | 510-540-3760 |
|---|---|---|
| Project Manager's Name | Title | Phone # |

11/3/2022

Branch Chief's Signature | Date

| Julie Pettijohn | Branch Chief | 510-540-3843 |
|---|---|---|
| Branch Chief's Name | Title | Phone # |

# ATTACHMENT 1

Union Pacific Property, 580 Dubuque Avenue, South San Francisco, CA
Refer to IS/MND Mitigation Measures

# MITIGATED NEGATIVE DECLARATION

## PROJECT DESCRIPTION, LOCATION, AND SETTING

This Mitigated Negative Declaration has been prepared for the 580 Dubuque Avenue project. See the Introduction and Project Information section of this document for details of the project.

## POTENTIALLY SIGNIFICANT IMPACTS REQUIRING MITIGATION

The following is a list of potential project impacts and the mitigation measures recommended to reduce these impacts to a less than significant level. Refer to the Initial Study Checklist section of this document for a more detailed discussion.

| Potential Impact | Mitigation Measures |
|---|---|
| **Air Quality, Construction Emissions**: Construction of the project would result in emissions and fugitive dust. While the project emissions would be below threshold levels, the Bay Area Air Quality Management District (BAAQMD) considers dust generated by grading and construction activities to be a significant impact associated with project development if uncontrolled and recommends implementation of construction mitigation measures to reduce construction-related emissions and dust for all projects, regardless of comparison to their construction-period thresholds. | |
| | **Mitigation Measure**<br>**Air-1: Basic Construction Management Practices.** The project shall demonstrate proposed compliance with all applicable regulations and operating procedures prior to issuance of demolition, building or grading permits, including implementation of the following BAAQMD "Basic Construction Mitigation Measures":<br>i) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.<br>ii) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.<br>iii) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day, unless the City Engineer determines that an alternative cleaning method would achieve the same standard of air pollution prevention and also reduce the potential for stormwater pollution.<br>iv) All vehicle speeds on unpaved roads shall be limited to 15 mph.<br>v) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.<br>vi) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. |

| Potential Impact | Mitigation Measures |
|---|---|
| | vii) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.<br>viii) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. |
| **Biological Impact:** Trees in the vicinity of the project site could host the nests of common birds that are protected under the federal Migratory Bird Treaty Act and the California Fish and Wildlife Code, so the following mitigation would be applicable to ensure no significant impacts occur with respect to these species during nesting. | |
| | **Mitigation Measure**<br>**Bio-1: Pre-Construction Nesting Bird Survey.** Initiation of construction activities during the avian nesting season (February 15 through September 15) shall be avoided to the extent feasible. If construction initiation during the nesting season cannot be avoided, pre-construction surveys for nesting birds protected by the Migratory Bird Treaty Act of 1918 and/or Fish and Game Code of California within 100 feet of a development site in the project area shall be conducted within 14 days prior to initiation of construction activities. If active nests are found, a 100-foot buffer area shall be established around the nest in which no construction activity takes place. The buffer width may be modified upon recommendations of a qualified biologist regarding the appropriate buffer in consideration of species, stage of nesting, location of the nest, and type of construction activity based upon published protocols and/or guidelines from the U.S. or California Fish and Wildlife Services (USFWS, CDFW) or through consultation with USFWS and/or CDFW. The biologist may also determine that construction activities can be allowed within a buffer area with monitoring by the biologist and stoppage of work in that area if adverse effects to the nests are observed. The buffer shall be maintained until after the nestlings have fledged and left the nest. These surveys would remain valid as long as construction activity is consistently occurring in a given area and would be completed again if there is a lapse in construction activities of more than 14 consecutive days during the nesting season. |
| **Cultural Resources Impact**: There are no known cultural resources at the site. However, given the moderate to high potential for unrecorded archeological resources and proposed disturbance of native soils which also have the potential to contain paleontological resources, mitigation measures Cul-1 through Cul-4 shall be implemented to address the potential for unexpected discovery of such resources. | |

| Potential Impact | Mitigation Measures |
|---|---|
| | **Mitigation Measures**<br>**Cul-1: Sampling and/or Monitoring Plan**. Prior to ground disturbance, a qualified archaeologist shall draft project specific recommendations for sampling and/or monitoring for subsurface paleontological, archaeological, and/or tribal resources during excavation as determined necessary based on cords searches and previous studies of the site. Next steps could include additional exploration prior to construction, monitoring of site disturbance by a qualified professional, or no additional action other than that specified in Cul-2, Cul-3, and Cul-4. The plan and supporting reasoning shall be submitted to the City of South San Francisco for approval and the applicant shall be responsible for implementing the plan and any follow-up actions determined to be necessary.<br>**Cul-2: Cultural Resources Worker Environmental Awareness Program (WEAP)**. A qualified archaeologist shall conduct a WEAP training for all construction personnel on the project site prior to construction and ground-disturbing activities. The training shall include basic information about the types of paleontological, archaeological, and/or tribal artifacts that might be encountered during construction activities, and procedures to follow in the event of a discovery. This training shall be provided for any personnel with the potential to be involved in activities that could disturb native soils.<br>**Cul-3: Halt Construction Activity, Evaluate Find and Implement Mitigation**. In the event that previously unidentified paleontological, archaeological, or tribal resources are uncovered during site preparation, excavation or other construction activity, the project applicant shall cease or ensure that all such activity within 25 feet of the discovery is ceased until the resources have been evaluated by a qualified professional, who shall be retained by the project applicant, and specific measures are implemented by the project applicant to protect these resources in accordance with sections 21083.2 and 21084.1 of the California Public Resources Code.<br>**Cul-4: Halt Construction Activity, Evaluate Remains and Take Appropriate Action in Coordination with Native American Heritage Commission**. In the event that human remains are uncovered during site preparation, excavation or other construction activity, the project applicant shall cease or ensure that all such activity within 25 feet of the discovery is ceased until the remains have been evaluated by the County Coroner, which evaluation shall be arranged by the project applicant, and appropriate action taken by the project applicant in accordance with section 7050.5 of the California Health and Safety Code and, if the remains are Native American, in accordance with section 5097.98 of the California Public Resources Code. |
| **Geological Impact**: The San Francisco Bay Area is a seismically active region. The project site includes undocumented fill. Construction activities require substantial excavation and dewatering. To mitigate the potential for damage to structures or people, Mitigation Measure Geo-1 shall be implemented. | |

| Potential Impact | Mitigation Measures |
|---|---|
| | **Mitigation Measure**<br>**Geo-1: Compliance with a design-level Geotechnical Investigation report prepared by a Registered Geotechnical Engineer and with Structural Design Plans as prepared by a Licensed Professional Engineer.** Proper foundation engineering and construction shall be performed in accordance with the recommendations of a Registered Geotechnical Engineer and a Licensed Professional Engineer. The structural engineering design, with supporting Geotechnical Investigation, shall incorporate seismic parameters compliant with the California Building Code. |
| **Hazardous Site Impact**: The site is impacted by contamination from historic and adjacent uses, mostly due to historic railroad use of the site and undocumented fill. The main contamination of concern is mainly low levels of lead and other metals in the soil. Removal and mitigation of impacted soil is proposed as part of project construction activities and would be performed per requirements of the regulatory agency, the California Department of Toxic Substances Control, as outlined in Haz-1. | |
| | **Mitigation Measure**<br>**Haz-1: Response Plan Implementation and Completion.** The applicant shall coordinate with DTSC to implement a Response Plan pursuant to the previously-approved CLRRA Agreement (Docket No HSA-FY19/20-013) to appropriately mitigate soil contamination. Evidence of plan approval by DTSC shall be submitted to the City prior to initiation of earth-moving at the site and a Certificate of Completion (or other no further action documentation) shall be submitted prior to issuance of Occupancy Permits. While details will be coordinated with DTSC, the following components are anticipated to be included in the Response Plan:<br>1. Soil Management. The proposed construction activities will disturb soil during the excavation, site grading, construction of new foundations, and installation of utility lines. During excavation activities, dust control measures will be implemented. The soil management objectives for the site are to control exposure of potentially hazardous constituents in soil to construction workers, nearby residents and/or pedestrians, and future users of the site, all implemented pursuant to the DTSC-approved plan. The components of the Response Plan will establish and maintain required health and safety procedures to control worker and public exposure to site contaminants during construction including but not necessarily limited to the elements listed below.<br>2. Dust Control. During handling of potentially contaminated soils, an enhanced dust control plan with provisions to protect construction workers and the public will be implemented through engineering controls, to control generation of dust and resulting off-site migration of contaminants in site soil. Dust control measures will include:<br>• Covering soil stockpiles with plastic sheeting.<br>• Watering uncovered ground surface at the site to prevent visible dust from becoming air-borne. |

| Potential Impact | Mitigation Measures |
|---|---|
| | • Misting or spraying of soil as required during excavation and loading.<br>• Placement of gravel and/or rubble plates on unpaved site access roads as feasible.<br>• Covering of trucks hauling contaminated soil from the site with a tarpaulin or other cover.<br>• Reducing to as low as feasible the soil drop from an excavator's bucket onto soil piles or into transport trucks.<br>• Deployment of windbreaks as necessary.<br>• Posting on-site vehicle speed limits.<br>• Street sweeping of public streets as required when soils are visible.<br>• Termination of excavation and loading activities if winds exceed 15 mph.<br>• Addition of soil stabilizers and other responses as needed.<br>3. Health and Safety Plan. The potential health risk to on-site construction workers and the public will be minimized by developing and implementing a comprehensive Health and Safety Plan prepared by a certified industrial hygienist representing the contractor. The purpose of the Health and Safety Plan is to provide field personnel with an understanding of the potential chemical and physical hazards, protection of any off-site receptors, procedures for entering the project site, health and safety procedures, and emergency response to hazards should they occur. All project personnel shall undergo the identified health and safety training, and read and adhere to the procedures established in the Health and Safety Plan. A copy of the Health and Safety Plan shall be kept on site during field activities and reviewed and updated as necessary.<br>The Health and Safety Plan will describe the specific personal hygiene and monitoring equipment that will be used during construction to protect and verify the health and safety of the construction workers and the general public from exposure to constituents in the soil and groundwater.<br>4. Health and Safety Officer. A site health and safety officer identified in the Health and Safety Plan will be on site at all times during excavation activities to ensure that all health and safety measures are maintained. The health and safety officer will have authority to direct and stop (if necessary) all construction activities in order to ensure compliance with the health and safety plan.<br>5. Groundwater Management. Construction dewatering is anticipated based on development plans, however, per analytic results of groundwater sampling, it is anticipated the groundwater from the site will be able to be discharged into the sanitary sewer system with no additional treatment. While not anticipated to be included as a required element of the Response Plan, any construction dewatering must adhere to a discharge permit obtained from the South San Francisco Department of Public Works Water Quality Control Division, Environmental Compliance Program or the Regional Water Quality Control Board. In the event of the presence of regulated levels of contamination, measures will be taken to comply with applicable |

| Potential Impact | Mitigation Measures |
|---|---|
| | requirements.<br>6. Contingency Plans for Unknown/Unexpected Conditions. The following tasks shall be implemented during excavation activities if unanticipated hazardous materials are encountered. Such materials may include unaccounted for underground storage tanks and associated product lines, sumps, and/or vaults, former monitoring wells, and/or soil with significant petroleum hydrocarbon odors and/or stains.<br>• Stop work in the area where the suspect material is encountered and cover with plastic sheets.<br>• Notify the site safety officer and site superintendent.<br>• Have an appropriate professional conduct a site inspection and determine appropriate follow-up actions, which would include appropriate handling and removal of the identified hazard.<br>• Review the existing health and safety plan for revisions, if necessary, and have appropriately trained personnel on-site to work with the affected materials as required by applicable requirements. |
| **Traffic Hazard Impact**: Under existing conditions, the curved alignment of Dubuque Avenue combined with the existing fence/retaining wall impacts the visibility of northbound traffic for drivers exiting onto Dubuque Avenue from the shared project and Caltrain station parking lot driveway. Additionally, signs attached to the fence and vegetation at the corner of the property to the north obstruct sight distance between southbound Dubuque Avenue traffic and vehicles exiting the shared project and Caltrain driveway under existing conditions. Because the proposed project would add traffic to the existing driveway on Dubuque Avenue, the project would exacerbate an existing traffic hazard, resulting in a potentially significant safety impact. Implementation of the safety improvements identified in Mitigation Measure Trans-1 would result in adequate sight distance at this intersection. | |
| | **Mitigation Measure**<br>**Trans-1: Shared Dubuque Avenue Driveway Safety Improvements.** The applicant shall coordinate the following safety improvements for the intersection of Dubuque Avenue and the shared Caltrain / project driveway to provide adequate sight distance between northbound Dubuque Avenue traffic and vehicles exiting the shared Dubuque Avenue driveway.<br>a) The applicant shall coordinate with the City to decrease the speed limit on Dubuque Avenue to 25 mph.<br>b) The applicant shall coordinate with the City to reduce the height of the fence along the retaining wall on Dubuque Avenue to the south of the project site to improve visibility of approaching northbound traffic.<br>Additionally, the applicant shall coordinate with the City and adjacent properties as reasonably feasible to address existing sight distance obstructions at the intersection of Dubuque Avenue and the shared Caltrain / project driveway as follows:<br>c) Coordinate with Caltrain to relocate or reduce the height of the existing |

| Potential Impact | Mitigation Measures |
|---|---|
| | "Caltrain Station Parking" sign located on the south side of the shared Dubuque Avenue driveway to provide adequate sight distance between northbound Dubuque Avenue traffic and vehicles exiting the shared Dubuque Avenue driveway.<br>d) Coordinate with the property owner to the north to clear obstructing signs from the fence and vegetation from the corner of their property to provide adequate sight distance between southbound Dubuque Avenue traffic and vehicles exiting the shared Dubuque Avenue driveway. |
| **Tribal Cultural Resources Impact**: There are no recorded tribal cultural resources at the site. However, given the moderate to high potential for unrecorded Native American resources, mitigation measures Cul-1 through Cul-4, above, shall be implemented to address the potential for unexpected discovery of such resources. | |
| | **Mitigation Measures**<br>Cul-1 through Cul-4, detailed above. |

# ATTACHMENT 2

Union Pacific Property, 580 Dubuque Avenue, South San Francisco, CA
Refer to Technical Memorandum 580 Dubuque Project – Assessment of CLRRA Response Plan

# LAMPHIER-GREGORY

## TECHNICAL MEMORANDUM

PREPARED FOR: Marin Gertler
IQHQ-Spur Ph 1, LLC
674 Via De La Valle, Suite 206
Solana Beach, California 92075

PREPARED BY: Rebecca Auld, Vice President
Lamphier-Gregory, Inc.
4100 Redwood Road, STE 20A - #601, Oakland, CA 94619

SUBJECT: **580 Dubuque Avenue Project – Assessment of CLRRA Response Plan**

DATE: September 29, 2022

**Background and Purpose**

The 580 Dubuque Avenue project (also referred to as "Site" herein) was analyzed in an Initial Study/Mitigated Negative Declaration (IS/MND) with State Clearinghouse Number 2022010277 that was circulated for public review from 1/19/2022 through 2/17/2022. The project was approved and the IS/MND was adopted at a City of South San Francisco ("City") City Council hearing on 5/11/2022 with the subsequent contingent General Plan Amendment approved on 7/27/2022. The adopted IS/MND for the 580 Dubuque Avenue project included an analysis of existing site conditions, including legacy soil contamination and planned remedial and monitoring measures in relation to same. South City Ventures, LLC entered into a Site cleanup agreement pursuant to the California Land Reuse and Revitalization Act (CLRRA) (Health and Safety Code Chapter 6.82 and 6.83) with the California Department of Toxic Substances Control (DTSC) on 1/23/2020, which had been included as Attachment C to the IS/MND. South City Ventures, LLC, changed their name to IQHQ-Spur Ph 1, LLC, on May 19, 2022.

Since adoption of the IS/MND for the Site, the applicant and DTSC have continued working through the requirements of CLRRA, including development of the required Response Plan,[1] which details site contamination clean-up and mitigation efforts, and related soil excavation, hauling and disposal details. Because the CLRRA Response Plan was not yet prepared at the time of the IS/MND adoption, it was necessary for the IS/MND to project possible and likely elements of the CLRRA Response Plan and to analyze conservative assumptions regarding the amount of contaminated excavated soil that would be required.

[1] Note that the IS/MND used the term "Remediation Plan" to refer to this plan. The "Remediation Plan" is the same document as what is now titled and referred to as the "Response Plan". Response Plan citation: *Report of Findings and Draft Response Plan, Union Pacific Property, Dubuque Avenue, Site Code 202240, 580 Dubuque Avenue, South San Francisco, California*. Prepared by Langan Engineering and Environmental Services, Inc., for IQHQ-Spur Ph 1, LLC. September 21, 2022. Available on Envirostor: https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002804

The purpose of this Technical Memorandum is to assess whether the details of the CLRRA Response Plan, now that they are fully identified, were sufficiently analyzed in the adopted IS/MND for the Site or alternatively if subsequent analysis is required. The California Environmental Quality Act (CEQA) Guidelines Section 15162 provides the following guidance:

(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 the light of the whole record, one or 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;

(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; or

(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 effects not discussed in the previous EIR or negative declaration;

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

(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 subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

State CEQA Guidelines Section 15164 states that an Addendum to an adopted MND may be prepared when minor changes or additions are necessary and none of the conditions for preparation of a Subsequent EIR/MND pursuant to Section 15162 (listed above) are satisfied.

**Summary Conclusions**

This Technical Memorandum summarizes the information and analysis in the IS/MND and its Appendices for the approved project, and the Response Plan's proposed remediation activities consisting of soil

excavation, hauling and disposal. Based on the Air Quality and Greenhouse Gas Assessment (IS/MND Attachment A), the Response Plan does not trigger the requirement for preparation of a subsequent EIR or MND. Additionally, because the IS/MND analysis contained in the Air Quality and Greenhouse Gas Assessment covered the cubic yards of contaminated soil to be excavated at the Site pursuant to the CLRRA Response Plan, the requirement for an Addendum is not triggered.

**Discussion of the Response Plan in the IS/MND**

The IS/MND included discussion of site remediation, excerpted and attached as Exhibit A. As detailed in the excerpt from the IS/MND, Mitigation Measure Haz-1 was identified to allow City tracking of the required CLRRA Response Plan process with DTSC oversight. Mitigation Measure Haz-1 was adopted by the City as part of the Mitigation Monitoring and Reporting Program for the project, and would be satisfied through acceptance by DTSC of the Response Plan and implementation of said plan.

As implementation of an adopted Mitigation Measure, acceptance and implementation of the Response Plan would not result in a new significant impact or a substantial increase in the severity of previously identified impacts, would not require new mitigation, and would therefore not trigger issuance of further environmental documentation under CEQA Guidelines Sections 15162 or 15164.

The above conclusion is further explored with respect to the quantified details of the analysis assumptions below.

**Comparison of the Response Plan to the Assumptions in the IS/MND**

For purposes of this Technical Memorandum, soil will be discussed as either "clean," meaning that it meets requirements for reuse on this or another site, or "contaminated," meaning that the soil would need to be disposed of either in a landfill or hazardous materials facility depending on the classification.

The IS/MND indicated on page 6 that, "The project would involve removal of contaminated soil and excavation for subsurface parking extending to depths of up to about 60 feet below ground surface." It further specified in the Air Quality and Greenhouse Gas attachment that quantified modeling was based on up to 134,016 cubic yards of soil hauling, up to 76,016 of which could be exported as contaminated soil.[2] Relevant excerpted pages are attached as Exhibit B.

The Response Plan and the construction plans identify approximately 101,424 cubic yards (CY) of soil will be required to be excavated , including the following soil volumes by type:

Class 1 RCRA: 3,240 CY [3]
Class 1 non-RCRA: 9,127 CY [4]

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[2] IS/MND Attachment A: Air Quality and Greenhouse Gas Assessment. Volumes are specified in the text and table on numbered pages 12 and 13, then the following un-numbered pages of the Attachment A pdf: 46th, 52nd, 117th.

[3] There are two sets of waste classification statutes used in California for hazardous waste: federal and state. Federal hazardous waste regulations adopted by U.S. EPA are found in Title 40, Code of Federal Regulations, (40 CFR), Parts 260- 279. The federal regulations were implemented under the authority of Chapter 42, United States Code, (Resource Conservation and Recovery Act, also known as RCRA). Contaminated soil regulated under this federal regulation is classified as "Class 1 RCRA".

[4] California hazardous waste regulations are outlined in the statute: California Health & Safety Code, (HSC), Division 20, Chapter 6.5 (Hazardous Waste Control Law). Regulations adopted from the HSC are found in the California Code

Class 2 non-hazardous: 7,277 CY [5]
Mass Excavation (clean): 74,630 CY
Spoils allowance (clean): 7,150 CY

Table 1 below summarizes the comparison of soil excavation assumptions.

**Table 1: Comparison of Soil Excavation Assumptions, IS/MND and Response Plan**

| | Assumptions for Soil Excavation Volumes (cubic yards) | | |
|---|---|---|---|
| **Type of Soil** | **IS/MND [a]** | **Response Plan [b]** | **Response Plan greater than IS/MND?** |
| Class 1 Soil [c] | | 12,367 | |
| Class 2 Soil | | 7,277 | |
| "Remediation" Soil Total (Class 1 and 2) [d] | 76,016 | 19,644 | |
| "Grading" Soil Total [d] | 58,000 | 81,780 | |
| **Total Soil Excavation** | **134,016** | **101,424** | ***No*** [e] |
| Imported Fill (trench) [f] | | 600 | |
| Imported Aggregate Base [f] | | 1,500 | |
| **Total Soil Hauling** [f] | **134,016** | **103,524** | ***No*** |

a Source for the numbers in the IS/MND column are IS/MND Attachment A: Air Quality and Greenhouse Gas Assessment. Volumes are specified in the text and table on numbered pages 12 and 13, then the following un-numbered pages of the Attachment A pdf: 46th, 52nd, 117th.

b Source for the numbers in the Response Plan column are the applicant team and Response Plan.

c The Class 1 RCRA and Class 1 non-RCRA soils (totaled in this row) are the soils addressed in the Response Plan.

d The IS/MND volumes were divided by "Remediation" soil, being soil removed as part of site response that could not be reused, and the "Grading" soil total being additional soil excavation to accommodate site development. The Grading total includes planned excavation of clean soil and spoils allowance.

e "Grading" soil would require the same or less handling and transport than the "Remediation" soil. Therefore, it does not matter if the "Grading" soil total is higher than in the IS/MND analysis, so long as the total soil excavation remains below the total soil excavation amount.

f The IS/MND did not specify import of materials during remediation and grading. However, some small amount of clean soil and/or aggregate could be imported to be used during this process. The current estimates are shown in these rows. As shown by the total soil hauling volumes, there is still additional volumes that could be used in this way without exceeding the volumes included in the IS/MND analysis.

of Regulations (CCR), division 4.5, title 22. Contaminated soil regulated under this state regulation is classified as "Class 1 non-RCRA".

[5] Soil that isn't appropriate for reuse, but isn't classified as hazardous under federal or state statutes is indicated as "Class 2 non-hazardous". This type of soil is usually disposed of at a local landfill.

As noted above, because final details of the Response Plan were not known at the time of the IS/MND analysis, the IS/MND made conservative assumptions with the intent that the assumptions for the analysis would be the same or greater than the final volumes and would therefore not need to be recalculated.

As shown in Table 1, the analysis in the IS/MND included assumptions for a greater volume of total soil hauling as well as a greater volume of contaminated soil -excavation then currently proposed . Therefore, the actual environmental impact of the project implementing the Response Plan would be less than the impacts identified in the IS/MND. Because the IS/MND reached conclusions that project impacts would be less than significant (with or without mitigation), impact conclusions do not need to be revised. The CLRRA Response Plan and refined details regarding soil excavation would not result in a new significant impact or a substantial increase in the severity of previously identified impacts, would not require new mitigation, and would therefore not trigger issuance of further environmental documentation under CEQA Guidelines Sections 15162 or 15164.

**Conclusions**

Given the substantial evidence above, implementation of the CLRRA Response Plan would not require subsequent analysis per CEQA Guidelines Section 15162, as confirmed by the following statements:

(1) The Response Plan and related refined details of soil excavation and hauling would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) There are no changes in circumstances that would result in the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) There is no new information resulting in a new significant effect not discussed in new significant environmental effects, a substantial increase in the severity of previously identified significant effects, or a change in the feasibility (or acceptance) of mitigation measures.

While the refined details of the Response Plan being contaminated soil excavation, hauling, and disposal are now available after adoption of the IS/MND, this Technical Memorandum assessment has determined that no further documentation is required per CEQA Guidelines Sections 15162 and 15164. The 580 Dubuque Avenue Project IS/MND can continue to serve as the applicable environmental review document pursuant to the requirements of CEQA for approval and implementation of the Response Plan.

**EXHIBIT A**

**IS/MND Discussion of Site Remediation**

Excerpted from IS/MND pp. 49-51:

The site is listed as a Voluntary Cleanup hazardous materials site for past contamination related to historic use of the site by Union Pacific Railroad from approximately the 1940s and ceasing by the early 1990s (DTSC's Envirostor Site Code: 202240).

Contamination at historic railroad sites can come from hazardous materials used in the construction of railroad tracks and associated structures; materials storage; chemicals that may have been used for dust suppression and weed control along the rail lines including pesticides, herbicides, petroleum hydrocarbons; and toxic preservatives that were used on the wooden rail ties. Additionally, the project site contains undocumented fill, which can contain contaminants from wherever the fill was sourced from.

Due to the known potential for contamination at the site, various tests of the groundwater and soils have been performed at the site over the years, with the following conclusions:

- **Soils**: The primary contaminants of concern in site soils were mainly low levels of metals, including antimony, arsenic, cobalt, copper, lead, nickel, and zinc. The lead and copper concentrations at some locations may qualify those soils as hazardous waste (Class 1 and Class 2). Additional soil contaminants were sampled that exceeded residential – but not commercial – screening levels including petroleum hydrocarbons (fuels). Given the proposed non-residential development planned for the site, these are not further specified here. Arsenic and asbestos were detected in the soil at levels consistent with background levels in natural soils in the area.
- **Groundwater**: No contaminants were detected in the groundwater above commercial screening levels for groundwater not used as a drinking water resource or for aquatic habitat. Limited groundwater samples at the site identified benzene above residential – but not commercial – direct exposure screening levels, so this is not further discussed for the proposed non-residential project. Some metals were detected at levels exceeding thresholds for aquatic habitats, but it was determined these standards would not be applicable to the site given the distance from the site to the nearest aquatic habitat along Colma Creek so they are not further discussed.

DTSC (California Department of Toxic Substances Control) is the lead regulatory agency for remediation of the project site. A CLRRA Agreement was executed between the applicant and DTSC on January 23, 2020 (Docket No. HSA-013), which outlines requirements for remediation of the site pursuant to CLRRA (see Attachment C). A Remediation Plan is required to be approved by DTSC pursuant to CLRRA prior to the start of construction activities at the site, which will detail remediation activities. The applicant anticipates this will include excavation and proper handling and disposal of contaminated site soils as part of project development, then appropriate mitigation of any remaining materials. A Certificate of Completion would be issued by DTSC once actions are completed at the site pursuant to CLRRA. While these actions are required per coordination with the regulatory agency, DTSC, the following mitigation measure Haz-1 shall be implemented to ensure appropriate tracking of actions by the City.

**Mitigation Measure**

**Haz-1:** **Remediation Plan Implementation and Completion**. The applicant shall coordinate with DTSC to implement a Remediation Plan pursuant to the previously-approved CLRRA Agreement (Docket No. HSA-FY19/20-013) to appropriately mitigate soil contamination.

Evidence of plan approval by DTSC shall be submitted to the City prior to initiation of earth-moving at the site and a Certificate of Completion (or other no further action documentation) shall be submitted prior to issuance of Occupancy Permits. While details will be coordinated with DTSC, the following components are anticipated to be included in the Remediation Plan:

1. **Soil Management.** The proposed construction activities will disturb soil during the excavation, site grading, construction of new foundations, and installation of utility lines. During excavation activities, dust control measures will be implemented. The soil management objectives for the site are to control exposure of potentially hazardous constituents in soil to construction workers, nearby residents and/or pedestrians, and future users of the site, all as implemented pursuant to the DTSC-approved plan. The components of the Remediation Plan will establish and maintain required health and safety procedures to control worker and public exposure to site contaminants during construction including but not necessarily limited to the elements listed below.
2. **Dust Control.** During handling of potentially contaminated soils, an enhanced dust control plan with provisions to protect construction workers and the public will be implemented through implementation of engineering controls, to control generation of dust and resulting off-site migration of contaminants in site soil. Dust control measures will include:
    - Covering soil stockpiles with plastic sheeting.
    - Watering uncovered ground surface at the site to prevent visible dust from becoming air-borne.
    - Misting or spraying of soil as required during excavation and loading.
    - Placement of gravel and/or rubble plates on unpaved site access roads as feasible.
    - Covering of trucks hauling contaminated soil from the site with a tarpaulin or other cover.
    - Reducing to as low as feasible the soil drop from an excavator's bucket onto soil piles or into transport trucks.
    - Deployment of windbreaks as necessary.
    - Posting on-site vehicle speed limits.
    - Street sweeping of public streets as required when soils are visible.
    - Termination of excavation and loading activities if winds exceed 15 mph.
    - Addition of soil stabilizers and other responses as needed.
3. **Health and Safety Plan**. The potential health risk to on-site construction workers and the public will be minimized by developing and implementing a comprehensive Health and Safety Plan prepared by a certified industrial hygienist representing the contractor. The purpose of the Health and Safety Plan is to provide field personnel with an understanding of the potential chemical and physical hazards, protection of any off-site receptors, procedures for entering the project site, health and safety procedures, and emergency response to hazards should they occur. All project personnel shall undergo the identified health and safety training, and read and adhere to the procedures

established in the Health and Safety Plan. A copy of the Health and Safety Plan shall be kept on site during field activities and reviewed and updated as necessary.

The Health and Safety Plan will describe the specific personal hygiene and monitoring equipment that will be used during construction to protect and verify the health and safety of the construction workers and the general public from exposure to constituents in the soil and groundwater.

4. **Health and Safety Officer.** A site health and safety officer identified in the Health and Safety Plan will be on site at all times during excavation activities to ensure that all health and safety measures are maintained. The health and safety officer will have authority to direct and stop (if necessary) all construction activities in order to ensure compliance with the health and safety plan.
5. **Groundwater Management**. Construction dewatering is anticipated based on development plans, however, per analytic results of groundwater sampling, it is anticipated the groundwater from the site will be able to be discharged into the sanitary sewer system with no additional treatment. While not anticipated to be included as a required element of the Remediation Plan, any construction dewatering must adhere to a discharge permit obtained from the South San Francisco Department of Public Works Water Quality Control Division, Environmental Compliance Program or the Regional Water Quality Control Board. In the event of the presence of regulated levels of contamination, measures will be taken to comply with applicable requirements.
6. **Contingency Plans for Unknown/Unexpected Conditions.** The following tasks shall be implemented during excavation activities if unanticipated hazardous materials are encountered. Such materials may include unaccounted for underground storage tanks and associated product lines, sumps, and/or vaults, former monitoring wells, and/or soil with significant petroleum hydrocarbon odors and/or stains.
    - Stop work in the area where the suspect material is encountered and cover with plastic sheets.
    - Notify the site safety officer and site superintendent.
    - Have an appropriate professional conduct a site inspection and determine appropriate follow-up actions, which would include appropriate handling and removal of the identified hazard.
    - Review the existing health and safety plan for revisions, if necessary, and have appropriately trained personnel on-site to work with the affected materials as required by applicable requirements.

Implementation of Mitigation Measure Haz-1 would reduce the impacts associated with upset or accidental release related to a hazardous materials site to a level of ***less than significant with mitigation***.

**EXHIBIT B**

**Excerpted pages from IS/MND Attachment A: Air Quality and Greenhouse Gas Assessment showing excavation volumes**

Note that these excerpted pages include numbered pages 12 and 13, then the following un-numbered pages of the IS/MND Attachment A pdf: 46th, 52nd, 117th.

site activity includes worker, hauling, and vendor traffic. The construction build-out scenario, including equipment list and schedule, were provided by the applicant. The applicant also provided other information such as hauling quantities, asphalt trips, and concrete trips.

The CalEEMod construction information included the schedule for each phase. Within each phase, the quantity of equipment to be used along with the average hours per day and total number of workdays was set to the CalEEMod default for each phase. The construction schedule assumed that the earliest possible start date would be February 2022 and would be built out over a period of approximately 28 months, or 582 construction workdays. The earliest year of full operation was assumed to be 2025.

*Construction Truck Traffic Emissions*

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the estimate of demolition material to be exported, soil material imported and/or exported to the site, and the estimate of cement and asphalt truck trips. Demolition was modeled to remove 112 tons of pavement. The modeling assumed 134,016 cy of soil hauling of material for import and export. There would be import of 200 cy of asphalt. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. The total trips for those were computed by multiplying the daily trip rate by the number of days in that phase. Haul trips for demolition and grading were estimated from the provided demolition and grading volumes by assuming each truck could carry 10 tons per load. The number of cement deliveries were provided for the project and converted to total one-way trips, assuming two trips per delivery. Asphalt trucks were assumed to carry 10 cy per delivered load, or 40 truckloads.

The latest version of the CalEEMod model is based on the older version of the CARB EMFAC2017 motor vehicle emission factor model. This model has been superseded by the EMFAC2021 model; however, CalEEMod has not been updated to include EMFAC2021. Therefore, the construction traffic information was combined with EMFAC2021 motor vehicle emissions factors. EMFAC2021 provides aggregate emission rates in grams per mile for each vehicle type. The vehicle mix for this study was based on CalEEMod default assumptions, where worker trips are assumed to be comprised of light-duty autos (EMFAC category LDA) and light duty trucks (EMFAC category LDT1and LDT2). Vendor trips are comprised of delivery and large trucks (EMFAC category MHDT and HHDT) and haul trips, including cement trucks, are comprised of large trucks (EMFAC category HHDT). Travel distances are based on CalEEMod default lengths, which are 10.8 miles for worker travel, 7.3 miles for vendor trips and 20 miles for hauling (soil import/export). Each trip was assumed to include an idle time of 5 minutes. Emissions associated with vehicle starts were also included. On road emissions in San Mateo County for 2022 - 2024 were used in these calculations. Table 3 provides the traffic inputs that were combined with the EMFAC2021 emission database to compute vehicle emissions.

**Table 3. Construction Traffic Data Used for EMFAC2021 Model Runs**

| CalEEMod Run/Land Uses and Construction Phase | Trips by Trip Type | | | Notes |
|---|---|---|---|---|
| | Total Worker[1] | Total Vendor[1] | Total Haul[2] | |
| Vehicle mix[1] | 50% LDA<br>25% LDT1<br>25% LDT2 | 50% MHDT<br>50% HHDT | 100% HHDT | |
| Trip Length (miles) | 10.8 | 7.3 | 20.0 | CalEEMod default distance with 5-min truck idle time. |
| Demolition | 40 | - | 11 | 112 ton pavement demolition. CalEEMod default worker trips. |
| Site Preparation | 40 | - | - | CalEEMod default worker trips. |
| Soldier Piles/Micropiles | 4,300 | 1,950 | - | CalEEMod default worker and vendor trips. |
| Dewatering | 17,612 | - | - | CalEEMod default worker trips. |
| Trenching/Foundation | 700 | - | - | CalEEMod default worker trips. |
| Soil Remediation | 240 | - | 9,502 | 76,016-cy soil export. CalEEMod default worker trips. |
| Grading | 720 | - | 7,250 | 58,000-cy soil export. CalEEMod default worker trips. |
| Building Construction | 24,080 | 10,920 | - | CalEEMod default worker and vendor trips. |
| Building Interior | 4,624 | - | - | CalEEMod default worker trips |
| Paving/Landscaping | 585 | - | 40 | 200-cy asphalt. CalEEMod default worker trips. |

Notes: [1] Based on 2022 - 2024 EMFAC2021 light-duty vehicle fleet mix for San Mateo County.
[2] Includes demolition and grading trips estimated by CalEEMod based on amount of material to be removed. Asphalt trips estimated based on data provided by the applicant.

Summary of Computed Construction Period Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions by the number of active construction workdays that year. Table 4 shows the annualized average daily construction emissions of ROG, $NO_X$, $PM_{10}$ exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 4, predicted annualized project construction emissions would not exceed the BAAQMD significance thresholds during any year of construction.

# Air Quality/Noise Construction Information Data Request

**Project Name:** 580 Dubuque R&D

**Complete ALL Portions in Yellow**

See Equipment Type TAB for type, horsepower and load factor

**Project Size**

0 Dwelling Units — 1.89 total project acres disturbed

0 s.f. residential

0 s.f. retail

273,971 s.f. office/commercial - R&D

0 s.f. other, specify:

156,399 s.f. parking garage — 350 spaces

0 s.f. parking structure — 0 spaces

**Construction Hours** 7 am to 3:30 pm

**Pile Driving -** YES FOR SHORING ACTIVITIES & MICROPILES AT BOTTOM OF PARKIN

**Project include on-site GENERATOR during project -** YES GENERATOR DURING AS BACKUP POWER

**IF YES (if BOTH separate values) -->**

**Kilowatts/Horsepower: 2800kW**

**Fuel Type: DIESEL**

**Location in project (Plans Desired if Available):**
LOCATION AT GRADE ELEVATION

**DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT**

| Quantity | Description | HP | Load Factor | Hours/day | Total Work Days | Avg. Hours per day | HP Annual Hours | Comments |
|---|---|---|---|---|---|---|---|---|
| | **Demolition** | **Start Date:** | **2/10/2022** | **Total phase:** | **5** | | | **Overall Import/Export Volumes** |
| | | **End Date:** | **2/16/2022** | | | | | |
| 1 | Concrete/Industrial Saws | 81 | 0.73 | 8 | 5 | 8 | 2365 | **Demolition Volume** |
| 1 | Excavators | 158 | 0.38 | 8 | 5 | 8 | 2402 | Square footage of buildings to be demolished |
| 0 | Rubber-Tired Dozers | 247 | 0.4 | 8 | 5 | 8 | 0 | (*or* total tons to be hauled) |
| 1 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 5 | 8 | 1436 | **?** square feet *or* |
| | *Other Equipment?* | | | | | | | **?** Hauling volume (tons) |
| | | | | | | | | Any pavement demolished and hauled - 112TONS |
| | **Site Preparation** | **Start Date:** | **4/22/2022** | **Total phase:** | **4** | | | |
| | | **End Date:** | **4/27/2022** | | | | | |
| 1 | Graders | 187 | 0.41 | 8 | 4 | 8 | 2453 | |
| 1 | Rubber Tired Dozers | 247 | 0.4 | 8 | 4 | 8 | 3162 | |
| 2 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 4 | 8 | 2297 | |
| | *Other Equipment?* | | | | | | | |
| | **Grading / Excavation** | **Start Date:** | **5/27/2022** | **Total phase:** | **48** | | | |
| | | **End Date:** | **8/2/2022** | | | | | **Soil Hauling Volume** |
| 2 | Excavators | 158 | 0.38 | 8 | 48 | 8 | 46111 | Export volume = **58,000** cubic yard |
| 1 | Graders | 187 | 0.41 | 8 | 48 | 8 | 29441 | Import volume = **0** cubic yards |
| 1 | Rubber Tired Dozers | 247 | 0.4 | 8 | 48 | 8 | 37939 | |
| 0 | Concrete/Industrial Saws | 81 | 0.73 | 8 | 48 | 8 | 0 | |
| 2 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 48 | 8 | 27564 | |
| | *Other Equipment?* | | | | | | | |
| | **Trenching/Foundation** | **Start Date:** | **4/28/2022** | **Total phase:** | **140** | | | |
| | | **End Date:** | **11/9/2022** | | | | | |
| 1 | Tractor/Loader/Backhoe | 97 | 0.37 | 6 | 140 | 6 | 30148 | |
| 1 | Excavators | 158 | 0.38 | 6 | 140 | 6 | 50434 | |
| | *Other Equipment?* | | | | | | | |
| | **Building - Exterior** | **Start Date:** | **7/14/2023** | **Total phase:** | **140** | | | **Cement Trucks -NONE FOR EXTERIOR** |
| | | **End Date:** | **1/25/2024** | | | | | |
| 1 | Cranes | 231 | 0.29 | 10 | 140 | 10 | 93786 | ELECTRIC |
| 1 | Forklifts | 89 | 0.2 | 8 | 140 | 8 | 19936 | DIESEL |
| 0 | Generator Sets | 84 | 0.74 | 8 | 140 | 8 | 0 | TEMPORARY POWER LINES |
| 0 | Tractors/Loaders/Backhoes | 97 | 0.37 | 7 | 140 | 7 | 0 | |
| 1 | Welders | 46 | 0.45 | 8 | 140 | 8 | 23184 | |
| | *Other Equipment?* | | | | | | | |
| | **Building - Interior/Architectural Coating** | **Start Date:** | **8/10/2023** | **Total phase:** | **136** | | | |
| | | **End Date:** | **2/15/2024** | | | | | |
| 1 | Air Compressors | 78 | 0.48 | 8 | 136 | 8 | 40735 | |
| 2 | Aerial Lift | 62 | 0.31 | 8 | 136 | 8 | 41823 | |
| | *Other Equipment?* | | | | | | | |
| | **Paving** | **Start Date:** | **3/4/2024** | **Total phase:** | **45** | | | |
| | | **Start Date:** | **5/3/2024** | | | | | |
| 1 | Cement and Mortar Mixers | 9 | 0.56 | 8 | 2 | 0.4 | 81 | |
| 1 | Pavers | 130 | 0.42 | 8 | 2 | 0.4 | 874 | **Asphalt - 200 CUYD** |
| 1 | Paving Equipment | 132 | 0.36 | 8 | 2 | 0.4 | 760 | |
| 1 | Rollers | 80 | 0.38 | 8 | 40 | 7.1 | 9728 | |
| 1 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 40 | 7.1 | 11485 | |
| | *Other Equipment?* | | | | | | | |
| | **Additional Phases - Soil Remediation** | **Start Date:** | **5/27/2022** | **Total phase:** | **48** | | | |
| | | **Start Date:** | **8/2/2022** | | | | | |
| 1 | *Soil Remdiation - Excavators* | 158 | 0.38 | 8 | 48 | 8 | 23055 | EXPORT - 76,016 cu. yards clean and Class I Class II. IMPORT - 0 cu. yards |
| 1 | Soil Remdiation - Tractor/Loader/Backhoe | 97 | 0.37 | 8 | 48 | 8 | 13782 | |
| | | | | | | 0 | 0 | |
| | | | | | | 0 | 0 | |
| | | | | | | 0 | 0 | |
| | **Additional Phases - Soldier Piles/Micropiles** | **Start Date:** | **4/22/2022** | **Total phase:** | **25** | | | |
| | | **Start Date:** | **5/26/2022** | | | | | |
| 1 | *Shoring Soldier Piles/Micropiles - Crane* | 231 | 0.29 | 10 | 25 | 10 | 16748 | |
| 1 | *Shoring Soldier Piles/Micropiles - Drill Rig* | 221 | 0.50 | 10 | 25 | 10 | 27625 | |
| 1 | *Shoring Soldier Piles/Micropiles - Forklift* | 89 | 0.20 | 10 | 25 | 10 | 4450 | |
| 1 | *Shoring Soldier Piles/Micropiles - Temporary Generator for Dewatering* | 84 | 0.74 | 24 | 540 | 518.4 | 805594 | Temp Generator for 18Months 24hrs/day |
| | | | | | | 0 | 0 | |
| | | | | | | 0 | 0 | |
| | | | | | | 0 | 0 | |

**Equipment types listed in "Equipment Types" worksheet tab.**

Equipment listed in this sheet is to provide an example of inputs

**Complete one sheet for each project component**

It is assumed that water trucks would be used during grading

**Add or subtract phases and equipment, as appropriate**

**Modify horsepower or load factor, as appropriate**

580 Dubuque R&D - San Mateo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblFleetMix | MDV | 0.15 | 0.16 |
| tblFleetMix | MDV | 0.15 | 0.16 |
| tblFleetMix | MDV | 0.15 | 0.16 |
| tblFleetMix | MDV | 0.15 | 0.16 |
| tblFleetMix | MH | 2.6570e-003 | 2.0400e-003 |
| tblFleetMix | MH | 2.6570e-003 | 2.0400e-003 |
| tblFleetMix | MH | 2.6570e-003 | 2.0400e-003 |
| tblFleetMix | MH | 2.6570e-003 | 2.0400e-003 |
| tblFleetMix | MHD | 0.01 | 8.7430e-003 |
| tblFleetMix | MHD | 0.01 | 8.7430e-003 |
| tblFleetMix | MHD | 0.01 | 8.7430e-003 |
| tblFleetMix | MHD | 0.01 | 8.7430e-003 |
| tblFleetMix | OBUS | 1.4460e-003 | 2.3100e-003 |
| tblFleetMix | OBUS | 1.4460e-003 | 2.3100e-003 |
| tblFleetMix | OBUS | 1.4460e-003 | 2.3100e-003 |
| tblFleetMix | OBUS | 1.4460e-003 | 2.3100e-003 |
| tblFleetMix | SBUS | 4.3200e-004 | 4.1800e-004 |
| tblFleetMix | SBUS | 4.3200e-004 | 4.1800e-004 |
| tblFleetMix | SBUS | 4.3200e-004 | 4.1800e-004 |
| tblFleetMix | SBUS | 4.3200e-004 | 4.1800e-004 |
| tblFleetMix | UBUS | 5.7200e-004 | 7.4300e-004 |
| tblFleetMix | UBUS | 5.7200e-004 | 7.4300e-004 |
| tblFleetMix | UBUS | 5.7200e-004 | 7.4300e-004 |
| tblFleetMix | UBUS | 5.7200e-004 | 7.4300e-004 |
| tblGrading | MaterialExported | 0.00 | 58,000.00 |
| tblGrading | MaterialExported | 0.00 | 76,016.00 |
| tblLandUse | LandUseSquareFeet | 140,000.00 | 156,399.00 |
| tblLandUse | LotAcreage | 6.77 | 2.00 |
| tblLandUse | LotAcreage | 3.15 | 0.00 |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

| | | | |
|---|---|---|---|
| tblFleetMix | MDV | 0.16 | 0.18 |
| tblFleetMix | MDV | 0.16 | 0.18 |
| tblFleetMix | MDV | 0.16 | 0.18 |
| tblFleetMix | MDV | 0.16 | 0.18 |
| tblFleetMix | MH | 2.9170e-003 | 2.1460e-003 |
| tblFleetMix | MH | 2.9170e-003 | 2.1460e-003 |
| tblFleetMix | MH | 2.9170e-003 | 2.1460e-003 |
| tblFleetMix | MH | 2.9170e-003 | 2.1460e-003 |
| tblFleetMix | MHD | 0.01 | 8.2620e-003 |
| tblFleetMix | MHD | 0.01 | 8.2620e-003 |
| tblFleetMix | MHD | 0.01 | 8.2620e-003 |
| tblFleetMix | MHD | 0.01 | 8.2620e-003 |
| tblFleetMix | OBUS | 1.3500e-003 | 2.2040e-003 |
| tblFleetMix | OBUS | 1.3500e-003 | 2.2040e-003 |
| tblFleetMix | OBUS | 1.3500e-003 | 2.2040e-003 |
| tblFleetMix | OBUS | 1.3500e-003 | 2.2040e-003 |
| tblFleetMix | SBUS | 4.2100e-004 | 3.9400e-004 |
| tblFleetMix | SBUS | 4.2100e-004 | 3.9400e-004 |
| tblFleetMix | SBUS | 4.2100e-004 | 3.9400e-004 |
| tblFleetMix | SBUS | 4.2100e-004 | 3.9400e-004 |
| tblFleetMix | UBUS | 4.9600e-004 | 6.4500e-004 |
| tblFleetMix | UBUS | 4.9600e-004 | 6.4500e-004 |
| tblFleetMix | UBUS | 4.9600e-004 | 6.4500e-004 |
| tblFleetMix | UBUS | 4.9600e-004 | 6.4500e-004 |
| tblGrading | MaterialExported | 0.00 | 58,000.00 |
| tblGrading | MaterialExported | 0.00 | 76,016.00 |
| tblLandUse | LandUseSquareFeet | 140,000.00 | 156,399.00 |
| tblLandUse | LotAcreage | 6.77 | 2.00 |
| tblLandUse | LotAcreage | 3.15 | 0.00 |