Sacramento Municipal Utility District

SMUD 59th Street Corporation Yard Demolition and Remediation Project

Draft Initial Study and Proposed Mitigated Negative Declaration•
January 2022

Powering forward. Together.

SMUD®

Sacramento Municipal Utility District

SMUD 59th Street Corporation Yard Demolition and Remediation Project

Draft Initial Study and Proposed Mitigated Negative Declaration• January 2022

Lead Agency:

Sacramento Municipal Utility District
6201 S Street, MS B209
Sacramento, CA 95817-1899

or

P.O. Box 15830 MS B209
Sacramento, CA 95852-1830
Attn: Rob Ferrera
(916) 732-6676 or rob.ferrera@smud.org

Prepared by:

Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814
Contact: Cori Resha
Cori.Resha@ascentenvironmental.com

TABLE OF CONTENTS

APPENDICES (included in a USB on the back cover)

EXHIBITS

TABLES

ACRONYMS AND OTHER ABBREVIATIONS

ACM	asbestos-containing materials
AOC	area of concern
BACT	Best Available Control Technology
BMP	best management practices
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
Cal EPA	California Environmental Protection Agency's
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH_4	methane
cis-DCE	1-dichloroethene
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSS	combined sewer system
dB	decibels
dBA	A-Weighted Decibels
DOC	California Department of Conservation's
DOT	U.S. Department of Transportation
Draft IS/MND	Draft Initial Study/Mitigated Negative Declaration
DTSC	California Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
ERCS	Environmental Resources and Customer Service

ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Authority
GHG	greenhouse gases
H_2S	hydrogen sulfide
HFC	hydrofluorocarbons
HREC	historical recognized environmental condition
in/sec	inches per second
IPaC	Information, Planning, and Consultation System
LBP	lead-based paint
lbs/day	pounds per day
L_{eq}	Equivalent Continuous Sound Level
L_{max}	Maximum Noise Level
LRT	light rail transit
mg/kg	milligram per kilogram
MMRP	mitigation monitoring and reporting program
MRZ	Mineral Resource Zones
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOI	Notice of Intent
non-VHFHSZ	non-Very High Fire Hazard Severity Zone
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Properties
OSHA	Occupational Safety and Health Administration
OWS	oil/water separators
Pb	lead
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PFC	perfluorocarbons
PG&E	Pacific Gas and Electric Company

PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
project	SMUD 59th Street Corporation Yard Demolition and Remediation Project
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental conditions
RFA	Facility Assessment
RFI	Facility Investigation
RMS	root-mean-square
ROG	reactive organic gases
SAFE Rule	Safer Affordable Fuel-Efficient Vehicles Rule
SCECD	Sacramento County Environmental Compliance Division
SF_6	sulfur hexafluoride
SFD	Sacramento Fire Department
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
SO_2	sulfur dioxide
SPD	Sacramento Police Department
SQIP	Stormwater Quality Improvement Plan
SVAB	Sacramento Valley Air Basin
SVE	soil vapor extractions
SVSL	soil vapor screening levels
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board’s
TAC	toxic air contaminants
tpy	tons per year
UAIC	United Auburn Indian Community of the Auburn Rancheria
US 50	U.S. Highway 50
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tanks
VdB	vibration decibels
VEC	vapor encroachment condition
VMT	vehicle miles traveled
VOC	volatile organic compounds

1. Introduction

1.1 Project Overview

The Sacramento Municipal Utility District (SMUD) proposes to undertake soil remediation at its former corporation yard and administrative offices located at 1708 59th Street in downtown Sacramento ("SMUD 59th Street Corporation Yard Demolition and Remediation Project" or "project").

1.2 Purpose of Document

This Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) has been prepared by SMUD to evaluate potential environmental effects resulting from the SMUD 59th Street Corporation Yard Demolition and Remediation Project. Chapter 2, "Project Description," presents the detailed project information.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.). Under CEQA, an IS can be prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. For this project, the lead agency has prepared the following analysis that identifies potential physical environmental impacts and mitigation measures that would reduce impacts to a less-than-significant level. SMUD is the lead agency responsible for complying with the provisions of CEQA.

In accordance with provisions of CEQA, SMUD is distributing a Notice of Intent (NOI) to adopt an MND to solicit comments on the analysis and mitigation measures in the Draft IS/MND. The NOI will be distributed to property owners within 500 feet of the project alignment, as well as to the State Clearinghouse/ Governor's Office of Planning and Research and each responsible and trustee agency. The Draft IS/MND will be available a 30-day review and comment period from January 18, 2022 to February 17, 2022.

If you wish to send written comments (including via e-mail), they must be received by close of business on February 17, 2022. Written comments should be addressed to:

SMUD–Environmental Services
P.O. Box 15830 MS B209
Sacramento, CA 95852-1830
Attn: Rob Ferrera

E-mail comments may be addressed to rob.ferrera@smud.org. If you have questions regarding the NOI or Draft IS/MND, please call Rob Ferrera at (916) 732-6676.

Digital copies of the NOI and Draft IS/MND are available on the internet at: https://www.smud.org/en/about-smud/company-information/document-library/CEQA-reports.htm. Hardcopies of the NOI and Draft IS/MND are available for public review at the following locations:

Sacramento Municipal Utility District
Customer Service Center
6301 S St.
Sacramento, CA 95817

Sacramento Municipal Utility District
East Campus Operations Center
4401 Bradshaw Road
Sacramento, CA 95827

1.3 Public Review Process

This Draft IS/MND is being circulated for a 30-day public comment period and is available at the locations identified above. The NOI is being distributed to all property owners within 500 feet of the project alignment, as well as to the State Clearinghouse/ Governor's Office of Planning and Research and responsible and trustee agencies. The NOI identifies where the document is available for public review and invites interested parties to provide written comments for incorporation into a Final IS/MND.

Following the 30-day public review period, a final IS/MND will be prepared, presenting written responses to comments received on significant environmental issues. Before SMUD's Board of Directors makes a decision on the project, the final IS/MND will be provided to all parties commenting on the Draft IS/MND.

1.4 SMUD Board Approval Process

The SMUD Board of Directors must adopt the IS/MND and approve the mitigation monitoring and reporting program (MMRP) before it can approve the project. The project and relevant environmental documentation will be formally presented at a SMUD Environmental Resources and Customer Service (ERCS) Committee meeting for information and discussion. The SMUD Board of Directors will then consider adoption the final IS/MND and MMRP at its next regular meeting. Meetings of the SMUD Board of Directors are generally held on the third Thursday of each month.

1.5 Document Organization

This Draft IS/MND is organized as follows:

Chapter 1: Introduction. This chapter provides an introduction to the environmental review process and describes the purpose and organization of this document.

Chapter 2: Project Description. This chapter provides a detailed description of the project.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if the project would result in no impact, a less-than-significant impact, or a less-than-significant impact with mitigation incorporated. Where needed to reduce impacts to a less-than-significant level, mitigation measures are presented.

Chapter 4: List of Preparers. This chapter lists the organizations and people that prepared the document.

Chapter 5: References. This chapter lists the references used in preparation of this Draft IS/MND.

1.6 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & 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

☒ None With Mitigation

1.7 Determination

On the basis of this initial evaluation:

☐ I find that the proposed project could not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed 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 proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed 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 proposed 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 proposed project, nothing further is required.

Signature	Date
Rob Ferrera	Environmental Specialist
Printed Name	Title
Sacramento Municipal Utility District	
Agency	

2. Project Description

2.1 Project Location

The project would be located at 1708 59th Street in East Sacramento (See Figure 2-1). The site is bordered by residential development to the west, commercial development to the north, a California Department of Transportation (Caltrans) laboratory to the east across 59th Street, and U.S. Highway 50 (US 50) to the south. The corporation yard is bisected by a Sacramento Regional Transit (Sac RT) light rail line. As shown in Figure 2-2, the project site is fully developed and is located in a highly developed area of Sacramento.

2.2 Project Background

SMUD purchased the 59th Street property from the Pacific Gas and Electric Company (PG&E) and used the site as a corporation yard from 1947 until 2012. In 2013 SMUD relocated to a replacement facility at 4401 Bradshaw Road (the East Campus Operations Center). After relocating the corporation yard, SMUD used the project site as a storage area for hazardous wastes generated onsite or at other SMUD facilities. The project site encompasses 19.74 acres. The site is bordered by residential development to the west, commercial development to the north, a California Department of Transportation (Caltrans) laboratory to the east across 59th Street, and U.S. Highway 50 (US 50) to the south. The corporation yard is bisected by a Sacramento Regional Transit light rail line.

In July 2012, the California Department of Toxic Substances Control (DTSC) completed a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA). The RFA identified 19 solid waste management units and two areas of concern (AOCs). DTSC recommended that two SMWUs and one AOC be included in a RCRA Facility Investigation (RFI). On January 28, 2015, a Corrective Action Consent Agreement (Agreement) was signed, and became effective February 25, 2015. In July 2015, DTSC approved an RFI Workplan for implementation, which began that same month. The RFI Report that concluded that no further investigation was needed at the AOC, and DTSC concurred with the conclusion in January 2016.

In 2015, Kleinfelder performed a Phase II Environmental Site Assessment (ESA), independent of the Agreement, to evaluate areas of the corporation yard where past and/or current activities may have chemically-impacted soil gas, soil, or groundwater. Tetrachloroethene (PCE) was detected in soil gas and arsenic was detected in soil at concentrations exceeding their respective regulatory screening criteria. Bromodichloromethane, chloroform, PCE, and petroleum hydrocarbons were detected in groundwater at concentrations that did not exceed their respective primary Maximum Contaminant Levels for drinking water, if established (Kleinfelder 2016).

On October 8, 2018, the First Amendment to the Agreement was signed to conduct further investigation of PCE and arsenic recommended in the Phase II ESA report. From

December 2018 to March 2019, AECOM conducted site investigation activities to further characterize the lateral and vertical extent of PCE in soil gas, soil, and groundwater, and arsenic in soil (AECOM 2019). It was determined that PCE levels in soil gas were present at concentrations exceeding residential and commercial/industrial soil vapor screening levels (SVSLs), while concentrations in soil and groundwater did not exceed the SVSLs (AECOM 2021b:2-5). The 2018 soil investigation found arsenic concentrations in soil that exceeded background concentration levels.

Source: adapted by Ascent Environmental in 2021

Figure 2-1. Project Vicinity

Source: adapted by Ascent Environmental in 2021

Figure 2-2. Project Site

A Phase I Environmental Site Assessment (Phase I ESA) was completed for the project site by AECOM in February 2020. This Phase I ESA report identified five recognized environmental conditions (RECs) in connection with the project site. RECs identified in connection with the project site include the following:

- Based on the information detailed in historical documents, there are potential uncharacterized environmental impacts caused by the presence of 11 underground hydraulic lifts and related hydraulic oil reservoir underground storage tanks (USTs), and two vehicle oil/water separators (OWSs). Since preparation of the Phase 1 report, SMUD has removed the OWSs in accordance with the Agreement (SMUD 2021).

- No information or documentation regarding the removal of a 550-gallon cleaning solvent tank and a 550-gallon kerosene tank was readily available for review. Since preparation of the Phase I ESA report, removal documentation for these USTs was found.

- The presence of polychlorinated biphenyls (PCBs) in building materials with concentrations greater than the 50-milligram per kilogram (mg/kg) screening criteria (up to 200,000 mg/kg) represents a REC for the project site. For demolition and disposal purposes, PCB concentrations were detected greater than the 50-mg/kg screening criteria, and the building materials are therefore considered “PCB bulk product waste” according to Title 40, Code of Federal Regulations (CFR) Part 761, and as hazardous waste by the Department of Toxic Substances Control (DTSC). Any contractor who may perform PCB-related work at the site (e.g., inspection, removal, or clean-up) must be trained and qualified to do so. All workers must also follow current Occupational Safety and Health Administration (OSHA) regulations, including Title 29 CFR Section 1910.120 and Title 8 California Code of Regulations (CCR) Section 5192, as well as other applicable federal, state, and local laws and regulations.

- A vapor encroachment condition (VEC) at the project site is likely to exist due to the documented presence of PCE in on-site soil and soil gas. The presence of potentially uncharacterized PCE and the likelihood of a possible VEC represents a REC for the project site. SMUD conducted indoor air sampling within the Tool Issue Building in April 2019. PCE and its breakdown products were not detected above residential SLs; therefore, conducting indoor air sampling within additional buildings was not deemed to be necessary at that time since the other buildings are considered to have lower VEC potential. SMUD has since conducted additional investigative work to further characterize PCE in the soil and soil gas at the project site.

- The presence of potentially uncharacterized arsenic represents a REC for the project site. AECOM’s recommended next steps regarding arsenic include implementing a corrective action to address arsenic concentrations in soil at the site above naturally occurring levels. The range of site-specific arsenic background concentrations should be evaluated to select an appropriate arsenic clean-up goal.

Although not considered RECs by ASTM Standards, the Phase I ESA included a review of available information regarding potential asbestos-containing materials (ACMs) and lead-based paint (LBP) that was identified in on-site building materials: The results of testing for asbestos during a survey performed in 2016 identified asbestos to be present in multiple materials from the buildings on the project site. Sampling also indicated the presence of LBP in multiple buildings.

The Phase I ESA report also identified one historical recognized environmental condition (HREC) within the project site: Between June 30 through July 3, 2014, tank removal operations were conducted to remove two 10,000-gallon unleaded gasoline fuel USTs and one 10,000-gallon diesel fuel UST. On August 8, 2014, the Sacramento County Environmental Compliance Division (SCECD) issued a letter stating that based on the results of the removal activities, it was their position that no further action was required at that time. Therefore, the successful documented removal of these USTs with regulatory agency concurrence is an HREC for the project site.

A pilot study was conducted in 2020 to determine whether soil vapor extraction (SVE) would be an effective technology to address volatile organic compound (VOC) contamination in soil gas. In May 2020, an initial five-day pilot test was performed using five wells. In August 2020, a long-term pilot test of the SVE system began and is ongoing (AECOM 2021a:2-6).

From June 2020 to March 2021, AECOM conducted additional site investigation activities to further characterize the lateral and vertical extent of VOCs, including PCE, in soil gas and to refine the lateral and vertical extent of arsenic in soil requiring remedial action. It was determined that additional VOCs besides PCE are present in soil gas at concentrations exceeding their respective screening criteria. Furthermore, a localized area of soil impacted by lead and total petroleum hydrocarbons as hydraulic oil was identified (AECOM 2021b).

In July and August 2021, AECOM conducted additional site investigation activities to evaluate seasonal and temporal variations for VOC concentrations in soil gas, further characterize the lateral and vertical extent of VOCs in soil gas, collect sub-slab vapor samples to use as an additional line of evidence regarding soil vapor attenuation at the site, and collect sewer gas data to evaluate sewer lines as a potential preferential pathway for vapor intrusion into buildings on site. It was determined that some of the VOCs that were detected at concentrations exceeding screening criteria during previous fall/winter sampling were not detected at concentrations exceeding screening criteria during the summer sampling event. The sub-slab vapor data were used to derive a site-specific soil vapor attenuation factor (AECOM 2021c).

2.3 Project Description

SMUD is proposing installation of a full-scale SVE system to remediate VOC-impacted soil gas, and excavation and disposal of soil contaminated with arsenic, lead, and petroleum hydrocarbons. In order to access the contamination, multiple buildings would require

demolition and pavement would need to be removed. The "SMUD 59th Street Corporation Yard Demolition and Remediation Project" or "project" would include building demolition, pavement removal, decommissioning of the existing pilot study SVE system, installation and operation of the SVE system, and excavation and disposal of contaminated soil, and backfilling the excavation with clean fill material. All soil gas and soil remediation activities would be reviewed and must be approved by DTSC to ensure protection of human health and the environment. SMUD proposes to remediate the site to appropriate risk and exposure levels to be determined by DTSC. For purposes of this analysis, "project construction" means any demolition or remediation activities, including installation of the SVE system. Following complete site remediation to DTSC standards, SMUD will continue to be responsible for site maintenance and may seek entitlements for the future use of the site and/or transfer ownership of the parcel. Because future use of the site is not yet known and would be subject to City of Sacramento zoning and City development application and project approval processes, this analysis does not evaluate any future operation of the project site.

2.3.1 Demolition

In order to access areas of soil contamination for remediation, SMUD would demolish at least two buildings on the project site as well as areas of pavement (see Figure 2-3). The buildings currently known to require demolition are the Salvage Building and the Tool Issue Building. Because SMUD and DTSC are currently working to determine the level of remediation appropriate for the site, it is unknown whether other buildings would require demolition. However, given the extent of the contamination, it is possible that all buildings except the Office Building (see Figure 2-3) would require demolition to be able to appropriately access and remediate contaminated areas. Therefore, this analysis assumes demolition of all but the Office Building. Construction debris and non-hazardous soil would be disposed of at Kiefer Landfill while metal would be disposed at Alco or Schnitzer Steel.

As part of project construction, protective fencing with tree protection signs will be erected around all trees (or tree groups) to be preserved during construction activities. The protective fence will be installed at the limits of the tree protection zone, usually the dripline of the tree or as defined by the project arborist or biologist. This will delineate the tree protection area and prevent unwanted activity in and around the trees and will reduce soil compaction in the root zones of the trees and other damage from heavy equipment. SMUD's construction contractor shall maintain the fence to keep it upright, taut, and aligned at all times. Fencing will be removed only after all construction activities near the trees are complete. Canopy or root pruning of any retained protected trees to accommodate construction and/or fire lane access will conform to the techniques and standards in the current edition of ANSI A300 (Tree, Shrub and Other Woody Plant Maintenance—Standard Practices) or International Society of Arboriculture Best Management Practices. Also, SMUD would comply with Sacramento City Code Section 12.56080(E) requiring approval from the City's Public Works Director prior to any work that may cause injury or removal of city and/or protected private trees.

2.3.2 Soil Vapor Extraction System

In order to remove the PCE soil vapor from the soil on the project site, SMUD would install one or more SVE systems. The size and number of systems would not be known until DTSC has determined the appropriate remediation level for the site. The SVE system is a portable unit, but any items fixed to the adjacent buildings such as conduit or electrical boxes will need to meet the California Building Code (CBC).

SVE systems are used to remove VOCs sorbed to soil in the unsaturated (vadose) zone (EPA 2010). Air is extracted from, and sometimes injected into, the vadose zone to strip VOCs from the soil and transport the vapors to ex situ treatment systems for VOC destruction or recovery (EPA 2010). SVE involves drilling one or more extraction wells into the contaminated soil to a depth above the water table, which must be deeper than 3 feet below the ground surface. Attached to the wells is equipment (such as a blower or vacuum pump) that creates a vacuum. The vacuum pulls air and vapors through the soil and up the well to the ground surface for treatment. Extracted air and contaminant vapors, sometimes referred to as “off-gases,” are treated to remove any harmful levels of contaminants. The off-gases are first piped from the extraction wells to an air-water separator to remove moisture, which interferes with treatment. The vapors are then separated from the air, usually by pumping them through containers of activated carbon. The chemicals are captured by the carbon while clean air exits to the atmosphere. Filter materials other than activated carbon may be used. In a process called “biofiltration,” tiny microbes (bacteria) are added to break down the vapors into gases, such as carbon dioxide and water vapor. Another option is to destroy vapors by heating them to high temperatures. (EPA 2012)

During remediation activities while the SVE system is running, it is anticipated that the site would be visited approximately twice per week but that there would be no regular daily presence of employees on the project site.

2.3.3 Soil Excavation

To remediate the site for arsenic contamination in the soil, SMUD would excavate and remove soil from the project site. Based on the known location and extent of arsenic contamination, SMUD estimated that it would remove approximately 10,000 cubic yards of soil with excavation depths no greater than 15 feet. Soil classified as hazardous waste would either require disposal at a class I or II landfill (i.e., Recology Hay Road, Clean Harbors Buttonwillow, or Waste Management Kettleman Hills). Note, if additional soil impacts are found during excavation activities, SMUD plans to remove all soil contamination to the maximum extent practicable.

Source: Image provided by AECOM in 2021

Figure 2-3. Site Buildings

2.3.4 Project Operation

As the project includes remediation of the project site and installation of the SVE system, project operation would consist of the operation of the SVE system for up to 4 years. During this operational phase, there would be up to two worker visits to the site per week which would include the periodic removal of drums containing material generated by the SVE system. Following complete site remediation to DTSC standards, SMUD will continue to be responsible for site maintenance and may seek entitlements for the future use of the site and/or transfer ownership of the parcel. Because future use of the site is not yet known and would be subject to City of Sacramento zoning and City development application and project approval processes, this analysis does not evaluate any future operation of the project site.

2.3.5 Project Schedule

While SMUD is still coordinating with DTSC to determine the appropriate level of remediation for the site, this analysis assumes that project construction activities would begin in 2022 and last approximately 8 months, ending in late 2022 or early 2023, while project operation (i.e., operation of the SVE system) would last for approximately 4 years following completion of construction activities. Construction intensity and hours would be in accordance with the City of Sacramento's Noise Ordinance, contained in Title 8, Chapter 8.68 of the Sacramento City Code. Construction would be limited to the hours between 7 a.m. and 6 p.m. Monday through Saturday, and between the hours of 9 a.m. and 6 p.m. on Sunday. Night and weekend work is not anticipated for most of the project, though emergency situations may require nighttime or weekend activities. Operation of the SVE system is expected to last approximately 4 years following demolition, remediation, and construction activities.

2.4 Potential Permits and Approvals Required

Elements of the project could be subject to permitting and/or approval authority of other agencies. As the lead agency pursuant to CEQA, SMUD is responsible for considering the adequacy of the CEQA documentation and determining if the project should be approved. Other potential permits required from other agencies could include:

State

- **State Water Resources Control Board/Central Valley Regional Water Quality Control Board:** issues Construction Storm Water Discharge Permits for projects that disturb more than one acre of land. The permit would also require preparation and implementation of a stormwater pollution prevention plan (SWPPP) that would specify storm water best management practices (BMPs).

- **California Department of Transportation**: issues permits for movement of oversized or excessive loads on State Highways.

Local

- **Sacramento Metropolitan Air Quality Management District (SMAQMD)**: Authority to Construct/Permit to Operate pursuant to SMAQMD Regulation 2 (Rule 201 et seq.).
- **City of Sacramento**:
    - Grading permit to comply with the requirements of the City's Stormwater Quality Improvement Plan (SQIP).

3. Environmental Impact Evaluation

3.0 Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "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 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).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a) Earlier Analysis Used. Identify and state where they are available for review.

    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 Aesthetics

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
I.	**Aesthetics**				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:					
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

3.1.1 Environmental Setting

The project site includes the existing buildings at SMUD's corporation yard located at 1708 59th Street in East Sacramento. The topography of the project site and surrounding areas is generally flat. Extensive suburban development exists around the project site, including shopping centers, residences, and industrial buildings. Most structures in the area are one to two stories in height. Landscaping on the project site is limited to the perimeter and includes some mature trees and a variety of shrubs. The visual character of the project site is typical of the Sacramento metropolitan area, which includes commercial and industrial buildings, residences, roads, utility lines, trees, and landscaping. Distant views towards the coast ranges or the Sierra Nevada foothills are largely limited due to existing surrounding buildings and the developed nature of the project area.

3.1.2 Discussion

a) Have a substantial adverse effect on a scenic vista?

Less than Significant. A scenic vista is generally defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality, or a natural or cultural resource that is indigenous to the area. The *Sacramento 2035 General Plan Update* designates the American River and Sacramento River, including associated parkways, the State Capitol (as defined by the Capitol View Protection Ordinance), and important historic structures listed on the Sacramento Register of Historic and Cultural Resources, California and/or National Registers as scenic resources (City of Sacramento

2014a:4.13-4). The closest scenic resource to the project site is the American River, located approximately 0.9 miles northeast of the project site. Between the project site and the American River, there is extensive residential and commercial development that prevents views of the American River. Views in the project vicinity are limited because of the flat terrain and the level of development/landscaping that preclude long-range views. Views from the project site are short- to mid-range and typically reflect the urban character of the surroundings, which are not considered scenic vistas. Further, the project would not involve the operation of above-ground facilities that could further impede long-distance views in the area. Therefore, the project would have a ***less-than-significant*** impact, and no mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The nearest designated scenic roadway is Route 160, approximately 6.5 miles southwest of the project area (Caltrans 2019). Because there are no designated state scenic highways within, adjacent to, or visible from the project area, the project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The project would have **no impact**, and no mitigation is required.

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 points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant. During project construction, including demolition and remediation activities, views in the project area along 59th Street and from north of the project site would be modified as a result of the presence of construction equipment and activities. However, the appearance of construction equipment and activities would be temporary, and once construction activities are complete, the project site would include fewer buildings and less pavement than prior to the project. The project does not propose any zoning changes and project uses would be consistent with existing site uses. Therefore, the project would not conflict with any zoning or scenic quality regulations. Because impacts would be limited to construction, and the project would remove structures, and does not include development of additional structures, the project would have a ***less-than-significant*** impact related to a scenic quality, and no mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. Construction activities would occur during daylight hours and would not require nighttime lighting. Construction equipment is unlikely to have reflective surfaces, other than what is required for safety purposes and would not be a substantial source of

glare in the area. Lighting at the project site as a result of project implementation would be similar to existing security lighting present at the project site. This minimal security lighting is not anticipated to adversely affect nighttime view in the project area. Therefore, the project would have a ***less-than-significant*** impact related to light and glare, and no mitigation is required.

3.2 Agriculture and Forestry Resources

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?				

3.2.1 Environmental Setting

The project site is located in a highly developed, urban area of Sacramento, and the project site is identified as urban and built-up land by the California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program (FMMP) (DOC 2017). No agricultural land or operations are located on or adjacent to the project site.

No portions of the project site or adjacent parcels are held under Williamson Act contracts (DOC 2015).

There are no areas either within or adjacent to the project site that are zoned as forestland, timberland, or Timberland Production Zone (City of Sacramento 2019).

3.2.2 Discussion

a-e) Would the project 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 uses; conflict with existing zoning for agricultural use, or a Williamson Act contract; 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)); result in the loss of forest land or conversion of forest land to non-forest use; or 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?

No Impact. The project site does not contain any lands designated as Important Farmland (i.e., Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) or zoned as forest land or timberland. As noted above, there are no active agricultural operations within or near the project site, and there are no Williamson Act contracts associated with the project site. No existing agricultural or timber-harvest uses are located on or near the project site. Therefore, the project would have ***no impact*** on agriculture or forest land, and no mitigation is required.

3.3 Air Quality

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Are significance criteria established by the applicable air district available to rely on for significance determinations?		☒ Yes		☐ No
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Environmental Setting

The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants, which are known to be harmful to human health and the environment. These pollutants are carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone, particulate matter (which is categorized into particulate matter less than 10 microns in diameter [PM_{10}] and particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]), and sulfur dioxide (SO_2). The State of California has also established the California Ambient Air Quality Standards (CAAQS) for these six pollutants, as well as sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. NAAQS and CAAQS were established to protect the public with a margin of safety, from adverse health impacts caused by exposure to air pollution. A brief description of the sources and health effects of criteria air pollutants is provided below in Table 3.3-1.

Table 3.3-1 Criteria Air Pollutants

Pollutant	Sources	Effects
Ozone	Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG), also sometimes referred to as volatile organic compounds by some regulating agencies) and nitrogen oxides (NO_X). The main sources of ROG and NO_X, often referred to as ozone precursors, are products of combustion processes (including motor vehicle engines) and the evaporation of solvents, paints, and fuels.	Ozone causes eye irritation, airway constriction, and shortness of breath and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.
Carbon monoxide	CO is usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicle engines; the highest emissions occur during low travel speeds, stop-and-go driving, cold starts, and hard acceleration.	Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, and fatigue; impair central nervous system function; and induce angina (chest pain) in persons with serious heart disease. Very high levels of CO can be fatal.
Particulate matter	Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect.	Scientific studies have suggested links between fine particulate matter and numerous health problems, including asthma, bronchitis, and acute and chronic respiratory symptoms, such as shortness of breath and painful breathing. Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air.
Nitrogen dioxide	NO_2 is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial	Aside from its contribution to ozone formation, NO_2 can increase the risk of acute and chronic respiratory disease and reduce visibility.

Pollutant	Sources	Effects
	operations are the main sources of NO_2.	
Sulfur dioxide	SO_2 is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel.	SO_2 is also a precursor to the formation of particulate matter, atmospheric sulfate, and atmospheric sulfuric acid formation that could precipitate downwind as acid rain.
Lead	Leaded gasoline, lead-based paint, smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere, with lead levels in the air decreasing substantially since leaded gasoline was eliminated in the United States.	Lead has a range of adverse effects including neurological, endocrine, and cardiovascular effects.

Sources: EPA 2019
Notes: CO=carbon monoxide; NO_2= nitrogen dioxide; NO_x=nitrogen oxides; ROG=reactive organic gases; SO_2=sulfur dioxide

The project site is located in Sacramento County which is within the Sacramento Valley Air Basin (SVAB). The SVAB encompasses Butte, Colusa, Glenn, Tehama, Shasta, Yolo, Sacramento, Yuba, and Sutter Counties and parts of Placer, El Dorado, and Solano Counties. The SVAB is bounded on the north and west by the Coast Ranges, on the east by the southern portion of the Cascade Range and the northern portion of the Sierra Nevada, and on the south by the San Joaquin Valley Air Basin. Sacramento County is currently designated as nonattainment for both the federal and State ozone standards, the federal $PM_{2.5}$ standard, and the State PM_{10} standard. The region is designated as in attainment or unclassifiable for all other federal and State ambient air quality standards. (CARB 2021).

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the local agency responsible for air quality planning and development of the air quality plan in the project area. SMAQMD maintains a plan for achieving the State and federal ozone standards that was updated and approved by the SMAQMD Board and the California Air Resources Board (CARB) in 2017. The air quality plan establishes the strategies used to achieve compliance with the NAAQS and CAAQS in all areas within SMAQMD's jurisdiction. SMAQMD develops rules and regulations and emission reduction programs to control emissions of criteria air pollutants, ozone precursors (NO_X and ROGs), toxic air contaminants (TACs), and odors within its jurisdiction.

At the local level, air districts may adopt and enforce CARB control measures. Under SMAQMD Rule 201 (“General Permit Requirements”), Rule 202 (“New Source Review”), and Rule 207 (“Federal Operating Permit”), all sources that possess the potential to emit TACs are required to obtain permits from SMAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including New Source Review standards and air toxics control measures. SMAQMD limits emissions and public exposure to TACs through a number of programs. SMAQMD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. Sensitive receptors are people, or facilities that generally house people (e.g., schools, hospitals, residences), that may experience adverse effects from unhealthful concentrations of air pollutants.

SMAQMD published the *Guide to Air Quality Assessment in Sacramento County,* which provides air quality guidance when preparing CEQA documents. This document was last updated in April 2020. SMAQMD’s guide establishes thresholds of significance for criteria air pollutants that SMAQMD recommends using when evaluating air quality impacts in Sacramento County. CEQA-related air quality thresholds of significance are tied to achieving or maintaining attainment designation with the NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health. As such, for the purposes of this project, the following thresholds of significance are used to determine if project-generated emissions would produce a significant localized and/or regional air quality impact such that human health would be adversely affected.

Per SMAQMD recommendations, air quality impacts are considered significant if the project would result in any of the following:

- Construction-generated emissions of NO_X exceeding 85 pounds per day (lbs/day), PM_{10} exceeding 80 lbs/day or 14.6 tons per year (tpy), or $PM_{2.5}$ exceeding 82 lbs/day or 15 tpy;

- Operational emissions of ROG exceeding 65 lbs/day, NO_X exceeding 65 lbs/day, PM_{10} exceeding 80 lbs/day or 14.6 tpy, or $PM_{2.5}$ exceeding 82 lbs/day or 15 tpy;

- CO emissions that would violate or contribute substantially to concentrations that exceed the 1-hour CAAQS of 20 parts per million (ppm) or the 8-hour CAAQS of 9 ppm during construction and operations;

- Expose any off-site sensitive receptor to a substantial incremental increase in TAC emissions that exceed 10 in one million for carcinogenic risk (i.e., the risk of contracting cancer) and/or a noncarcinogenic hazard index of 1.0 or greater; or

- Create objectional odors affecting a substantial number of people.

In addition to these thresholds, SMAQMD's guide indicates that without the application of recommended best management practices (BMPs) and Best Available Control Technology (BACT), the threshold for PM_{10} and $PM_{2.5}$ during construction and operations is zero pounds per day.

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant with Mitigation Incorporated. As discussed previously, SMAQMD developed thresholds of significance for air quality impacts in consideration of achieving attainment for the NAAQS and CAAQS, which represent concentration limits of criteria air pollutants needed to adequately protect human health.

A Phase I ESA was conducted on the project site by AECOM in February 2020. The Phase I ESA identified contaminants that could be airborne and harm the health of people residing nearby. The assessment identified asbestos, lead and polychlorinated biphenyl (PCBs) concentrations in the building materials, arsenic in the soil, and VOCs, specifically, tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-DCE) in the form of soil gas (AECOM 2021b).

The Warehouse, Salvage, and Tool Issue buildings have currently been found to contain arsenic contamination in the underlying soil. SMUD and DTSC are working to determine whether other buildings (except the Office building) would require demolition in order to install remediation systems. To provide a complete analysis of potential demolition activities, the Hazardous Material and Shops buildings were also considered to be demolished in the analysis. After demolition of the buildings, approximately 10,000 cubic yards of contaminated soil with excavation depths no greater than 15 feet would be removed and disposed to the nearby Class I,II, or III landfill (i.e., Kiefer Boulevard, Recology Hay Road, Clean Harbors Buttonwillow, or Waste Management Kettleman Hills). Site preparation and grading construction phases were assumed to reflect on-site and off-site emissions from the contaminated soil removal process.

A pilot study was conducted in 2020 by AECOM to determine whether SVE would be an effective technology to address VOC contamination in soil gas. In May 2020, an initial five-day pilot test was performed using five wells. In August 2020, a long-term pilot test of the SVE system began and is ongoing (AECOM 2021a:2-6). SMUD has decided to install one or more SVE systems for removing the soil vapor. The system would be transported to the site and would be monitored periodically. For the purpose of the analysis, 4 daily worker trips and 2 daily vendor trips have been conservatively assumed. The SVE system would utilize either activated carbon or other treatment technologies to actively treat soil vapor. The SVE system will be permitted through the SMAQMD to ensure emissions are below the human health risk levels as determined by SMAQMD. Since the SVE system will be using active treatment, it is not anticipated that vapor emissions of PCE, TCE, cis-DCE would exceed the associated health risk screening

levels determined by SMAQMD. For purposes of this analysis, “project construction” means any demolition or contaminated soil removal activities. The construction activities are anticipated to occur beginning in 2022 and last approximately 8 months, ending in late 2022. The project is expected to result in operational activities including the operation of the SVE system and periodic removal of drums containing material generated by the system. The pilot test study reported that SMAQMD has issued a permit exemption to operate the SVE and carbon adsorption system to vent treated air from the site for 24 hours per day for four years. Accordingly, this analysis assumes that the SVE system will operate for four years. A new permit or modified exemption would be required if operation of the system extends beyond four years.

The goal of the project is to remediate the site to appropriate risk and exposure levels. Following complete site remediation, SMUD will continue to be responsible for site maintenance and may seek entitlements for the future use of the site and/or transfer ownership of the parcel. Because future use of the site is not yet known and would be subject to City of Sacramento zoning and City development application and project approval processes, this analysis does not evaluate any future operation of the project site beyond four years of operation of the SVE system. Thus, the project is anticipated to result in long-term operational emissions of criteria air pollutants and precursors but would be negligible and temporary. Table 3.3-2 summarizes the modeled maximum daily emissions for all pollutants and annual emissions for particulate matter from the operational activities. The operations with the application of BMPs would not violate or substantially contribute to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations such that adverse health impacts would occur. Therefore, with the application of the BMPs, the project’s contribution to operational criteria pollutants and precursors would not contribute to the exceedance of the NAAQS or CAAQS in the County nor result in greater health impacts compared to existing conditions.

Emissions from project construction were estimated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 computer program in accordance with recommendations by SMAQMD and other air districts (CAPCOA 2016). Emissions from worker and vendor trips for the installation and operation of the SVE system were also estimated using CalEEMod in a separate model run. Maximum daily VOC emissions from the SVE system are reported based on the permit exemption and screening health risk assessment completed by SMAQMD. Modeling was based on project-specific information, where available; otherwise, CalEEMod default values were used that are based on the project’s location and land use type.

Construction activities would result in project-generated emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ from demolition activities, earth moving, off-road equipment, material delivery, and worker commute trips. Based on the size of buildings demolished and contaminated soil removed, and CalEEMod defaults, the activities would likely require the use of industrial saw, rubber-tired dozers, tractors/loaders, and graders. Fugitive dust emissions of PM_{10} and $PM_{2.5}$ would be associated primarily with demolition and removal of contaminated soil, and vary as a function of soil silt content, soil moisture, wind speed,

acreage of disturbance, and vehicle miles traveled on and off the site. Emissions of ozone precursors, ROG and NO_X, are associated primarily with equipment required for demolition and on-road mobile exhaust.

Operational activities would include worker trips and occasional use of a forklift and a flatbed truck for removal of the drums containing material generated by the SVE system. The operational activities would last for four years. For assumptions and modeling inputs, refer to Appendix A.

As noted in the Section 2.2, "Project Description", the project would typically be limited to daily construction hours between 7 a.m. and 6 p.m. Monday through Saturday, and between the hours of 9 a.m. and 6 p.m. on Sunday. The analysis assumes that all equipment would be used for eight hours in a day as each equipment usually operate lesser than the actual timeframe of the construction activity. As such, reported emissions represent a conservative estimate of maximum daily emissions during the construction period. For assumptions and modeling inputs, refer to Appendix A.

Table 3.3-2 summarizes the modeled maximum daily emissions for all pollutants and annual emissions for particulate matter from demolition and remediation activities without the application of BMPs and BACTs.

Table 3.3-2 Summary of Unmitigated Emissions Generated During Project Construction and Operations

Year – 2022	Maximum Daily Emissions (lbs/day)				Annual Emissions (tons/year)	
	ROG	NO_X	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Construction Phase						
Demolition and Removal of Contaminated Soil	3	33	20	11	<1	<1
SMAQMD Threshold of Significance[b]	None	85	0	0	14.6	15
Exceeds Threshold?	No	No	Yes	Yes	No	No
Operational Phase						
SVE System and Drum Removal – Mobile	<1	<1	<1	<1	<1	<1
SVE System and Drum Removal – Off Road	<1	1	<1	<1	<1	<1
Total	<1	1	<1	<1	<1	<1
SMAQMD Threshold of Significance[b]	65	65	0	0	14.6	15
Exceeds Threshold?	No	No	Yes	Yes	No	No

Notes: ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; lbs/day = pounds per day; SMAQMD = Sacramento Metropolitan Air Quality Management District
[a.] Includes cis-DCE, TCE, and PCE. ROG is used to represent volatile organic compound emissions from the SVE system.
[b.] Represents SMAQMD Threshold of Significance without the application of BMPs and BACT.
Maximum daily emissions represent non-overlapping phases. See Appendix A for details.
Source: Modeled by Ascent Environmental in 2021

As shown in Table 3.3-2, project demolition and remediation would not generate emissions in excess of the SMAQMD thresholds for ROG and NO_X, nor would it result in a significant increase in annual emissions of PM_{10} and $PM_{2.5}$. However, the project, without the application of BMPs and BACT, would generate daily emissions of PM_{10} and $PM_{2.5}$ in excess of the SMAQMD thresholds during construction activities. Therefore, the impact of construction activities would be potentially significant.

Mitigation Measure 3.3-1: Implement SMAQMD Basic Construction Emission Control Practices.

During demolition and remediation, the contractor shall comply with and implement SMAQMD's Basic Construction Emission Control Practices, which includes SMAQMD-recommended BMPs and BACT, for controlling fugitive dust emissions. Measures to be implemented include the following:

- Water all exposed surfaces at least two times daily. Exposed surfaces include, but are not limited to, soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

- Cover or maintain at least two (2) feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Cover any haul trucks that will be traveling along freeways or major roadways.

- Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

- Limit vehicle speed on unpaved roads to 15 miles per hour.

- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by California Code of Regulations Title 13, Sections 2449[d][3] and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.

- Maintain all equipment in proper working condition according to manufacturer's specifications. Equipment will be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Mitigation Measure 3.3-2: Implement SMAQMD Basic Construction Emission Control Practices.

During operations, SMUD shall comply with and implement SMAQMD's BMPs for Operational PM Emissions to support the use of the SMAQMD's non-zero thresholds of significance. Measures to be implemented include the following:

- Compliance with District rules that control operational PM and NO_x emissions. Reference rules regarding wood burning devices, boilers, water heaters, generators and other PM control rules that may apply to equipment to be located at the project.

- Compliance with anti-idling regulations for diesel powered commercial motor vehicles (greater than 10,000 gross vehicular weight rating). This BMP focuses on non-residential land use projects (retail and industrial) that would attract these vehicles. The current requirements include limiting idling time to 5 minutes and installing technologies on the vehicles that support anti-idling.

Implementation of Mitigation Measure 3.3-1 and 3.3-2 would be considered application of BMPs and BACT, which sets the threshold of significance for PM_{10} to 80 lbs/day for construction, and 65 lbs/day for operations and for $PM_{2.5}$ to 82 lbs/day for construction and 65 lbs/day for operations. The project emissions of PM_{10} and $PM_{2.5}$ from construction and operational activities are below these thresholds. In addition, implementation of Mitigation Measure 3.3-1 and 3.3-2 would serve to further reduce emissions of PM_{10} and $PM_{2.5}$ during construction and operational activities. With implementation of Mitigation Measure 3.3-1 and 3.2-2, the emissions of criteria air pollutants and precursors would not exceed the SMAQMD-recommended thresholds and hence, would not expose sensitive receptors to substantial pollutant concentrations such that adverse health impacts would occur. Therefore, the project emissions would not contribute to the exceedance of the NAAQS or CAAQS in the County and would be consistent with applicable air quality plans. Thus, the impact would be less than significant with mitigation incorporated.

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?

Less than Significant with Mitigation Incorporated. Project construction and operational activities would result in emissions of criteria air pollutants. Sacramento County is currently in nonattainment for federal and State ozone, State PM_{10}, and federal $PM_{2.5}$ standards. Ozone impacts are the result of cumulative emissions from numerous sources in the region and transport from outside the region. Ozone is formed in chemical reactions involving NO_X, ROG, and sunlight. Particulate matter also has the potential to cause significant local problems during periods of dry conditions accompanied by high winds, and during periods of heavy earth disturbing activities. Particulate matter (PM_{10}

and $PM_{2.5}$) may have cumulative local impacts if, for example, several unrelated grading or earth moving activities are underway simultaneously at nearby sites. This impact would be potentially significant.

Implementation of Mitigation Measure 3.3-1 and 3.3-2 (above) would reduce project emissions and ensure that project related emissions of NO_X, ROG, PM_{10}, and $PM_{2.5}$ would not exceed SMAQMD thresholds during project construction and operational activities. Implementation of SMAQMD BMPs and BACT would reduce fugitive dust emissions to the extent feasible. In addition, cleanup of contaminated soil would release VOCs (i.e., PCE, cis-DCE and TCE). To extract VOCs from the soil safely, an SVE system would be used onsite. The SVE system would remove most of the vapors, but a small amount of vapors would be released. As reported in the permit exemption application approved by SMAQMD, maximum expected VOC emissions from the equipment would not exceed 2 lbs/day (AECOM 2021a).

Emissions due to project construction activities would be temporary and would not be generated following completion of the project. The goal of the project is to remediate the site to appropriate risk and exposure levels. The temporary construction activities are necessary to achieve this goal and would serve to reduce potential emissions of and exposure to pollutants from the site. Emissions would also be generated during project operations but would be negligible and temporary. Therefore, with mitigation, short-term project-generated construction and operational emissions would not be cumulatively considerable, and impacts would be ***less than significant***.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant. Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and the potential for increased and prolonged exposure of individuals to pollutants. The project is located adjacent to sensitive receptors including single-family residential units located adjacent to the west, and north of the site, St. Mary's Catholic Church approximately 700 feet to the north and Phoebe A. Hearst Elementary School approximately 900 feet to the northeast of the project site.

Project construction activities would result in temporary, intermittent emissions of diesel particulate matter (diesel PM) from the exhaust of off-road, heavy-duty diesel equipment. The operational activities would also result in emissions of diesel particulate matter (diesel PM) from the worker trips and occasional usage of forklifts and flatbed trucks. For these activities, diesel PM is the primary TAC of concern. The potential cancer risk from inhaling diesel PM outweighs the potential for all other diesel PM—related health impacts (i.e., noncancer chronic risk, short-term acute risk) and health impacts from other TACs (CARB 2003).

Other TACs such as PCE, TCE, and cis-DCE were also identified in the soil during the Phase I ESA. A pilot study was conducted in 2020 to determine whether SVE would be an effective technology to address the contamination. The results of the pilot study suggested that vapor build-up could be remediated using the SVE system (AECOM 2021b). In addition, SMAQMD reviewed a permit exemption request for use of the SVE system and determined that the use is exempt from the permitting requirements of SMAQMD Rule 201, Section 122 because the total maximum expected VOC emissions from the equipment will be less than 2 lbs in any 24-hour period. This determination was based on the maximum concentrations from the pilot test conducted on May 22, 2020. Furthermore, screening health risk assessment results showed a cancer risk of less than 1.0 in a million and a hazard index of less than 1.0, which are below the SMAQMD's air toxics permitting criteria. These findings are based on operation of the SVE system 24 hours per day for two years. Assuming the system will continue to operate within the identified parameters, it would not expose nearby sensitive receptors to substantial VOC concentrations.

The Phase I ESA also identified arsenic in the soil and lead, PCB, and asbestos in the building materials. The remediation of the site would involve removing the demolished building materials and contaminated soil and transporting them to the appropriate landfill facilities. Because the project involves demolition of commercial buildings, it would be subject to Rule 902 which applies to demolition or renovation of any buildings containing asbestos. Compliance with this rule entails notifying SMAQMD of disturbance of any asbestos containing building and meeting construction requirements to safely dispose the asbestos containing material. Compliance with this rule would ensure asbestos dust from demolished buildings is contained and disposed in a safe manner. The same control measures would also serve to contain emissions of lead and PCB from demolished materials.

In addition, implementation of Mitigation Measure 3.3-1 would ensure that the contaminated soil would be disposed safely. The soil would be disposed at a Class I, II, or III landfill (i.e., Kiefer Boulevard, Recology Hay Road, Clean Harbors Buttonwillow, or Waste Management Kettleman Hills). Furthermore, for trucking of these hazardous materials, including lead-contaminated building materials, SMUD and the construction contractors would be required to comply with federal and State hazardous materials transportation laws including CFR Title 49, Sections 100 to 185, and the California Environmental Protection Agency's Unified Program. Compliance with these rules and regulations would significantly reduce any potential for accidental release of hazardous materials during implementation of the project. For further details on these identified contaminants, refer to Section 3.9, "Hazards and Hazardous Materials."

A Health Risk Assessment was conducted by Ascent Environmental to study the potential impacts of diesel PM on the nearby sensitive receptors (see Appendix B). Based on emissions modeling, average daily emissions of exhaust PM_{10} would not exceed 2.0 lbs/day during project construction, and the HRA showed that health risk would be 6.42 in a million, which is below the carcinogenic health risk threshold of 10 in a million.

As noted previously, these estimates represent a conservative analysis as construction and operational activities would only occur nearby each sensitive receptor during a short period of time and receptors would not likely be outdoors and exposed to these concentrations for the entire duration. In addition, the hazardous materials and contaminants would be removed and transported to the respective facilities in compliance with Rule 902 and the hazardous materials transportation laws. Thus, the project would not expose sensitive receptors to substantial pollutant concentrations and impact would be ***less than significant***, and no mitigation is required.

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

Less than Significant. Minor odors from the use of heavy-duty diesel equipment during project construction activities would be intermittent and temporary and would dissipate rapidly from the source within an increase in distance. Therefore, the project is not anticipated to result in an odor-related impact. The project would also result in operational activities but since it would occasionally use heavy-duty diesel equipment and would only be used for four years, it would not generate long-term objectionable odors. The project does not include activities that typically generate odors, such as wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, or food processing facilities. Implementation of the project would not result in exposure of a substantial number of people to objectionable odors. Thus, this impact would be ***less than significant***, and no mitigation is required.

3.4 Biological Resources

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IV. 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 the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.4.1 Environmental Setting

This section describes biological resources on the project site and evaluates potential impacts to these resources as a result of project implementation. To determine the biological resources that may be subject to impacts from the project, Ascent biologists reviewed several existing data sources including:

- California Natural Diversity Database (CNDDB) (CDFW 2021);
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2021);
- U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Consultation System (IPaC) (USFWS 2021a); and

- USFWS National Wetlands Inventory (USFWS 2021b).

Vegetation and Landcover Types

The project site is currently developed and is located in a highly developed area with residential, industrial, and commercial land uses around it. The project site is relatively flat. The landcover type of the entirety of the project site is classified as "developed." Vegetation within the project site consists of native and non-native ornamental vegetation. Vegetation includes valley oak (*Quercus lobata*), tree-of-heaven (*Ailanthus altissima*), white oak (*Quercus alba*), pecan (*Carya illinoinensi*s), Crape myrtle (*Lagerstroemia indica*), privet (*Ligustrum* sp.), camellia (*Camellia* sp.), Indian hawthorn (*Rhaphiolepis indica*), Japanese pittosporum (*Pittosporum tobira*), Chinese pistache (*Pistacia chinensis*), maidenhair tree (*Ginko biloba*), live oak (*Quercus* sp.), sweetgum (*Liquidambar styraciflua*), catalpa (*Catalpa* sp.), Persian silk tree (*Albizia julibrissin*), Russian thistle (*Kali tragus*), willowleaf lettuce (*Lactuca saligna*), holly (*Prunus* sp.), Fernald iris (*Iris fernaldii*), prickly lettuce (*Lactuca serriola*), ivy (*Hedera* sp.), wildoats (*Avena fatua*), and Bermuda grass (*Cynodon dactylon*).

Wildlife

Developed areas support common birds and mammals that have adapted to urban environments. Wildlife species observed in the project site include California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), bushtit (*Psaltriparus minimus*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus)*, house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), black phoebe (*Sayornis nigricans*), rock pigeon (*Columba livia*), northern flicker (*Colaptes auratus*), Nuttall's woodpecker (*Picoides nuttallii*), Anna's hummingbird (*Calypte anna*), American robin (*Turdus migratorius*), and western screech owl (*Megascops kennicottii*).

Other species expected to occur include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), and striped skunk (*Mephithis mephitis*).

Sensitive Biological Resources

Sensitive biological resources are protected and/or regulated by federal, state, and/or local laws and policies outlined in this memorandum under Key Regulatory Issues.

Special-Status Species

Special-status species are plants and animals in the following categories:

- listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) or are candidates for possible future listing;

- listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA);
- listed as rare under the California Native Plant Protection Act;
- listed as Fully Protected under the California Fish and Game Code;
- identified by the California Department of Fish and Wildlife (CDFW) as species of special concern;
- plants considered by CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR). Species on these lists may meet the CEQA definition of rare or endangered. They are summarized as follows:
  - CRPR 1A - Plants presumed to be extinct in California;
  - CRPR 1B - Plants that are rare, threatened, or endangered in California and elsewhere;
  - CRPR 2A - Plants that are presumed extirpated in California, but more common elsewhere;
  - CRPR 2B - Plants that are rare threatened, or endangered in California, more common elsewhere;
- considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA Section15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G); or
- otherwise meets the definition of rare or endangered under CEQA Section15380(b) and (d).

Based on a review of existing data sources (CDFW 2021, CNPS 2021, USFWS 2021a), 13 special-status wildlife species and 17 special-status plant species have potential to occur in the area surrounding the project site. The majority of these species nest, forage, or are associated with habitat that does not occur on the project site, such as riverine, vernal pool, wetland, Valley and foothill grassland, or riparian habitat, which do not occur on the project site.

There is no critical habitat for special-status wildlife species on or near the project site (USFWS 2021a). The National Wetlands Inventory does not contain records of wetlands in the project site (USFWS 2021b).

The project site, however, is adjacent to potentially suitable habitat (landscape trees along H Street) for Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*) and native bird species that do not have a special-status designation but are afforded protection under state law. No other special-status wildlife is expected to occur on the project site due to lack of habitat suitable for those species.

3.4.2 Discussion

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 the U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated. Demolition and remediation activities associated with the project would be located within developed land and the project would have no impact on most special-status species. However, potential nesting habitat for Swainson's hawk, white-tailed kite, and native bird species protected under state law is adjacent to the site.

Although the project site contains trees that could provide nesting sites for Swainson's hawk and white-tailed kite, foraging habitat is limited near the project site and therefore nesting potential is somewhat reduced by a lack of proximate foraging habitat. White-tailed kites generally nest within 0.5 mile of foraging habitat and are rarely found away from their preferred foraging habitats, which include alfalfa and other hay crops, irrigated pastures, sugar beets, and tomatoes (Erichsen et al. 1994, Dunk 1995, CDFW 2005). Swainson's hawk nest sites are generally located within approximately 2 miles of suitable foraging habitat, which consists of alfalfa, disked fields, fallow fields, dry-land pasture, beets, tomatoes, irrigated pasture, grains, other row crops, and uncultivated grasslands (Estep 1989, Estep 2009). While Swainson's hawks may forage 10 miles or more from their nest sites, foraging habitat within 1 mile of the nest is of primary importance and reproductive success decreases for Swainson's hawks as distance from foraging habitat increases (Estep 1989, England et al. 1995 in Estep 2009, England et al. 1997).

There are 30 CNDDB records (includes unprocessed data from CNDDB[1]) of nesting Swainson's hawks (*Buteo swainsoni*) within 5 miles of the project site (CDFW 2021). 14 of these occurrences are within the riparian area along the Sacramento River to the west of the project, 10 occurrences are within the riparian corridor of the American River to the north of the project, and six occurrences are within the urban grid of midtown Sacramento. The nearest Swainson's hawk nest is approximately 2 miles to the northeast of the project site within the American River Parkway. While the project is highly developed, Swainson's hawks are known to nest in urban settings in some locations. Although the project site is within 10 miles of known Swainson's hawk nesting locations, because of its urban nature, the project site does not contain suitable foraging habitat for Swainson's hawk (e.g., row crops, field crops, pasture).

[1] Because CDFW allows digital submissions of species sightings, there is currently a backlog of submissions not yet vetted by CDFW staff. These submissions are available for review, but are considered "unprocessed" data.

There are eight CNDDB records (includes unprocessed data from CNDDB) of nesting white-tailed kite. The nearest CNDDB record for white-tailed kite is approximately 1.5 miles to the northeast, along the north bank of the American River (CDFW 2021). This species is known to nest in riparian areas and within urban settings.

As noted above, there are no known occurrences for either Swainson's Hawk or white-tailed kite, and the site also does not present foraging habitat for either species. However, due to the presence of several mature trees in and around the project site and based on documented occurrences of these two species nesting within urban areas, there is a remote potential that either species could nest near or adjacent to the project site. If so, there is a potential that construction activities at the project site could result in nest disturbance, which would be considered a significant impact.

In addition to providing potential nesting sites for Swainson's hawk and white-tailed kite, mature trees in the project site and adjacent area could support nests of common raptors. The common raptors that may nest within or adjacent to the project site include: western screech owl, Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and great horned owl (*Bubo virginianus*). In addition to common raptors, vegetation within and adjacent to the project site may also support other common nesting birds.

Destruction of any bird nest or take of the nest or eggs of any bird is a violation of Section 3503 of the California Fish and Game Code. Project demolition could include removal of the landscape trees and therefore has the potential to result in direct removal of bird nests. Additionally, construction activities occurring during the nesting season (between approximately February 1 and August 31), such as demolition, ground disturbance, and presence of construction equipment and crews, could generate noise and visual stimuli that may result in disturbance to active bird nests, if present, potentially resulting in nest abandonment. Nest abandonment may result in death of chicks or loss of eggs if the adult bird does not return to the nest. Loss of active bird nests would be a significant impact.

Mitigation Measure 3.4-1: Avoid disturbance of nesting birds

Ornamental vegetation shall be removed within the project site outside of the nesting bird season (September 1 – January 31).

If vegetation removal, demolition activities, or construction will occur during the nesting season (between February 1 and August 31), a SMUD project biologist/biological monitor will conduct pre-construction nesting bird surveys to determine if birds are nesting in the work area or within 0.25 mile for Swainson's hawk, and within 500 feet of the work area for non-listed raptors, and within the project site for all other nesting birds.

The pre-construction nesting bird surveys will identify on-site bird species and any nest-building behavior. If no nesting Swainson's hawks are found on or within 0.25 mile or no nesting raptors are found within 500 feet or no nesting birds are found within the project site during the pre-construction clearance surveys, construction activities may proceed as scheduled.

If active Swainson's hawk nests are found within the nest survey area, the construction contractor shall avoid impacts on such nests by establishing a no-disturbance buffer around the nest. Monitoring of the nest by a qualified biologist during construction activities shall be required if the activity has the potential to adversely affect the nest. Based on guidance for determining a project's potential for impacting Swainson's hawks (Swainson's hawk Technical Advisory Committee 2000), projects in urban areas have a low risk of adversely affecting nests greater than 600 feet from project activities. Therefore, 600 feet is anticipated to be the adequate buffer size for protecting nesting Swainson's hawks from disturbances associated with the proposed project. However, the qualified biologist shall consult with the California Department of Fish and Wildlife to confirm the adequacy of the no-disturbance buffer and/or if the buffer is reduced based on the biologist professional judgement.

If an active nest of non-listed raptor species is found in or within 500 feet of the project site during construction, a "No Construction" buffer zone will be established around the active nest. Similarly, if a passerine nest is found within the project site during construction a "No Construction" buffer zone will be established around the active nest (usually 500 feet for raptors) to minimize the potential for disturbance of the nesting activity. The project biologist/biological monitor will determine and flag the appropriate buffer size required, based on the species, specific situation, tolerances of the species, and the nest location. Project activities will resume in the buffer area when the project biologist/biological monitor has determined that the nest(s) is (are) no longer active or the biologist has determined that with implementation of an appropriate buffer, work activities would not disturb the bird's nesting behavior.

If special-status bird species are found nesting on or within 500 feet of the project site, the project biologist/biological monitor shall notify SMUD's project manager to notify CDFW or USFWS, as appropriate, within 24 hours of first nesting observation.

Implementation of Mitigation Measure 3.4-1 would minimize impacts to special-status bird species by requiring pre-construction nesting surveys for nesting birds, and no-disturbance buffers around active nests. With implementation of Mitigation Measure 3.4-1, potential impacts to nesting birds would be reduced to a ***less-than-significant*** level.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

No Impact. The project site is located within currently developed areas, and landscaped vegetation and does not contain sensitive natural communities (e.g., riparian habitat, elderberry savanna, and northern hardpan vernal pools). ***No impact*** on sensitive natural communities would occur, and no mitigation is required.

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?

No Impact. The project site is currently developed and does not contain wetland, stream, or other aquatic habitat that could be considered jurisdictional waters of the United States or state. All project activities would take place within previously developed areas. Therefore, ***no impact*** to wetlands or other waters of the United States or state would occur, and no mitigation is required.

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?

No Impact. The project site is located within an urban setting (see Figure 2-2) within developed land cover and landscaped vegetation. This urban and disturbed setting does not support native wildlife nursery sites. The project would not alter any existing wildlife corridor and would not interfere with the movement of migratory fish or wildlife species. Therefore, ***no impact*** on the movement of native resident or migratory fish or wildlife species, movement corridors, or native wildlife nursery sites would occur, and no mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant. The project site supports limited landscape vegetation. Project demolition and remediation activities may require work within existing landscape planters and removal of existing native and landscape trees. Section 12.56.080(E) of the Sacramento City Code requires that before a public utility installs or performs maintenance on infrastructure that may cause injury to a city tree or private protected tree, the utility shall submit a plan for review and approval by the City's Public Works Director. While this provision essentially exempts SMUD from the City's tree ordinance, SMUD prefers to coordinate with the City by providing tree work plans to the City that may be approved via email.

Because SMUD would include protective fencing and would comply with Sacramento City Code Section 12.56080(E) requiring approval from the City's Public Works Director prior to any work that may cause injury or removal of city and/or protected private trees, this impact would be less than significant, and no mitigation is required. 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?

No Impact. The project site is not located within the plan area of an adopted habitat conservation plan, natural community conservation plan or other applicable and approved habitat conservation plan. As a result, it would not conflict with the provisions of any such plan. Therefore, the project would result in ***no impact***, and no mitigation is required.

3.5 Tribal Cultural Resources

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
V. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?		☐ Yes		☒ No
Would the project 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) 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)?	☐	☐	☐	☒
b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

3.5.1 Environmental Setting

Under PRC section 21080.3.1 and 21082.3, SMUD must consult with Tribes traditionally and culturally affiliated with the project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a Tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

Tribal Consultation

A search of the Native American Heritage Commission (NAHC) Sacred Lands File was conducted on August 26, 2021. The results were positive and the NAHC's letter advised SMUD to contact the United Auburn Indian Community of the Auburn Rancheria (UAIC) for more information.

On November 4, 2012, SMUD sent notification letters that the project was being addressed under CEQA, as required by PRC 21080.3.1, to the California Native American Tribes that had previously requested such notifications. Notifications were sent to UAIC,

Wilton Rancheria, Shingle Springs Band of Miwok Indians, and the Ione Band of Miwok Indians. UAIC was the only Tribe to respond to the notification. On November 23, 2021, UAIC stated that they were unaware of any previously recorded Tribal cultural sites in or adjacent to the project site, and that the nearest Sacred Lands are located close to the American River. Therefore, there are no known resources within the project area considered to be Tribal cultural resources as defined in PRC Section 21074.

3.5.2 Discussion

Would the project 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) 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)?

No impact. The NCIC records search identified no indigenous sites within the project site. Therefore, the project site contains no Tribal cultural resources that are listed or eligible for listing in the CRHR, or in a local register of historical resources. Therefore, there would be **no impact**.

b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant with Mitigation Incorporated. Although the NAHC Sacred Lands search was positive, the search is done on a USGS quadrangle section, approximately 250 acres, and therefore included an area that was much larger than the project site. The NAHC search results do not contain locational information. As discussed above, UAIC stated that the nearest Sacred Lands are located close to the American River. Nevertheless, the possibility remains that Tribal cultural resources could be encountered during construction-related ground disturbing activities. This impact is potentially significant.

Mitigation Measure 3.5-1

If any suspected Tribal cultural resources are discovered during ground disturbing construction activities, including midden soil, artifacts, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, all work shall cease within 100 feet of the find. Appropriate Tribal representative(s) shall be immediately

notified and shall determine if the find is a Tribal cultural resource (pursuant to PRC Section 21074). The Tribal representative will make recommendations for further evaluation and treatment, as necessary.

Preservation in place is the preferred alternative under CEQA and the Tribes' protocols, and every effort must be made to preserve the resources in place, including through project redesign. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project vicinity where they will not be subject to future impacts. The Tribe does not consider curation of tribal cultural resources to be appropriate or respectful and request that materials not be permanently curated, unless approved by the Tribe. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Implementation of Mitigation Measure 3.5-1 would reduce impacts to Tribal cultural resources to a **less-than-significant** level by requiring culturally appropriate treatment and proper care of significant Tribal cultural resources in the case of a discovery.

3.6 Cultural Resources

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VI. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

3.6.1 Environmental Setting

A cultural resources investigation was conducted for the project; see Appendix C. In August 2021, a California Historical Resources Information System records search was conducted by the North Central Information Center (NCIC) on the campus of California State University, Sacramento. The search was conducted to determine whether indigenous archaeological, historic-period archaeological, or built-environment historical resources have been previously recorded within the project site, the extent to which the project site has been previously surveyed, and the number and type of cultural resources within a 0.25-mile radius of the project site (NCIC File No.: SAC-21-173).

The results of the NCIC search indicated that one previously recorded historic-period archaeological site (P-34-000455) was located within the project site; no previous studies have been conducted within the project site. There are twelve known built-environment features located outside of the project site, but within the 0.25-mile radius. These resources consist of 10 residences, the SMUD Headquarters Building, and a no-longer extant commercial building (Ascent 2022).

The project site is completely paved, aside from minor landscaping along 59th Street, and was therefore not surveyed for indigenous archaeological resources. A built-environment pedestrian survey of the project site was conducted on August 17, 2021. Eight buildings over 50 years of age were photographed, recorded, and evaluated under National Register of Historic Properties (NRHP) and California Register of Historical Resources (CRHR) criteria. The buildings do not possess important historical associations or architectural merit, are not associated with notable individual, and do not have the potential to yield any additional important information about commercial office buildings or our history. Therefore, they do not appear to be eligible for listing in the NRHP or CRHR and are not considered historical resources for the purposes of CEQA (Ascent 2022).

Historic-period archaeological site P-34-000455 is the original Sacramento Valley Railroad alignment (later Southern Pacific Railroad), which began at the intersection of Front Street and R Street in February 1855 and was completed to Leidesdorff Plaza in Folsom early in 1856. Designed by pioneering engineer Theodore Judah, the railroad line traveled down R Street then outside the city limits where it paralleled today's Folsom Boulevard. It was originally constructed on an elevated track, at least the portion within Sacramento, to protect it from flooding. In 1993, the Sacramento Valley Railroad as a whole was recommended as eligible for listing in the NRHP/CRHR under Criterion A/1 for its role in the development of Sacramento and Folsom and under Criterion B/2 for its association with Theodore Judah (Ascent 2022).

The built-environment pedestrian survey revealed a previously undocumented spur line associated with P-34-000455. The spur line is located south of the Sac RT line, which divides the SMUD 59th Street Corporation Yard. This spur is no longer in use, has been severed from the main line, and the tracks have mostly been paved over. No rails, ties, or associated features such as switches, signals, or signage remain and therefore this segment no longer retains its historic integrity. Although P-34-000455 as a whole was evaluated as potentially eligible, because this segment lacks integrity it would not be an eligible contributing element, and therefore not a resource under CEQA (Ascent 2022).

3.6.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. The records search and the historical resources evaluation revealed no built-environment historical resources within the project site. Therefore, there would be ***no impact*** to historical resources, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant with Mitigation Incorporated. The records search revealed one historic-period archaeological site, P-34-000455. The segment of this resource that is located within the project site was evaluated and recommended not eligible for the CRHR, based on lack of integrity. Therefore, it is not considered a resource under CEQA. Given the distance of the project site to nearby water bodies (e.g., streams, rivers, lakes, etc.) and the lack of previously recorded resources within 0.25 mile of the project site, ground disturbing activities within the project area are unlikely to impact archaeological resources. Nevertheless, the possibility remains for project-related ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. This impact would be potentially significant.

Mitigation Measure 3.6-1: Discovery of Archaeological Materials

In the event that indigenous subsurface archaeological features or deposits, including locally darkened soil ("midden") or historic-period archaeological materials (such as concentrated deposits of bottles or bricks with makers marks, or other historic refuse), is uncovered during construction activities, all ground-disturbing activity within 100 feet of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. SMUD will be notified of the potential find and a qualified archeologist shall be retained to investigate its significance. If the qualified archaeologist determines the archaeological material to be Native American in nature, Mitigation Measure 3.18-1 shall be implemented. If the find is determined to be significant by the archaeologist (i.e., because it is determined to constitute a unique archaeological resource), the archaeologist shall work with SMUD to develop and implement appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.

Implementation of Mitigation Measure 3.6-1 would reduce potential impacts to archaeological resources discovered during project construction activities to a ***less-than-significant*** level by requiring preservation options and proper curation if significant archaeological materials are recovered.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant with mitigation incorporated. There are no known past cemeteries or burials on the project site or immediate area. However, because earthmoving activities associated with project construction would occur, there is potential to encounter buried human remains or unknown cemeteries in areas with little or no previous disturbance. This impact would be potentially significant.

Mitigation Measure 3.6-2: Discovery of Human Remains

If human remains are discovered during any demolition/construction activities, potentially damaging ground-disturbing activities within 100 feet of the remains shall be halted immediately, and the project applicant shall notify the Sacramento County coroner and the NAHC immediately, according to Section 5097.98 of the PRC and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project applicant shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. Following the coroner's

and NAHC's findings, the archaeologist, and the NAHC-designated Most Likely Descendant shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Implementation of Mitigation Measure 3.6-2 would reduce potential impacts related to human remains to a ***less-than-significant*** level by requiring work to stop if suspected human remains are found, communication with the county coroner, and the proper identification and treatment of the remains consistent with the California Health and Safety Code and the California Native American Historical, Cultural, and Sacred Sites Act.

3.7 Energy

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. 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?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.7.1 Environmental Setting

Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2018, approximately 34 percent of natural gas consumed in the State was used to generate electricity. Large hydroelectric projects generated approximately 11 percent of the electricity used by the State, and renewable energy from solar, wind, small hydroelectric, geothermal, and biomass combustion generated 31 percent (CEC 2020).

Electrical service to the City of Sacramento is provided by Sacramento Municipal Utility District (SMUD). Natural gas service is provided to the project site by Pacific Gas and Electric (PG&E). In 2020, SMUD's base power plan's electricity was composed of 33.8 percent eligible renewable energy resources, as defined by California Energy Commission (CEC), (i.e., biomass combustion, geothermal, small-scale hydroelectric, solar, and wind), 29.1 percent large-scale hydroelectric resources, and 35.2 percent natural gas and other fuels (SMUD 2020).

Commercial buildings represent just under one-fifth of U.S. energy consumption with office space, retail, and educational facilities representing about half of commercial sector energy consumption. In aggregate, commercial buildings consumed 47 percent of building energy consumption and approximately 18 percent of U.S. energy consumption.

Petroleum products (gasoline, diesel, jet fuel) are consumed almost exclusively by the transportation sector, and account for almost 99 percent of the energy used in California by the transportation sector, with the rest provided by ethanol, natural gas, and electricity (BTS 2015). Between January 2007 and May 2016, an average of approximately 672 billion gallons of gasoline were purchased in California (CSBE 2016). Gasoline and

diesel fuel sold in California for motor vehicles is refined in California to meet specific formulations required by the California Air Resources Board (CARB) (EPA 2018).

Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many alternative transportation fuels (e.g., biodiesel, hydrogen, electricity, and others). Use of alternative fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, Assembly Bill [AB] 32 Scoping Plan).

Energy Policy and Conservation Act, and CAFE Standards

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this Act, the National Highway Traffic and Safety Administration, part of the U.S. Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. The U.S. Environmental Protection Agency (EPA) calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. Based on information generated under the CAFE program, DOT is authorized to assess penalties for noncompliance.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 increases 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, which represents a nearly five-fold increase over current levels; and reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds upon progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

Warren-Alquist Act

The 1974 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The act introduced state policy for siting power plants to reduce potential environmental impacts, and additionally sought to reduce demand for these facilities by directing CEC to develop statewide energy conservation measures to reduce wasteful, inefficient, and unnecessary uses of energy. Conservation measures recommended establishing design standards for energy

conservation in buildings that ultimately resulted in the creation of the Title 24 Building Energy Efficiency Standards (California Energy Code), which have been updated regularly and remain in effect today. The act additionally directed CEC to cooperate with the Office of Planning and Research, the California Natural Resources Agency (CNRA), and other interested parties in ensuring that a discussion of wasteful, inefficient, and unnecessary consumption of energy is included in all environmental impact reports required on local projects.

State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 2003 California Energy Action Plan (2008 update). The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access (CEC 2019a).

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011); 52 percent by 2027 (SB 100 of 2018); 60 percent by 2030 (also SB 100 of 2018); and 100 percent by 2045 (also SB 100 of 2018).

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

City of Sacramento General Plan

The 2035 General Plan is the City of Sacramento's policy guide for the future. It sets policy guidelines for everything from the physical boundaries of the city to its economic growth and physical development. Policies in the energy section require reducing peak electric load for City facilities, reducing City fleet fuel consumption, improving energy efficiency of City facilities, and encouraging city residents to consume less energy. Policies also support an increasing reliance on renewable energy to reduce Sacramento’s dependence on nonrenewable energy sources.

City of Sacramento Climate Action Plan

The Sacramento Climate Action Plan (CAP) was adopted on February 14, 2012 by the Sacramento City Council and was incorporated into the 2035 General Plan. The CAP includes energy goals, strategies, and implementation measures developed to help the city reach its goals. The City also developed a CAP Consistency Review Checklist to provide a streamlined review process for proposed new development projects which are subject to CEQA.

3.7.2 Discussion

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

Less than Significant. Energy would be consumed during project demolition and remediation activities to operate and maintain equipment, transport demolition debris and remediated soil, and for worker commutes. Levels of energy consumption by the project construction and operations were calculated using the California Emissions Estimator Model Version 2020.4.0 and from fuel consumption factors in the EMFAC 2021 models (see Appendix A for detailed calculations). An estimated 1,008 gallons of gasoline and 21,411 gallons of diesel would be consumed during project construction activities, accounting for both onsite equipment use and offsite vehicle travel.

For operations, energy would be consumed from the usage of the SVE system, worker trips and occasional usage of a forklift and a flatbed truck to remove drums containing material generated by the system. The operational activities would last for 4 years. An estimated 223 gallons of gasoline and 10,650 gallons of diesel would be consumed annually during project operational activities. In addition, the SVE system would consume electricity. Based on data from the U.S. Environmental Protection Agency (EPA), a typical SVE system consumes 77,600 kWh annually (EPA 2012). This analysis uses EPA data to characterize the SVE system's electricity consumption. Electricity consumption of 77,600 kWh is based on a full year of operation. If the SVE system operates for the duration of remediation activities, i.e., 8 months, electricity consumption would be approximately 51,800 kWh. It should be noted that the EPA factor is based on data from Superfund sites. Superfund areas constitute the nation's most contaminated areas requiring a long-term response to clean up hazardous material contaminations. Therefore, such sites typically include remediation activities at a much larger scale, addressing long-term contamination, and over a longer duration. Therefore, the electricity consumption estimate provided is conservative and likely overestimates the actual use from the SVE system. Operation of the SVE system is necessary to reduce VOC emissions from contaminated soils to a safe level. This one-time consumption of electricity would bring the site in compliance with hazardous waste standards.

The one-time energy expenditure required to demolish the buildings, remove the contaminated soil and extract the soil vapor would be non-recoverable. The energy needs for the project would be temporary and would not require additional capacity or increase peak or base period demands for electricity or other forms of energy.

The project would not generate any vehicle trips or additional emissions after four years of operational activities including usage of SVE system and removal of drums from the project site. Following complete site remediation, SMUD will continue to be responsible for site maintenance and may seek entitlements for the future use of the site and/or transfer ownership of the parcel. Because future use of the site is not yet known and would be subject to City of Sacramento zoning and City development application and project approval processes, this analysis does not evaluate any future operation of the project site. Therefore, the project would not result in an inefficient, wasteful, or unnecessary consumption of energy resources. This impact would be ***less than significant***, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Less than Significant. As discussed above, the project would not result in inefficient, wasteful, or unnecessary consumption of energy resources. Furthermore, the energy used for demolition, removal of the contaminated soil and extraction of soil vapor, would be temporary and would not create any long-term demand for energy. Thus, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact would be ***less than significant***, and no mitigation is required.

3.8 Geology and Soils

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VIII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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 California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

3.8.1 Environmental Setting

Regional and Local Geology

As noted previously, the project site is located in the developed area of the city of Sacramento, within the southern portion of the Sacramento Valley. The Sacramento Valley represents the northern portion of the Great Valley geomorphic province of California, which is bordered on the east by the foothills of the Sierra Nevada geomorphic province and on the west by the Coast Range geomorphic province. The Great Valley is an asymmetrical trough approximately 400 miles long and 40 miles wide forming the broad valley along the axis of California. Erosion of the Coast Range and the Sierra

Nevada has generated alluvial, overbank, and localized lacustrine sediments as thick as 50,000 feet in areas of the Great Valley.

According to the United States Department of Agriculture Soil Conservation Service National Cooperative Soil Survey, the dominant soil composition in the general area of the project site is urban land with variable soil types and textures (AECOM 2020:3-1). Another associated soil type in the vicinity of the subject property is San Joaquin silt loam characterized by very slow infiltration rates in moderately-drained soils, with fine or clayey textures (AECOM 2020:3-1). The project site, which is located approximately one mile southwest of the American River and approximately four miles east of the Sacramento River, is underlain by the Riverbank Formation (Qr), described alluvium (Wagner, et al. 1981).

Seismicity

The Great Valley is bounded on the west by the Great Valley fault zone and the Coast Ranges and on the east by the Foothills fault zone and the Sierra Nevada. Relatively few faults in the Great Valley have been active during the last 11,700 years. The closest faults to the project site with evidence of displacement during Holocene time are the Dunnigan Hills Fault (approximately 24 miles to the northwest) and the Cleveland Hills Fault (approximately 60 miles to the north). In general, active faults are located along the western margin of the Central Valley (e.g., the Great Valley Fault) and within the Coast Ranges (Jennings 1994). There are no Alquist-Priolo Earthquake Fault Zones within the Sacramento area (City of Sacramento 2014a:4.5-4).

According to the California Geological Survey Earthquake Shaking Potential for California, the Sacramento region is distant from known, active faults and would experience lower levels of shaking less frequently that areas closer to major, active faults. However, very infrequent earthquakes could still cause strong shaking here (CGS 2016). Landslides triggered by seismic events are not expected at the project site due to the site's flat terrain.

Factors determining liquefaction potential are the soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Loose sands, peat deposits, and unconsolidated Holocene-age sediments are the most susceptible to liquefaction, while clayey silts, silty clays, and clays deposited in freshwater environments are generally stable under the influence of seismic ground shaking. The occurrence of liquefaction during an earthquake can potentially cause reduction in or loss of shear strength, seismically induced settlements, formation of boils, or lateral spreading of the liquefied soil. In order for liquefaction of soils due to ground shaking to occur, it is generally understood that subsurface soils must be in a relatively loose state, soils must be saturated, soils must be sand like (e.g. non-plastic or of very low plasticity), and the ground motion is of sufficient intensity to act as a triggering mechanism. The project site is not located in a currently established State of California Seismic Hazard Zone for liquefaction.

Soils

A review of U.S. Natural Resources Conservation Service (NRCS) soil survey data indicates that the project site is composed of mostly Urban Land with a small amount of San Joaquin-Urban Land Complex (NRCS 2021). The urban land unit consists of areas covered up to 90 percent by impervious surfaces.

Table 3.8-1 Project Site Soil Characteristics

Soil Map Unit	Water Erosion Hazard[1]	Wind Erosion Hazard[2]	Shrink-Swell Potential[3]	Permeability[4]	Drainage Class
Urban Land	NR	NR	NR	NR	NR
San Joaquin–Urban Land Complex	Moderate	6	Low	Moderately high	Moderately well drained

Notes: NR = not rated

1. Based on the erosion factor "Kw whole soil," which is a measurement of relative soil susceptibility to sheet and rill erosion by water.
2. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.
3. Based on percentage of linear extensibility. Shrink-swell potential ratings of "moderate" to "very high" can result in damage to buildings, roads, and other structures.
4. Based on standard U.S. Natural Resources Conservation Service saturated hydraulic conductivity (Ksat) class limits; Ksat refers to the ease with which pores in a saturated soil transmit water.

Source: NRCS 2021

Paleontological Resources

The project site is underlain by the Riverbank Formation, which may include sedimentary alluvial deposits which frequently contain fossils (SMUD 3.3-27)

3.8.2 Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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 California Geological Survey Special Publication 42.)

No Impact. Surface ground rupture along faults is generally limited to a linear zone a few yards wide. There are no Alquist-Priolo Earthquake Fault Zones within Sacramento (City of Sacramento 2014a:4.5-4). Consequently, the project is not expected to expose people or structures to adverse effects caused by the rupture of a known fault. There would be ***no impact*** associated with fault rupture, and no mitigation is required.

ii. Strong seismic ground shaking?

Less than Significant. The project site is located in the Sacramento Valley, which has historically experienced a low level of seismic ground shaking. The California Geological Survey has identified the region as an area of low to moderately low earthquake shaking potential (CGS 2016).

Depending on the strength of groundshaking, it is possible that structures in the area could be damaged during such an event. However, the soil vapor extraction system would be constructed in a manner consistent with California Building Code (CBC) Title 24, which identifies specific design requirements to reduce damage from strong seismic ground shaking, ground failure, landslides, soil erosion, and expansive soils. This impact would be ***less than significant,*** and no mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant. For the installation of the soil vapor extraction system, SMUD would comply with the CBC, which incorporates seismic engineering and construction parameters designed to protect life and property to the maximum extent practicable.

Active seismic sources are a relatively long distance away and the project site is located on flat land and has low shaking hazard potential. However, in the unlikely event of a significant earthquake, widespread liquefaction could occur resulting in significant damage. The project would comply with CBC Title 24, which includes specific design requirements to reduce damage from ground failure. In addition, emergency shutoffs would be installed to reduce risks involving seismic-related ground failure. Therefore, the potential of adverse effects involving ground failure, including liquefaction is low and this impact would be ***less than significant***, and no mitigation is required.

iv. Landslides?

No Impact. The project site is located in a flat area of Sacramento; there is no risk of landslides in such terrain (SMUD 2018:3.5-9). Consequently, the project would not expose people or structures to landslides and there would be ***no impact*** associated with landslide risk, and no mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant. As discussed above, NRCS soil survey data indicate that the project site includes soils that are classified as Urban Land and San Joaquin-Urban Land Complex (NRCS 2021). Construction activities would involve grading, excavating, trenching, moving, and filling within the project site. Construction activities would remove existing concrete and paving and would expose site soils to erosion via wind in the summer months, and to surface water runoff during storm events. Sediment from construction activities could be transported within stormwater runoff and could drain to off-site areas and degrade local water quality.

However, the project would be subject to the National Pollutant Discharge Elimination System (NPDES) Statewide construction general NPDES permit for stormwater runoff (Order No. 99 - 08 – DWQ and NPDES No. CAS000002 [Construction General Permit]). In compliance with the Construction General Permit, a Stormwater Pollution Prevention Plan (SWPPP) would be developed for the project by a qualified SWPPP professional. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater associated with construction activity and identify, construct, and implement stormwater pollution prevention measures to reduce pollutants in stormwater discharges during and after construction. Therefore, the SWPPP would include a description of potential pollutants, the management of dredged sediments, and hazardous materials present on the site during construction (including vehicle and equipment fuels). The SWPPP would also include details of how BMPs for sediment and erosion control would be implemented. Implementation of the SWPPP would comply with state and federal water quality regulations.

Furthermore, and as noted above, the project would be constructed in accordance with CBC standards. These standards require that appropriate soil and geotechnical reports be prepared and that site-specific engineering design measures, including those related to general site grading, clearing and grubbing, soil stabilization, and general erosion control, be implemented to appropriately minimize potential adverse impacts related to erosion at the infill site. This, coupled with preparation of a site-specific SWPPP, would minimize potential adverse impacts related to erosion and loss of topsoil at the project site. Impacts would be ***less than significant***, and no mitigation would be required.

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?

Less than Significant. As described previously, there are no slopes within the project site, and therefore there would be no potential for on- or off-site landslide. While the alluvium that underlies the area can be subject to liquefaction, the site has been developed and includes extensive fill. In addition, the project would comply all building codes and engineering recommendations. Therefore, this impact would be ***less than significant***, and no mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less than Significant. Expansive soils shrink and swell as a result of moisture change. These volume changes can result in damage over time to building foundations, underground utilities, and other subsurface facilities and infrastructure if they are not designed and constructed appropriately to resist the damage associated with changing soil conditions. A review of NRCS (2021) soil survey data indicates that the project site is mostly

composed of soil classified as Urban Land, which is not at risk of expansion (see Table 3.8-1). Therefore, this impact would be ***less than significant***, and no mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The project would not require the use of septic tanks or alternative wastewater disposal systems. Thus, the project would have ***no impact*** related to soil suitability for use of septic tanks or alternative wastewater disposal systems, and no mitigation is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated. Project-related earthmoving activities would occur in the Pleistocene-age Riverbank Formation. Because numerous vertebrate fossils have been recovered from the Riverbank Formation in northern and central California, including localities that are close to the project site, this formation is considered to be paleontologically sensitive. Therefore, earthmoving activities in the Riverbank Formation could result in accidental damage to or destruction of previously unknown unique paleontological resources. This impact would be potentially significant.

> **Mitigation Measure 3.8-1: Worker awareness and response for paleontological resources**
>
> Prior to the start of project activities that would result in ground disturbance, SMUD shall provide information to the construction contractor and SMUD's project superintendent regarding the potential for paleontological resources that could be encountered during ground disturbance, the regulatory protections afforded to such finds, and the procedures to follow in the event of discovery of a previously unknown resource, including notifying SMUD representatives.
>
> If workers observe any evidence of paleontological resources (e.g., fossils), all work within 50 feet of the find shall cease immediately, and SMUD representatives shall be notified. A paleontologist meeting the Society of Vertebrate Paleontology's minimum qualifications shall be consulted to assess the significance of the paleontological find and recommend appropriate measure for the treatment of the resource. Potential treatment may include no action (i.e., the resource is not significant), avoidance of the resource, or data recovery.

Implementation of Mitigation Measure 3.8-1 would reduce potential impacts to previously-undiscovered resources by requiring worker awareness training and that steps be taken in the event that paleontological resources are encountered during project construction. With implementation of Mitigation Measure 3.8-1, this impact would be reduced to a ***less-than-significant*** level.

3.9 Greenhouse Gas Emissions

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IX.	**Greenhouse Gas Emissions. Would the project:**				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.9.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing, electricity generation by utilities and consumption by end users, residential and commercial onsite fuel usage, and agriculture and forestry. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing together (IPCC 2014:5).

Climate change is a global problem. GHGs are global pollutants because even local GHG emissions contribute to global impacts. GHGs have long atmospheric lifetimes (one to several thousand years) and persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any particular GHG molecule is dependent on multiple variables and cannot be determined with any certainty, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration (IPCC 2013:467).

Federal Plans, Policies, Laws, and Regulations

In *Massachusetts et al. v. Environmental Protection Agency et al.*, 549 U.S. 497 (2007), the Supreme Court of the United States ruled that CO_2 is an air pollutant as defined under

the federal Clean Air Act and that the U.S. Environmental Protection Agency (EPA) has the authority to regulate GHG emissions.

In 2010, EPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the federal Clean Air Act.

EPA and the National Highway Traffic Safety Administration (NHTSA) have issued rules to reduce GHG emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond (77 Federal Register [FR] 62624). NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. The purpose of this program is to increase fuel economy and limit vehicle emissions, including CO_2 emissions, of cars and light-duty trucks (77 FR 62630).

The Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule), promulgated by NHTSA and EPA in 2020, set new CAFE standards for passenger cars and light duty trucks, model years 2021–2026 (NHTSA 2021). This rule also revoked a waiver granted by EPA to the State of California under Section 209 of the Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by EPA for the explicit purpose of greenhouse gas emission reduction, and indirectly, criteria air pollutant and ozone precursor emission reduction (NHTSA 2021).

Statewide GHG Emission Targets and the Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the state government for approximately two decades (CEC 2019b). GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 and Senate Bill [SB] 197 of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. Executive Order B-55-18 calls for California to achieve carbon neutrality by 2045 and achieve and maintain net negative GHG emissions thereafter. These targets are in line with the scientifically established levels needed in the United States to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (United Nations 2015:3).

California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by the California Air Resources Board (CARB), outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB 2017:1, 3, 5, 20, 25–26). It identifies the

reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). The latest 2022 Scoping Plan Update aims to assess progress towards achieving the Senate Bill 32 2030 target and lay out a path to achieve carbon neutrality by no later than 2045.

CARB and other state agencies also released the *January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan* (Natural and Working Lands Implementation Plan) consistent with the carbon neutrality goal of Executive Order B-55-18. The measures included in the draft plan are projected to result in cumulative emissions of 21.6 to 56.8 $MMTCO_2e$ by 2030 and cumulative emissions reduction of -36.6 to -11.7 $MMTCO_2e$ by 2045 (CalEPA et al. 2019:13-14).

Local Plans and Policies

City of Sacramento General Plan

Although Sacramento Municipal Utility District (SMUD) is not subject to the goals and policies of the City of Sacramento, the City's 2035 General Plan includes goals and policies relevant to climate change and GHG emissions for projects within city limits. Relevant policies related to climate change are described below (City of Sacramento 2015).

- **Policy ER 6.1.6:** Community Greenhouse Gas Reductions. The City shall reduce community GHG emissions by 15 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 49 percent and 83 percent by 2035 and 2050, respectively.

- **Policy ER 6.1.8:** Additional GHG Emission Programs. The City shall continue to evaluate the feasibility and effectiveness of new policies, programs, and regulations that contribute to achieving the City's long-term GHG emissions reduction goals.

- **Policy ER 6.1.9:** Climate Change Assessment and Monitoring. The City shall continue to assess and monitor performance of GHG emissions reduction efforts beyond 2020, progress toward meeting long-term GHG emissions reduction goals, the effects of climate change, and the levels of risk in order to plan a community that can adapt to changing climate conditions and be resilient to negative changes and impacts.

- **Policy ER 6.1.10:** Coordination with Sacramento Metropolitan Air Quality Management District (SMAQMD). The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.

City of Sacramento Climate Action Plan

The Sacramento Climate Action Plan (CAP) was adopted on February 14, 2012 by the Sacramento City Council and was incorporated into the 2035 General Plan. The CAP includes GHG goals, strategies, and implementation measures developed to help the city reach its goals. The City also developed a CAP Consistency Review Checklist to provide a streamlined review process for proposed new development projects which are subject to CEQA (City of Sacramento 2012).

Sacramento Metropolitan Air Quality Management District

The SMAQMD is the primary agency responsible for addressing air quality in Sacramento County. SMAQMD also recommends methods for analyzing project-generated GHGs in CEQA analyses and offers potential GHG reduction measures for land use development projects. SMAQMD developed thresholds of significance to provide a uniform scale to measure the significance of GHG emissions from land use and stationary source projects in compliance with CEQA and AB 32. SMAQMD's goals in developing GHG thresholds include ease of implementation; use of standard analysis tools; and emissions mitigation consistent with AB 32.

Threshold of Significance

SMAQMD has established quantitative significance thresholds for evaluating GHG emissions. For construction emissions generated by land development projects, the SMAQMD threshold is 1,100 metric tons per year of CO_2 equivalent ($MTCO_2e$) and 10,000 metric tons per year of CO_2 equivalent ($MTCO_2e$) for operational emissions (SMAQMD 2020).

3.9.2 Discussion

a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant. The issue of global climate change is inherently a cumulative issue, because the GHG emissions of an individual project cannot be shown to have any material effect on global climate. Thus, the level of GHG emissions associated with implementation of the project is addressed as a cumulative impact.

GHG emissions associated with implementation of the project would be generated during demolition and remediation activities, and removal of demolition debris and contaminated soil. Project-related demolition and remediation activities would result in the generation of GHG emissions from the use of heavy-duty off-road equipment and vehicle use during worker commute. The activities would include demolition of buildings, site clearing, and removal of demolition debris and contaminated soil. GHG emissions from demolition and remediation-related activities were estimated using CalEEMod Version 2020.4.0. A detailed discussion of the major emissions generating activities and model assumptions is provided

in Section 3.3, “Air Quality.” Model outputs are included in Appendix A. All the above-mentioned activities would result in construction emissions of 316 $MTCO_2e$.

The project would also generate some additional GHG emissions during operations. The operation of the SVE system and periodic removal of drums containing material generated by the system would result in worker trips and occasional use of forklift and flatbed truck. The GHG emissions from these operational activities would be 10 $MTCO_2e$. Additionally, operation of the SVE system would generate off-site GHG emissions from electricity consumption. Based on the reported electricity consumption in Section 3.6, “Energy,” the SVE system would generate 12 $MTCO_2e$ of GHG emissions. Total emissions from project operational activities would be 22 $MTCO_2e$.

Following complete site remediation, SMUD will continue to be responsible for site maintenance and may seek entitlements for the future use of the site and/or transfer ownership of the parcel. Because future use of the site is not yet known and would be subject to City of Sacramento zoning and City development application and project approval processes, this analysis does not evaluate any future operation of the project site beyond four years of operation of the SVE system.

SMAQMD has established quantitative significance thresholds for evaluating GHG emissions. For construction of all types, emissions due to land development projects, the established significance threshold is 1,100 $MTCO_2e$ annually and for operations the significance threshold is 10,000 $MTCO_2e$ annually (SMAQMD 2020). Construction-related GHG emissions for the project would be primarily generated in 2022 and would be no more than 316 $MTCO_2e$ and operations-related GHG emissions would be no more than 22 $MTCO_2e$. Therefore, project-related construction and operational GHG emissions would not exceed SMAQMD’s threshold of significance. This impact would be ***less than significant***, and no mitigation is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant. Plans, policies, and regulations adopted for the purpose of reducing GHG emissions were developed with the purpose of reducing cumulative emissions related, primarily, to long-term operational emissions. SMAQMD developed thresholds of significance to provide a uniform scale to measure the significance of GHG emissions from land use and stationary source projects in compliance with CEQA and AB 32. As described previously, the project would not result in a considerable increase in GHG emissions as a result of demolition and remediation activities and would not generate any GHG emissions due to operations that would exceed the threshold of significance. Thus, the project would not conflict with any applicable plan, policy, or regulation adopting for the purpose of reducing emissions of GHGs. The impact would be ***less than significant***, and no mitigation is required.

3.10 Hazards and Hazardous Materials

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
X.	**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?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency 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?	☐	☐	☐	☒

3.10.1 Environmental Setting

Since 1947 when it purchased the property from PG&E, SMUD has used the former corporation yard property located at 1708 59th Street, Sacramento, as a storage area for hazardous and nonhazardous wastes generated on-site or at other SMUD facilities. There have historically been designated areas for the storage of new and refurbished transformers in a building known as the Hazardous Materials Building located in the northwest corner of the project site (See Figure 2-3).

From December 2018 to March 2019, AECOM conducted site investigation activities to further characterize the lateral and vertical extent of tetrachloroethene (PCE) in soil gas, soil, and groundwater and arsenic in soil (AECOM 2021b). It was determined that PCE levels in soil gas were present at concentrations exceeding residential and commercial/industrial soil vapor screening levels (SVSLs), while concentrations in soil

and groundwater did not exceed the SVSLs (AECOM 2021b:2-5). The 2018 soil investigation found arsenic concentrations in soil that exceeded background concentration levels.

A Phase I ESA was completed for the project site by AECOM in February 2020. This Phase I report identified five recognized environmental conditions (RECs) in connection with the project site. RECs identified in connection with the project site include the following:

- Based on the information detailed in historical documents, there are potential uncharacterized environmental impacts caused by the presence of 11 underground hydraulic lifts and related hydraulic oil reservoir underground storage tanks (USTs), and two vehicle oil/water separators (OWSs). Since preparation of the Phase I ESA report, SMUD has removed the OSWs in accordance with the Corrective Action Consent Agreement (Agreement), Docket HWCA P1-13/14-007 (SMUD 2021).

- No information or documentation regarding the removal of a 550-gallon cleaning solvent tank and a 550-gallon kerosene tank was readily available for review. Lack of documentation of removal of these historical USTs constitutes a REC for the project site.

- The presence of polychlorinated biphenyls (PCBs) in building materials with concentrations greater than the 50-milligram per kilogram (mg/kg) screening criteria (up to 200,000 mg/kg) represents a REC for the project site. For demolition and disposal purposes, PCB concentrations were detected greater than the 50-mg/kg screening criteria, and the building materials are therefore considered “PCB bulk product waste” according to Title 40, Code of Federal Regulations (CFR) Part 761, and as hazardous waste by the Department of Toxic Substances Control (DTSC). Any contractor who may perform PCB-related work at the site (e.g., inspection, removal, or clean-up) must be trained and qualified to do so. All workers must also follow current Occupational Safety and Health Administration (OSHA) regulations, including Title 29 CFR Section 1910.120 and Title 8 California Code of Regulations (CCR) Section 5192, as well as other applicable federal, state, and local laws and regulations.

- A vapor encroachment condition (VEC) at the project site is likely to exist due to the documented presence of tetrachloroethene (PCE) in on-site soil and soil gas. The presence of potentially uncharacterized PCE and the likelihood of a possible VEC represents a REC for the project site. SMUD conducted indoor air sampling within the Tool Issue Building in April 2019. PCE and its breakdown products were not detected above residential SLs; therefore, conducting indoor air sampling within additional buildings was not deemed to be necessary at that time since the other buildings are considered to have lower VEC potential than the tested building. SMUD has indicated that additional investigative work is being conducted to further characterize PCE in the soil and soil gas at the project site.

- The presence of potentially uncharacterized arsenic represents a REC for the project site. AECOM's recommended next steps regarding arsenic include implementing a corrective action to address arsenic concentrations in soil at the site above naturally occurring levels. The range of site-specific arsenic background concentrations should be evaluated to select an appropriate arsenic clean-up goal.

Although not considered RECs by ASTM Standards, the Phase I included a review of available information regarding potential asbestos-containing materials (ACMs) and lead-based paint (LBP) that was identified in on-site building materials: The results of testing for asbestos during a survey performed in 2016 identified asbestos to be present in multiple materials from the buildings on the project site. Sampling also indicated the presence of LBP in multiple buildings.

The Phase I ESA report also identified one historical recognized environmental condition (HREC) within the project site: Between June 30 through July 3, 2014, tank removal operations were conducted to remove two 10,000-gallon unleaded gasoline fuel USTs and one 10,000-gallon diesel fuel UST. On August 8, 2014, the Sacramento County Environmental Compliance Division (SCECD) issued a letter stating that based on the results of the removal activities, it was their position that no further action was required at that time. Therefore, the successful documented removal of these USTs with regulatory agency concurrence is an HREC for the project site.

DTSC's Envirostor website, which provides data related to hazardous materials spills and clean ups, identifies the project site as a historic permitted but currently non-operational hazardous waste facility (DTSC 2021). The site is identified as an active corrective action site.

The State Water Resources Control Board's (SWRCB) GeoTracker website provides data relating to leaking USTs and other types of soil and groundwater contamination, along with associated cleanup activities. While the project site is not identified in this database, there are two open cleanup program sites within one-quarter mile of the project site. These sites are the Camellia Cleaners located at 5901 Folsom Boulevard and the Former Kramer Carton Facility (formerly Community Linen) located at 1800 61st Street (SWRCB 2021).

There are two schools located within one-quarter mile of the project site: Phoebe A. Hearst Elementary School at 1410 60th Street and St. Mary Parish School at 1351 58th Street.

No public airports or private airstrips are within 2 miles of the project site. The closest airport is Sacramento Executive Airport, approximately 3.7 miles southwest of the project site. The project site is not located within any airport safety zones (SACOG 2013: Map3).

3.10.2 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant. Implementation of the project would result in the demolition of multiple buildings and remediation of onsite soil contamination. These activities would likely involve the temporary storage, use, and transport of hazardous materials, such as fuel and lubricants, during construction activities. The use and storage of these materials could potentially expose and adversely affect workers, the public, or the environment as a result of improper handling or use, accident, environmentally unsound disposal methods, fire, explosion, or other emergencies, resulting in adverse health or environmental effects.

For trucking of hazardous materials, including lead-contaminated building materials, SMUD and any construction contractors would be required to comply with federal and State hazardous materials transportation laws including CFR Title 49, Sections 100 to 185, and the California Environmental Protection Agency's Unified Program. Any regulated activities would be managed by the Sacramento County Environmental Management Department, which is the designated CUPA and ensures compliance with environmental regulations. Compliance with these regulations and agencies would reduce any potential for accidental release of hazardous materials during implementation of the project.

Based on findings in the assessments and investigations previously discussed above, hazardous materials have been identified within the project site, notably within soils surrounding three buildings. The project would demolish buildings as needed to install SVE systems and excavate contaminated soil. SMUD is currently coordinating with DTSC to determine the extent of the remediation effort and to establish the appropriate remediation level for the site. Because the project involves remediation of known contamination, hazardous materials are known to be present.

As part of SMUD's site investigations and coordination with DTSC, many reports have been created documenting the known contamination and conditions of the site, including the Phase I ESA (AECOM 2020), a site characterization report (AECOM 2019), and two site characterization report addenda (AECOM 2021b and 2021c). The project would be required to adhere to all applicable regulations regarding site remediation to protect worker safety, public health, and the environment.

The California Highway Patrol and Caltrans are responsible for enforcing regulations related to the transportation of hazardous materials on local roadways, and the use of these materials is regulated by DTSC, as outlined in CCR Title 22. SMUD and its construction contractors would be required to comply with the California Environmental Protection Agency's (Cal EPA's) Unified Program, which protects Californians from hazardous waste and hazardous materials by ensuring consistency throughout the state

regarding the implementation of administrative requirements, permits, inspections, and enforcement at the local regulatory level. Regulated activities would be managed by the Sacramento County Environmental Management Department, which is the designated Certified Unified Program Agency, and in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous material management plans and inventories). Such compliance would reduce the potential for accidental release of hazardous materials during project construction.

The project would be required to comply with existing laws and regulations regarding the transportation, use, and disposal of hazardous materials. Soil classified as hazardous waste would require disposal at a class I, II, or III landfill (i.e., Kiefer Boulevard, Recology Hay Road, Clean Harbors Buttonwillow, or Waste Management Kettleman Hills). These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations would ensure that this impact would be ***less than significant***, and no mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than Significant. As discussed above, the project site is known to contain hazardous materials including PCBs, PCE, arsenic, lead, and asbestos. Groundwater testing has been conducted and found not to exceed applicable thresholds (AECOM 2021b:2-5). The project would include demolition and remediation which could involve the handling of hazardous materials. Additionally, project activities would involve the use of hazardous materials (e.g., fuels, oils, and lubricants), that could be accidentally upset or released into the environment. As discussed in item a) above, compliance with applicable laws and regulations regarding the transport, use, and disposal of hazardous materials would ensure that the project would result in a ***less-than-significant*** impact, and no mitigation is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant. As discussed above, there are two schools within one-quarter mile of the project site. Small quantities of hazardous materials such as fuels, oils, and lubricants would be used during project implementation and the project would remove existing hazardous materials from the project site. The project would be required to comply with existing regulations associated with the transport, use, and disposal of hazardous materials. Compliance with applicable regulations regarding hazardous materials would reduce the potential for hazardous emissions within one-quarter mile of

existing schools. Therefore, this impact would be ***less than significant***, and no mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant. Government Code Section 65962.5 requires that DTSC compile and maintain a list of hazardous waste facilities subject to corrective action, land designated as hazardous waste property, or hazardous waste disposals on public land. This list is known as the Cortese List, which can be accessed on Cal EPA's website. As described above, the project site is identified on DTSC's Envirostor database as a hazardous waste disposal site. While the site is a listed site, the project involves remediation of the site contamination. Following all project activities, the site would be remediated to DTSC standards, with the goal of closing the DTSC corrective action case for the site. The project would comply with existing laws and regulations related to the use, disposal, and transport of hazardous materials, as described in item a) and c), above. This impact would be ***less than significant***, and no mitigation is required.

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?

No Impact. The Sacramento Executive Airport is located approximately 3.7 miles southwest of the project site. The project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport, or within the vicinity of a private airstrip, and implementing the project would not result in an aviation-related safety hazard for people residing or working in the project area. Therefore, ***no impact*** would occur, and no mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant. Project implementation is not expected to require temporary lane closures or other actions that could interfere with or slow down emergency vehicles, temporarily increasing response times and impeding existing services on these roadways. However, any project activities that may involve public right-of-way would be required to obtain an encroachment permit from either Caltrans or the City of Sacramento. As part of this encroachment permit application, SMUD would be required to prepare and then later implement a traffic control plan, which would require the provision of temporary traffic controls and maintenance of emergency access during construction. Once the project is complete, all roads in the area would continue to operate as under pre-project conditions and the project would not interfere with emergency repose or evacuation plans. As a result, this impact would be ***less than significant***, and no mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The project site is located in a highly developed area of Sacramento that is not adjacent to wildlands, therefore implementation of the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to developed areas. There would be ***no impact*** related to wildland fires, and no mitigation is required.

3.11 Hydrology and Water Quality

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XI. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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:	☐	☐	☐	☐
i) Result in substantial on- or offsite erosion or siltation;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
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; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.11.1 Environmental Setting

The city of Sacramento is located at the confluence of the Sacramento and American Rivers within the Sacramento River Basin. The Sacramento River Basin encompasses about 27,000 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta to the southeast. The Sacramento River Basin is the largest river basin in California, capturing, on average, approximately 22 million acre-feet of annual precipitation (City of Sacramento 2014b:6-43). The project site is entirely developed and mostly covered with pavement. There are no surface waters within 500 feet of the project site.

Stormwater at the project site drains to the existing storm drain system along 59th Street which is part of the City of Sacramento's combined sewer system (CSS). Stormwater is then conveyed to one of two facilities for primary treatment before discharge to the

Sacramento River. CSS flows and discharges are currently regulated by the provisions of Waste Discharge Requirement Order No. R5-2015-0045 (NPDES No. CA0079111) (City of Sacramento 2014a: 4.7-2).

The project is located within an area of minimal and reduced flood hazard due to existing levee infrastructure (Zone X), as identified on Federal Emergency Management Agency (FEMA) flood hazard maps (FEMA 2021).

3.11.2 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality

Less than Significant. Drainage from the project flows into the City's CSS and from there is discharged to the Sacramento River, which is located within the Sacramento River Basin. As such, the applicable water quality standards are listed in the Fifth Edition of the Water Quality Control Plan (Basin Plan) For the Sacramento River and San Joaquin River Basins (CRWQCB 2018).

To reduce or eliminate construction-related water quality effects, the City of Sacramento's Grading Ordinance would require future public or private contractors to comply with the requirements of the City's Stormwater Quality Improvement Plan (SQIP). In addition, before the onset of any construction activities, where the disturbed area is one acre or more in size, the City would require any public or private contractors to obtain coverage under the NPDES General Construction Permit and include erosion and sediment control plans. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point source runoff. The City's SQIP and the Stormwater Quality Design Manual for the Sacramento Region include BMPs to be implemented to mitigate impacts from new development and redevelopment projects. Construction BMPs that implement the SQIP and General Construction Permit may include, but are not limited to the following measure:

> Prior to issuance of a construction permit, the City would require public and/or private contractors to provide an erosion and sediment control plan. The City would verify that a state general permit was obtained including verification that a Notice of Intent has been filed with the Central Valley Regional Water Quality Control Board and a SWPPP has been developed before allowing construction to begin. The City would perform inspections of the construction area to verify that the BMPs specified in the erosion and sediment control plan are properly implemented and maintained. The City would notify contractors immediately if there is a noncompliance issue and would require compliance. Control of erosion and sediment transport during the construction phase would effectively mitigate potential sediment impairment of receiving waters.

Consequently, compliance with City and State requirements related to protecting water quality would ensure that violations of WDRs or water quality standards would be ***less than significant***, and no mitigation would be required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant. The project site is underlain by the North and South American Groundwater Subbasin, which is part of the larger Sacramento Valley Groundwater Basin. The South American River Subbasin is estimated to have a groundwater storage capacity of 4,816,000 acre-feet (DWR 2004:2). No groundwater would be withdrawn following project remediation activities.

Because the project would involve construction activities within previously developed areas, which are primarily paved areas, the project would not involve construction practices or develop facilities that would substantially prevent or otherwise redirect the flow of groundwater resources within the project site. Implementation of the project would include removal of impervious pavement and would decrease the amount of onsite impervious surfaces. This could potentially result in a beneficial change in surface infiltration characteristics affecting groundwater recharge. For all these reasons, there would be a ***less-than-significant*** impact on groundwater supplies and groundwater recharge, and no mitigation is required.

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:

i) Result in substantial on- or offsite erosion or siltation;

Less than Significant. Project activities would involve the excavation and movement of soil as well as building and pavement removal that would expose bare soil, temporarily increasing erosion and siltation potential at the site. If not properly controlled, these activities could accidentally discharge wastes into waterways through runoff. However, SMUD would comply with the existing submittal and approval requirements associated with the Stormwater Management and Control Code, the Grading, Erosion and Sediment Control Ordinance, as well as the NPDES Regional MS4 Permit, which would necessitate the implementation and maintenance of on-site BMPs to control potential erosion and siltation and prevent discharges off-site. Therefore, regulatory compliance would ensure that the project does not result in substantial long-term effects on water quality. As a result, this impact would be ***less than significant***, and no mitigation is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less than Significant. Project activities would occur within the developed project site and would not include addition but may include removal of impervious surfaces, which generally increase the rate of stormwater runoff. Therefore, the project would not be expected to substantially increase the rate or amount of surface runoff in or near the project site. Therefore, this impact would be ***less than significant***, and no mitigation is required.

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; or

Less than Significant. Excavation for removal of contaminated soil is estimated to be up to 15 feet below ground surface. As groundwater in the area is generally located at least 35 feet below ground surface, dewatering activities are not anticipated. Because project activities would include removal of buildings and pavement, the project would not add new impervious surfaces that could contribute to an exceedance of existing or planned stormwater facilities. Following completion of project demolition and remediation activities, the site would likely contain more pervious surfaces than in the pre-project condition, making it unlikely that the site would exceed existing runoff conditions. Therefore, the project would not exceed existing or planned stormwater capacity or provide polluted runoff. This impact would be ***less than significant***, and no mitigation is required.

iv) Impede or redirect flood flows?

Less than Significant. The project is in an area with minimal flood risk (FEMA 2021). While not expected, localized flooding could occur in the area. Removal of impervious surfaces on the site would tend to slow the rate of current stormwater runoff at the site, which is generally beneficial from flooding standpoint. Ultimately, the project would not impede or redirect flood flows. Therefore, this impact would be ***less than significant***, and no mitigation is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The project site is located within an area of reduced flood risk (Zone X) (FEMA 2021). The project is in an area of mostly flat terrain with no nearby large open bodies of water. For these reasons, the project would not be expected to be inundated. There would be ***no impact***, and no mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant. During project implementation, SMUD would implement BMPs, consistent with City's water quality and watershed protection measures, as required by

the Phase I NPDES Permit and implemented through the SQIP. Following completion of the project, the site would not include additional impervious surfaces or generate wastewater, so there would be no conflict with or obstruction of a water quality control plan following demolition and remediation activities. The project would not require the use of any potable water, including groundwater. Because the project would implement BMPs consistent with local water quality control measures, this impact would be ***less than significant***, and no mitigation is required.

3.12 Land Use and Planning

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

3.12.1 Environmental Setting

The project site is located in the city of Sacramento in Sacramento County. The project site has been used as SMUD's corporation yard for decades, but these uses have been transitioning to other sites as part of SMUD's Headquarters Campus Master Plan. Prior to site remediation, any remaining uses would be removed from the site. There are existing residential units west of the site, commercial development north of the site, a Caltrans yard and buildings east of the site, and U.S. Highway 50 south of the site.

3.12.2 Discussion

a) Physically divide an established community?

No Impact. The project would involve the remediation of soil contamination of SMUD's corporation yard that is no longer in use. The project would not introduce any barriers within the project area and would not lead to a physical division of an established community. There would be ***no impact***, and no mitigation is required**.**

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?

Less than Significant. Project construction would occur within the project site and would remove existing buildings and surface features and install soil vapor extraction equipment as required to meet remediation goals. The project does not propose any future use of the project site. As discussed in Section 3.4, Biological Resources," SMUD would voluntarily comply with the City of Sacramento's tree ordinance as it applies to public utilities. The project would not conflict with any adopted plans, policies, or regulations adopted for avoiding or mitigating an environmental effect. Therefore, this impact would be ***less than significant***, and no mitigation is required.

3.13 Mineral Resources

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIII. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.13.1 Environmental Setting

The Surface Mining and Reclamation Act directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the State to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data. Areas known as Mineral Resource Zones (MRZs) are classified on the basis of geologic factors, without regard to existing land use and land ownership. The areas are categorized into four general classifications (MRZ-1 through MRZ-4). Of the four, the MRZ-2 classification is recognized in land use planning because the likelihood for occurrence of significant mineral deposits is high, and the classification may be a factor in the discovery and development of mineral deposits that would tend to be economically beneficial to society.

The project site is classified as MRZ-1, which indicates no significant mineral deposits are located at the project site (DOC 1999). The project site is not designated as a locally important mineral resource recovery site in the Sacramento 2035 General Plan Update (City of Sacramento 2014b).

3.13.2 Discussion

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?

No Impact. The project site is classified as MRZ-1, and no known mineral deposits are present at the project site. Therefore, there would be ***no impact***, and no mitigation is required.

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?

No Impact. The project site and surrounding area is not designated as a locally important mineral resource recovery site in the Sacramento 2035 General Plan Update (City of Sacramento 2014b: Figure 6-11). Thus, project implementation would not result in a loss of availability of locally important mineral resources, and the project would have ***no impact*** related to the loss of availability of a locally important mineral resource discovery site, and no mitigation is required.

3.14 Noise and Vibration

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIV. Noise. Would the project result in:				
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 in other applicable local, state, or federal standards?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.14.1 Environmental Setting

Acoustic Fundamentals

Acoustics is the scientific study that evaluates perception, propagation, absorption, and reflection of sound waves. Sound is a mechanical form of radiant energy, transmitted by a pressure wave through a solid, liquid, or gaseous medium. Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise.

Noise is typically expressed in decibels (dB), which is a common measurement of sound energy. A decibel is logarithmic; it does not follow normal algebraic methods and cannot be directly summed. For example, a 65-dB source of sound, such as a truck, when joined by another 65-dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). A sound level increase of 10 dB corresponds to 10 times the acoustical energy, and an increase of 20 dB equates to a 100-fold increase in acoustical energy. The human ear is not equally sensitive to loudness at all frequencies in the audible spectrum. To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed, identified as A through E. There is a strong correlation between the way humans perceive sound and A-weighted sound levels. For this reason, the A-weighted sound levels are used to predict community response to noise from the environment, including noise from construction activities, and are expressed as A-weighted decibels (i.e., dBA).

Noise can be generated by many sources, including mobile sources such as automobiles, trucks, and airplanes and stationary sources such as activity at construction sites, machinery, and commercial and industrial operations. As sound travels through the

atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on a variety of factors. Atmospheric conditions such as windspeed, wind direction, turbulence, temperature gradients, and humidity alter the propagation of noise and affect levels at a receiver. The presence of a barrier (e.g., topographic feature, intervening building, and dense vegetation) between the source and the receptor can provide substantial attenuation of noise levels at the receiver. Natural (e.g., berms, hills, and dense vegetation) and human-made features (e.g., buildings and walls) may function as noise barriers.

Various noise descriptors have been developed to describe time-varying noise levels. The noise descriptors used in this section include:

- Equivalent Continuous Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013:2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period.

- Maximum Noise Level (L_{max}): The highest instantaneous noise level during a specific time period (Caltrans 2013:2-48).

- A-Weighted Decibels (dBA): A measurement of sound energy used to predict community response to a noise from the environment based on how humans perceive sound levels.

Ground Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Groundborne vibration is vibration of and through the ground. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., operating factory machinery), or transient in nature (e.g., explosions).

Groundborne vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPC and RMS vibration velocity are normally described in inches per second (in/sec) but can also be expressed in decibel notation (VdB), which is used mainly in evaluating human response to vibration.

Existing Noise Sources

Because the project site is located in a highly developed area, numerous noise sources exist in the project vicinity, most prominently the vehicles travelling on U.S. 50 and Sac RT's light rail transit (LRT). The LRT line bisects the southern portion of the SMUD

corporation yard, and U.S. 50 is located directly south of and adjacent to the project site. Commercial loading docks that are part of retail land uses are located just across the northern property line of the northern portion of the site. At-grade crossing signals that are part of the LRT system are located near the southeast corner of the northern portion of the site at the 59th street crossing.

Noise- and Vibration-Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of the intended purpose, and historic buildings that could sustain structural damage due to vibration. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Additional land uses such as parks, schools, cemeteries, and recreation areas are also generally considered sensitive to increases in exterior noise levels.

Noise sensitive receptors near the project site include single-family residential units located approximately 163 feet adjacent to and west of the site, and the Lighthouse Child Development Center located approximately 1,335 feet southeast of the project site.

Local Noise Regulations

The City's 2035 General Plan Environmental Constraints Element (e.g., exterior and interior noise level performance standards for new projects affected by or including non-transportation noise sources, and maximum allowable noise exposure levels for transportation sources) and the City Noise Ordinance contains noise limits for sensitive receptors that are considered relevant to the evaluation of potential nose impacts as a result of the project. Consistent with City planning efforts, this analysis considers the following noise thresholds:

- construction-generated noise levels in excess of City Noise Control Ordinance standards during the more noise-sensitive evening, nighttime, and early-morning hours (6 p.m. to 7 a.m., Monday through Saturday, and between 6 p.m. and 9 a.m. on Sunday);

- construction-generated vibration levels exceeding Caltrans-recommended standards with respect to the prevention of structural building damage (0.2 in/sec PPV for fragile buildings) or FTA's maximum-acceptable-vibration standard with respect to human response (80 VdB for residential uses) at nearby existing vibration-sensitive land uses during daytime hours; and

- 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, public use airport, or private airstrip, exposure of people residing or working in the project area to excessive noise levels.

3.14.2 Discussion

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 in other applicable local, state, or federal standards?

Less than Significant. The project would be limited to short-term demolition/remediation activities that could result in temporary increases in noise levels; however, once demolition and remediation activities cease, no operational activities would occur. Thus, this impact focusses on short-term temporary increase in noise associated with the proposed demolition/remediation activities. Note that the term "demolition and remediation" activities is used synonymously with construction activities in this analysis.

Temporary increases in noise would result from the use of heavy-duty equipment for excavation of material, demolition of buildings, and material off-hauling. Based on the types of activities that would occur (e.g., excavation, groundwork, soil remediation, demolition, and material hauling), typical equipment such as dozers, backhoes, excavators, concrete saws, loaders, work trucks, and haul trucks would be required. Construction noise would be short-term, and the operation of heavy-duty equipment would be intermittent throughout the day during construction activites. Noise levels from these types of construction equipment are shown in Table 3.14-1 below.

Table 3.14-1 Reference Noise Levels from Construction Equipment

Equipment Type	Typical Noise Level L_{max} (dBA) @ 50 feet[1]
Backhoe	80
Concrete Saw	90
Dozer	85
Excavator	85
Loader	85
Dump Truck	84

Notes: L_{max}= Maximum Noise Level; dBA= A-Weighted Decibel.

[1] Noise levels assume all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018

Remediation and demolition activities would generate noise levels near individual sensitive receptors throughout the duration of the construction period, but only for relatively brief periods (intermittently throughout the day) and would cease when construction activity is complete. Construction activity involving the demolition of the two buildings and soil excavation work would occur over an eight-month period, ending in 2022, while soil remediation activity is planned through the end of 2025. All construction activity would take place between 7 a.m. and 6 p.m., Monday through Saturday and between 9 a.m. and 6 p.m. on Sunday, times when noise impacts are less likely to effect

sensitive receptors (e.g., day-time hours), thereby reducing construction noise impacts to nearby receptors. The closest sensitive receptors are residential units located 163 feet west of the project site.

It was conservatively assumed that the loudest three pieces of equipment – a concrete saw, a dozer, and an excavator – would be operating simultaneously in close proximity to each other, combining to generate a modeled maximum noise level from construction activity. Note that pieces of construction equipment move around a construction site and generally are not close to each other for safety reasons; thus, noise levels would fluctuate through the day, depending on the actual activity taking place and number of equipment operated at any one location on the site.

Assuming simultaneous operation of a concrete saw, a dozer, and an excavator and accounting for typical usage factors of individual pieces of equipment and activity types along with typical attenuation rates, on-site construction related activities could result in hourly average noise levels of approximately 87 L_{eq} and 92 L_{max} at 50 feet. At a distance of 163 feet (i.e., the location of the nearest sensitive receptors to the west of the project site), construction related activities could result in hour average noise levels of approximately 73.3 L_{eq} and 78.6 L_{max}. Within the City of Sacramento, the City's Municipal Code Section 8.28.060 exempts certain activities, including construction, from the City's noise standards as long as the activities are limited to the hours of 7 a.m. to 6.p.m. Monday through Saturday, and 9 a.m. to 6 p.m. on Sunday. This exemption provides that construction equipment must include appropriately maintained exhaust and intake silencers. However, the City does not specify limits in terms of maximum noise levels that may occur during the allowable construction hours. As described in the project description, project construction would occur between 7 a.m. and 6 p.m., Monday through Saturday and between 9 a.m. and 6 p.m. on Sunday, times when construction activity is exempt thereby complying with applicable noise standards.

In addition to onsite remediation/demolition work, haul trucks would be required for off-hauling material (i.e., construction debris, scrap metal, soil, and any hazardous materials) to waste disposal sites which could generate noise at receptors located near haul routes, primarily local roadways in residential neighborhoods. Construction debris and non-hazardous soil would be disposed of at Kiefer Landfill, metal would be disposed at Alco or Schnitzer Steel, and soil classified as hazardous waste would require disposal at a class I, II, or III landfill (i.e., Recology Hay Road, Button Willow, or Kettleman Hills), however if Clean Harbors is used, soil would be disposed of in Clean Harbors Landfill.

Based on the location of the site and anticipated disposal sites, primary regional access to/from the project site would be via Highway 50. Local roads most likely to be used would be 59th, 65th, T, and S Street, where residences are located as close as 50 feet from the roadway edge.

During demolition, up to 20 truck trips could occur per day (3 per hour) would be the most intensive truck hauling activity. Based on reference noise levels for haul trucks (Table

3.14-1), trucks generate similar noise levels to heavy-duty equipment, thus, assuming up to three trucks per hour traveling on any given road, the project would not generate more noise than discussed above for multiple onsite construction equipment (i.e., 84 dBA L_{eq} to 89 dBA L_{max}). In addition, hauling activity would only occur for a short duration of time once initiated (i.e., approximately one month) and soil removal hauling activities would include soil to be stockpiled onsite until haul trucks would simultaneously haul out all excavated soil. Therefore, any nearby receptors would not be exposed to truck hauling noise for long periods of time. Further, all truck hauling activity would occur during day-time hours (i.e., between 7 a.m. and 6 p.m., Monday through Saturday and between 9 a.m. and 6 p.m. on Sunday), times when noise is less likely to effect sensitive receptors, consistent with City daytime hours established by code.

Because project construction and truck hauling activities (i.e., demolition and remediation) would be temporary and intermittent, and would only occur during the less sensitive daytime hours, pursuant to the City's Noise Control Ordinance standard (i.e., construction noise exemption), the project would not generate a substantial temporary increase in ambient noise levels in excess of allowable standards in the vicinity of the project and this impact would be **less than significant** and no mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant. The project does not include any operational activities; thus, there would not be any new operational vibration sources (e.g., highways, rail, transit). However, construction activities would generate minor temporary ground vibration, the intensity of which would depend on the specific construction equipment used and activities involved. Construction activities would result in ground vibration from the use of heavy-duty construction equipment. Construction may result in varying degrees of temporary ground vibration levels due to intermittent operation of various types of construction equipment and activities. Based on the types of construction activities associated with the project (e.g., excavation, soil remediation, and building demolition), the use of heavy-duty equipment such as dozers during demolition would be associated with the maximum ground vibration levels.

According to the Federal Transit Authority (FTA), large dozers produce groundborne vibration levels that could result in 0.089 inches per second (in/sec) peak particle velocity (PPV) and 87 vibration decibels (VdB) within 25 feet of operational construction equipment (FTA 2018, Caltrans 2020). Caltrans recommends a level of .2 in/sec PPV with respect to structural damage for fragile buildings (i.e., nearby residential receptors). FTA guidance for maximum acceptable VdB levels are primarily concerned with sleep disturbance in residential areas and can be avoided by keeping exposures at or below 80 VdB during typical sleeping hours.

Vibration levels would exceed the FTA vibration threshold for sensitive uses (i.e., 80 VdB) within 42 feet of construction activity and would exceed the Caltrans-recommended level for fragile buildings (i.e., 0.089 in/sec PPV) at a distance of 15 feet. Construction activities

would be located 163 feet away from the nearest receptor and structure, located west of the project site, and hauling activities would occur as close as 50 feet from existing structures/sensitive receptors. Thus, both onsite and offsite construction activities would occur beyond distances at which structural damage or human disturbance could occur. Furthermore, all construction and hauling activities would occur during the less-sensitive daytime hours, consistent with City code.

Sensitive receptors would not be expected to experience exposure to .2 in/sec PPV or 80 VdB as a result of project construction activities. Project construction and truck hauling activities would not occur during typical sleep hours (i.e., construction would only occur between 7 a.m. and 6 p.m., Monday through Saturday and between 9 a.m. and 6 p.m. on Sunday). Thus, the project would not result in the exposure of the existing off-stie receptors to excessive ground vibration levels. The impact would be **less than significant**, and no mitigation would be required.

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?

No Impact. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. Additionally, the project is not located within two miles of a private air strip. The closest airport to the project site is the Sacramento Executive Airport and is located approximately 3.7 miles southwest. Also, the project would not include any new land uses where people would live or work. Thus, the project would have **no impact** regarding the exposure of people residing or working in the project area to excessive aircraft-related noise levels, and no mitigation is required.

3.15 Population and Housing

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XV. 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.15.1 Environmental Setting

The project involves remediation for soil contamination, which would include demolition of multiple buildings on the project site. The project would not include any future reuse of the site. Therefore, the project would not generate any new residents in the area or provide any new jobs within the Sacramento region.

3.15.2 Discussion

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)?

No Impact. The project involves the remediation of the site to extract soil contamination and would not include any future use of the site. The project does not include new homes or businesses. Further, the temporary addition of remediation systems on the project site would not induce or generate population growth. Therefore, the project would have ***no impact***, and no mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. No persons or homes would be displaced as a result of project construction or operation. Therefore, the project would have ***no impact***, and no mitigation is required.

3.16 Public Services

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVI. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.16.1 Environmental Setting

The project site is located within the City of Sacramento and is served by City of Sacramento public services (police, fire, schools, parks, and libraries).

Fire Protection Services

The Sacramento Fire Department (SFD) provides fire protection services to the project site the entire city, as well as some small areas outside the city boundaries within Sacramento County. The fire station closest to the project site is Sacramento Fire Department Station 8 at 5990 H Street, located approximately 0.9 miles northeast of the site.

Police Protection Services

The Sacramento Police Department (SPD) is principally responsible for providing police protection services in the city of Sacramento, including the project area. The SPD main office is located at 300 Richards Boulevard, located approximately 4.3 miles northwest of the project site.

Schools

The nearest public school, Phoebe A. Hearst Elementary School at 1410 60th Street, is located approximately 0.15 miles east of the project site. There is one other school located within one-quarter mile of the project site, St. Mary Parish School located at 1351 58th Street.

Parks and Other Public Facilities

The nearest park, Sierra Vista Park, is located approximately 0.2 miles southwest of the project site. Additionally, East Portal Park is located approximately 0.4 miles north the project site. This 7.38-acre park includes bocce courts, a clubhouse, picnic areas, play areas, and a softball field.

3.16.2 Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 any of the public services:

Fire Protection

No Impact. Implementation of the project would not increase demand for SFD fire protection services because the project would not generate new residents, which is the driving factor for fire protection services, nor would it result in the operation of additional structures within the project area that could generate calls for service. Because the project would not increase demand for fire protection services, no construction of new or expansion of existing fire service facilities would be required. Therefore, the project would have ***no impact*** on fire protection services, and no mitigation is required.

Police Protection

No Impact. Implementation of the project would not increase demand for SPD police protection services because the project would not generate new residents, which is the driving factor for police protection services, nor would it result in the operation of additional structures within the project area that could generate calls for service. Because the project would not increase demand for police protection services, no construction of new or expansion of existing police service facilities would be required. Therefore, the project would have ***no impact*** on police facilities, and no mitigation is required.

Schools

No Impact. The project would not provide any new housing that would generate new students in the community nor result in an increase in employment opportunities that could indirectly contribute new students to the local school district. Therefore, the project would have ***no impact*** on school services and facilities, and no mitigation is required.

Parks

No Impact. The project would not provide any new structures that could result in additional residents/employees, which could necessitate new or expanded park facilities. Therefore, the project would have ***no impact*** on parks, and no mitigation is required.

Other Public Facilities

No Impact. Though the project is located near public transportation stations, including 59th street light rail station, the project would not result in additional residents or employees that would utilize these public facilities, nor would the project attract existing residents toward the area. Therefore, the project would have ***no impact*** on other public facilities, and no mitigation is required.

3.17 Recreation

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVII. Recreation. Would the project:				
a) 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?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.17.1 Environmental Setting

The project site is located within the city of Sacramento. The nearest park, Sierra Vista Park, is located approximately 0.2 miles southwest of the project site. Additionally, East Portal Park is located approximately 0.4 miles north the project site. This 7.38-acre park includes bocce courts, a clubhouse, picnic areas, play areas, and a softball field.

3.17.2 Discussion

a) 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?

No Impact. The project does not include any new development (i.e., residential, office, or commercial) that could increase the use of existing local parks or recreational facilities. Therefore, the project would have ***no impact***, and no mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The project does not include any new development that could necessitate new or expanded recreational facilities. Therefore, the project would have ***no impact***, and no mitigation is required.

3.18 Traffic and Transportation

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVIII. Transportation/Traffic. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

3.18.1 Environmental Setting

The project site is located at 1708 59th Street in Sacramento and is bisected by a Sacramento Regional Transit light rail line. Along the project site, 59th Street is a two-way, two-lane street with bike lanes and sidewalks on both sides. Directly north of the project site, there is an alley that runs behind the commercial center that fronts towards Folsom Boulevard. Project activities would be contained within the project site owned by SMUD. There is a light rail stop located east of 59th Street.

3.18.2 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than Significant. Project demolition and remediation activities would be contained within the project site and would not interfere with existing vehicle, transit, bicycle, and pedestrian circulation other than adding a small amount of vehicle trips going to and coming from the project site. Upon completion of site remediation, there would not be an increase in traffic beyond pre-project levels. Any future reuse of the project site would be subject to additional CEQA review by the City of Sacramento. Project operation would not generate additional vehicle, transit, pedestrian, or bicycle use, so there would be no conflicts with programs, plans, ordinances, or policies related to circulation. Therefore, this impact would be ***less than significant***, and no mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

Less than Significant. Temporary demolition and construction activities would result in slight increases in vehicle trips associated with worker commutes, solid waste hauling, and materials delivery. During the 4-year operational period of the SVE systems, the site would be visited approximately once per week by one to two workers at a time. Thus, there would be fewer trips generated during project operation than under pre-project conditions. Because the project would not change the amount of development projected for the area, would be consistent with the population growth and VMT projections in regional and local plans, and would have only a slight increase in VMT during construction, this impact would be ***less than significant***, and no mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant. As discussed in item a) above, project activities would be confined to the project site and would not result in any changes in road geometry or new uses. Therefore, impacts related to traffic hazards would be ***less than significant,*** and no mitigation is required.

d) Result in inadequate emergency access?

Less than Significant. As discussed above, the project would not change any existing roads, including areas provided for emergency access. Project demolition and remediation activities would be confined to the project site and would not interfere with emergency access. Therefore, impacts related to emergency access would be ***less than significant,*** and no mitigation is required.

3.19 Utilities

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Environmental Setting

The project involves demolition of existing structures and remediation of contaminated soil. These activities would not require a significant water supply or generate wastewater requiring disposal. Project construction and demolition activities could require dewatering activities, and the water could be retained in Baker tanks and/or conveyed through filtration bags, if needed, prior to being released to the City's combined sewer system (CSS) that serves the project site. Stormwater from the project site drains to the existing storm drain along 59th Street.

Most refuse collected by the City is transported to the Kiefer Landfill (City of Sacramento 2014b:4-44). Sacramento County owns and operates the Kiefer Landfill, and the landfill is the primary solid waste disposal facility in the county. The Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction and demolition debris, green materials, agricultural debris, and other nonhazardous designated debris.

3.19.2 Discussion

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant. The project would remove existing structures and install a soil vapor extraction system. The project site would not be home to regular employees but would be visited periodically as necessary for the operations and maintenance of the soil vapor extraction system. No new restroom facilities or other sources of water demand or wastewater generation would be part of the project. As the project operation involves site remediation only, there are no anticipated water demands or wastewater generation associated with it. Project water demand and wastewater generation would be substantially similar to or less than existing system demands and flows. This impact would be ***less than significant***, and no mitigation is required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant. Due to the nature of the project, the project would not require additional water supplies. Because the demand would be substantially similar to or less than existing demand, the impact would be ***less than significant***, and no mitigation is required.

c) Result in a determination by the wastewater treatment provider that 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?

Less than Significant. As the project involves only demolition and site remediation, wastewater would not be generated once these activities are complete. Therefore, the project would have ***less-than-significant*** impact related to wastewater treatment capacity, and no mitigation is required.

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?

Less than Significant. The project would generate solid waste during construction activities by the removal of existing structures on the project site. Construction debris could include asphalt, concrete, soil, scrap lumber, finishing materials, metals, and organic materials. Compliance with the 2013 CALGreen Code and the City Construction and Demolition Debris Recycling Ordinance would result in a reduction of construction waste and demolition debris and increase recycling. In addition, the construction

contractor would comply with the goals of the Sacramento 2035 General Plan Update, which contains goals regarding solid waste generation and recycling.

The majority of landfilled waste would be delivered to the Sacramento Recycling and Transfer Station, the Sacramento County Kiefer Landfill, the Yolo County Landfill, L and D Landfill, Florin Perkins Landfill, and Elder Creek Transfer Station. Combined, these landfills have a large volume of landfill capacity available to serve the project during construction. As the project involved site remediation, it is not anticipated that any solid waste would be generated once remediation activities have been concluded. This impact would be ***less than significant***, and no mitigation is required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant. The project would cause a temporary increase in the generation of solid waste as a result of demolition and remediation activities. During operation of the SVE systems, soil vapor would be trapped in large carbon-filled drums. These drums would be periodically removed and replaced, with the contents hauled off-site to be tested and disposed of at the appropriate facility. Compliance with the City of Sacramento policies regarding solid waste would prevent landfills from being overloaded due to the project construction activities. This impact would be ***less than significant***, and no mitigation is required.

3.20 Wildfire

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire.				
Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones?		☐ Yes	☒ No	
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒
c) Require the installation 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.20.1 Environmental Setting

The project site is located within a local responsibility area that is designated as a non-Very High Fire Hazard Severity Zone (non-VHFHSZ) (CAL FIRE 2008).

3.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant. Project demolition and remediation would take place completely within SMUD's property located at 1708 59th Street, though demolition and remediation debris would be hauled offsite for disposal in landfills or recyclers. No work is anticipated to take places with the adjacent roadways or rights-of-way. Because project activities would be confined to the project site, there would be no lane closures or other actions that could temporarily impair emergency response plans or evacuation plans. Because access and connectivity would be maintained during demolition and remediation activities, the project would not substantially impair an emergency response plan or evacuation plan. Once remediation activities are complete, the site would not be utilized

for corporation yard activities and would not impair emergency response or evacuation. Because adequate access would be maintained throughout construction activities, this impact would be ***less than significant***, and no mitigation is required.

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?

No Impact. The project would not exacerbate wildfire risks as the project site is not located within a wildfire hazard zone, is substantially surrounded by developed land, and is not near wildland areas. There would be ***no impact***, and no mitigation is required***.***

c) Require the installation 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?

Less than Significant. The project involves the removal of multiple buildings on the project site and the temporary installation of SVE equipment. The project would not exacerbate fire risk because the project would adhere to all safety requirements for the equipment to be installed. This impact would be ***less than significant***, and no mitigation is required.

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?

No Impact. The project is located in an area of predominantly flat terrain and would not involve changing slopes in a manner that could expose people to risks of flooding from post-fire slope instability. Project facilities would be located both aboveground and under the ground surface, however, would operate similar to current conditions and would not result in changes to existing drainage. There would be ***no impact***, and no mitigation is required.

3.21 Mandatory Findings of Significance

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Authority: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.
Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

3.21.1 Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. As discussed in Section 3.4, "Biological Resources," of this IS/MND, project activities would occur within paved areas and the project would not result in significant impacts on biological resources with implementation of Mitigation Measure 3.4-1.

As discussed in Section 3.5, "Tribal Cultural Resources," there remains a possibility that Tribal cultural resources could be encountered during ground disturbing activities but implementation of Mitigation Measure 3.5-1 would reduce potential impacts to a less-

than-significant level. As discussed in Section 3.6, “Cultural Resources,” there are no known cultural resources on the project site. Because there is the potential for discovery of previously unknown resources, Mitigation Measures 3.6-1 and 3.6-2 would be implemented to reduce impacts to a less-than-significant level. Also, implementation of Mitigation Measure 3.8-1 would reduce impacts on paleontological resources to a less-than-significant level.

Implementation of project mitigation measures, along with adherence to applicable regulations and requirements, would ensure that the project would not substantially degrade the quality of the environment. This impact would be ***less than significant***.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant with Mitigation Incorporated. Project impacts would be individually limited and not cumulatively considerable due to the site-specific nature of the potential impacts. The potentially significant impacts that can be reduced to a less-than-significant level with implementation of recommended mitigation measures include the following areas: biological resources, cultural resources, geological resources, and tribal cultural resources. These impacts would be related to construction and remediation activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics.

Potentially significant biological resources impacts would be reduced to a less-than-significant level with implementation of Mitigation Measure 3.4-1. Potentially significant Tribal cultural resources impacts would be reduced to a less-than-significant level with implementation of Mitigation Measures 3.5-1 and 3.6-1. Potentially significant cultural resources impacts would be reduced to less-than-significant levels with implementation of Mitigation Measures 3.6-1 and 3.6-2. Potentially significant impacts related to geology and soils would be reduced to less-than-significant levels with implementation of Mitigation Measure 3.8-1.

The project would have no impact or less than significant impacts to the following environmental areas: aesthetics, agriculture and forestry resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. Therefore, the project would not substantially contribute to any potential cumulative impacts for these topics.

All environmental impacts that could occur as a result of the project would be reduced to a less-than-significant level through the implementation of the mitigation measures

recommended in this document. Implementation of these measures would ensure that the impacts of the project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project implementation. Therefore, this impact would be ***less than significant***.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated. The project would have potentially significant impacts related to the following areas: air quality, biological resources, Tribal cultural resources, cultural resources, and geology and soils. However, all of these impacts would be reduced to less-than-significant levels with incorporation of the mitigation measures included in the respective section discussions above. No other direct or indirect impacts on human beings were identified in this IS/MND. Therefore, this impact would be ***less than significant***.

4. List of Preparers

SMUD

Rob Ferrera	Environmental Specialist
Keegan George	Senior Civil Engineer

Ascent

Mike Parker, AICP	Principal
Cori Resha, J.D.	Project Manager
Alta Cunningham	Architectural Historian
Emilie Zelazo	Archaeologist/Architectural Historian
Richa Nanavati	Environmental Planner
Shaurya Johari	Air Quality/GHG Specialist
Poonam Bopari	Principal, AQ/GHG
Carlos Alvarado	Biologist
Linda Leeman	Senior Biologist
Carrie Simmons	Noise Specialist
Dimitri Antoniou	Senior Noise Specialist
Lisa Merry	GIS Specialist
Phi Ngo	GIS Specialist
Brian Perry	Graphics Specialist
Corey Alling	Graphics Specialist
Gayiety Lane	Publishing Specialist
Michele Mattei	Publishing Specialist

This page intentionally left blank.

5. References

AECOM. 2019 (December). *Site Characterization Report SMUD 59th Street Corporation Yard*.

———. 2020 (February 12). *Phase I Environmental Site Assessment, SMUD 59th Street Corporation Yard*.

———. 2021a (January). *Soil Vapor Extraction Pilot Study Summary Report, SMUD 59th Street Corporation Yard, 1708 59th Street, Sacramento, California 95819.*

———. 2021b (May). *Site Characterization Report Addendum, SMUD 59th Street Corporation Yard*.

———. 2021c (November). *Site Characterization Report Addendum No. 2, SMUD 59th Street Corporation Yard*. Draft.

Ascent. 2022 (January 11). *Cultural Resources Memo for the SMUD 59th Street Corporation Yard*.

BTS. See Bureau of Transportation Statistics

Bureau of Transportation Statistics. 2015. Transit Industry Electric Power and Primary Energy Consumption and Travel. Available: https://www.bts.gov/content/transit-industry-electric-power-and-primary-energy-consumption-and-travel-0. Accessed December 10, 2021.

CalEPA et al. See California Environmental Protection Agency, California Natural Resources Agency, California Department of Food and Agriculture, California Air Resources Board, and California Strategic Growth Council.

CAL FIRE. *See* California Department of Forestry and Fire Protection.

California Air Pollution Control Officers Association. 2016. California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Available: http://www.caleemod.com/. Accessed August 23, 2018.

California Air Resources Board. 2003. *HARP User Guide*. Sacramento, CA.

———. 2017 (November). California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed December 8, 2021.

———. 2021. State Area Designations. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed December 14, 2021.

California Department of Conservation. 1999. Mineral Land Classification Map of PCC-Grade Aggregate Resources in Sacramento County. 1:90,000 Scale. Sacramento, CA.

———. 2015. Sacramento County Williamson Act FY 2011/2012. Scale: 1:100,000. Division of Land Resource Protection, Conservation Program Support. Available: ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Sacramento_15_16_WA.pdf.

———. 2017 (July). Sacramento County Important Farmland Map 2016. Scale: 1:100,000. Division of Land Resource Protection, Farmland Mapping and Monitoring Program. Available: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/.

California Department of Fish and Wildlife. 2021. Rarefind 5. Commercial Version dated September 3, 2021. An online subscription database application for the use of the California Department of Fish and Wildlife's Natural Diversity Database. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA. Accessed August 20 2021, printed September 13, 2021.

———. 2005. Species account for white-tailed kite (*Elanus leucurus*). California Wildlife Habitat Relationships System. California Interagency Wildlife Task Group.

California Department of Forestry and Fire Protection. 2008 (July 30). Sacramento County, Very High Fire Hazard Severity Zones in LRA. 1:100,000 Scale. Sacramento, CA.

California Department of Toxic Substances Control. 2021. EnviroStor map. Available: www.envirostor.dtsc.ca.gov. Accessed November 2021.

California Department of Transportation. 2013 (September). Technical Noise Supplement to the Traffic Noise Analysis Protocol. Prepared by ICF Jones & Stokes. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed September 17, 2021.

_____. 2019. California Scenic Highway Mapping System, Sacramento County. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ Accessed May 22, 2019.

_____. 2020. *Transportation and Construction Vibration Guidance Manual.* Available at https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed on September 21, 2021. Accessed September 17, 2021.

California Department of Water Resources. 2004. *California's Groundwater.* Bulletin 118, South American Subbasin. Last updated February 27, 2004. Sacramento, CA.

California Energy Commission. 2019a. 2019 California Energy Efficiency Action Plan. Available: https://www.energy.ca.gov/filebrowser/download/1900. Accessed December 10, 2021

_____. 2019b. California Greenhouse Gas Emissions for 2000 to 2017: Trends of Emissions and Other Indicators. Available: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf. Accessed December 10, 2021.

_____. 2020. Final 2019 Integrated Energy Policy Report. Adopted February 20, 2020. Available: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report. Accessed December 8, 2021

California Environmental Protection Agency, California Natural Resources Agency, California Department of Food and Agriculture, California Air Resources Board, and California Strategic Growth Council. 2019. January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan. Available: https://ww3.arb.ca.gov/cc/natandworkinglands/draft-nwl-ip-1.3.19.pdf. Accessed December 8, 2021.

California Geological Survey. 2016. Earthquake Shaking Potential for California. Available: https://www.conservation.ca.gov/cgs/Documents/MS_48.pdf. Accessed May 17, 2019.

California Native Plant Society, Rare Plant Program. 2021 Inventory of Rare and Endangered Plants (online edition, v9-01 0.0). California Native Plant Society, Sacramento, CA. Available: http://www.rareplants.cnps.org. Accessed August 20, 2021, printed September 23, 2021.

California Regional Water Quality Control Board. 2018 (May). The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, Fifth Edition, the Sacramento River Basin and the San Joaquin River Basin. Rancho Cordova, CA.

California State Board of Equalization. 2016. Net Taxable Gasoline Gallons. Available: https://www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.xlsx. Accessed December 10, 2021.

Caltrans. *See* California Department of Transportation.

CAPCOA. *See* California Air Pollution Control Officer's Association.

CARB. See California Air Resources Board.

CEC. See California Energy Commission

CGS. *See* California Department of Conservation, California Geological Survey.

City of Sacramento. 2012 (January). *Sacramento Climate Action Plan*. Available: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/CAP.aspx. Accessed December 8, 2021.

———. 2014a (August). *Draft Master Environmental Impact Report for the City of Sacramento 2035 General Plan Update*. State Clearinghouse No. 2012122006. Sacramento, CA. Prepared by Ascent Environmental, Sacramento, CA.

———. 2014b (August). Sacramento 2035 General Plan Background Report. Sacramento, CA.

_____. 2015. *Sacramento 2035 General Plan*. Adopted March 3, 2015. Sacramento, CA.

———. 2019. Planning and Development Code Base Zones. Available: https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Maps/Sacramento_Zoning_Ev10/Sacramento_Zoning_34X44.pdf?la=en

CRWQCB. *See* California Regional Water Quality Control Board.

CSBE. *See* California State Board of Equalization.

DOC. *See* California Department of Conservation.

DTSC. *See* California Department of Toxic Substances Control.

Dunk, J. R. 1995. White-tailed kite (Elanus leucurus). In The Birds of North America, No. 178 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, and the American Ornithologists' Union, Washington, D.C.

England, A.S., M.J. Bechard, and C.S. Houston. 1997. Swainson's Hawk (Buteo swainsoni). In: The Birds of North America, No. 265 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA; and The American Ornithologists Union, Washington, DC.

EPA. *See* U.S. Environmental Protection Agency.

Erichsen, A.L, S. Smallwood, N.D. Ottum, and D.M. Fry. 1994. The white-tailed kite: GIS analysis of habitat selection in the Sacramento Valley, California, with implications for conservation of wildlife in agricultural landscapes. Journal of Raptor Research 28:46

Estep, J.A. 1989. Biology, Movements, and Habitat Relationships of the Swainson's Hawk in the Central Valley of California, 1986-1987. Prepared for the California Department of Fish and Game, Nongame Bird and Mammal Section, Sacramento, CA.

———. 2009. The Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (Buteo swainsoni) in the City of Elk Grove, California. Prepared for the City of Elk Grove. Elk Grove, CA.

Federal Emergency Management Agency. 2021. National Flood Hazard Layer FIRMette. Accessed November 2021. Available: http://www.msc.fema.gov.

Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. Available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed on September 17, 2021.

FEMA. *See* Federal Emergency Management Agency.

FTA. *See* Federal Transit Administration.

Intergovernmental Panel on Climate Change. 2013. Chapter 6, Carbon and Other Biogeochemical Cycles. Pages 465–570 in Climate Change 2013: The Physical Science Basis. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available: http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf. Accessed December 10, 2021.

———. 2014. Climate Change 2014 Synthesis Report: Summary for Policymakers. Available: https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf. Accessed December 10, 2021.

IPCC. *See* Intergovernmental Panel on Climate Change.

Jennings, C. W. (1994), Fault Activity Map of California and Adjacent Areas with Locations and Ages of Recent Volcanic Eruptions, California Department of Conservation, Division of Mines and Geology.

Kleinfelder, Inc. 2016 (February). *Phase II Environmental Site Assessment Report, SMUD Corporation Yard, 1708 59th Street, Sacramento Yard*.

Natural Resources Conservation Service. 2021. Web Soil Survey National Cooperative Soil Survey. Available: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed November 23, 2021.

NCIC. *See* California Historical Resources Information System, Northern California Information Center.

NHTSA. *See* National Highway Traffic Safety Administration.

NRCS. *See* Natural Resources Conservation Service.

SACOG. *See* Sacramento Area Council of Governments.

Sacramento Area Council of Governments. 2013. *Sacramento International Land Use Compatibility Plan.* Adopted December 12, 2013. Sacramento, CA.

Sacramento Metropolitan Air Quality Management District. 2020 (April). SMAQMD Thresholds of Significance Table. Available: https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf. Accessed December 8, 2021.

Sacramento Metropolitan Utility District. 2018 (April). *Sacramento Municipal Utility District Headquarters Campus Master Plan Draft Environmental Impact Report*. State Clearinghouse No. 2017092050. Sacramento, CA. Prepared by Ascent Environmental, Sacramento, CA.

———. 2020. 2020 Power Content Label. Available: https://www.smud.org/SMUDPCL. Accessed December 8, 2021.

———. 2021 (April 5). *Oil/Water Separator Closure Report, SMUD 59th Street Corporation Yard*. Sacramento, CA. Letter memorandum to Jose Salcido of the California Department of Toxic Substances Control.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.

SMUD. *See* Sacramento Metropolitan Utility District.

State Water Resources Control Board. 2021. GeoTracker Map. Available: https://geotracker.waterboards.ca.gov. Accessed November 2021.

Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. May 31. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990 Accessed Sept. 13, 2021.

SWRCB. *See* State Water Resources Control Board.

United Nations. 2015. United Nations. 2015. Paris Agreement. Available: https://unfccc.int/sites/default/files/english_paris_agreement.pdf. Accessed September 24, 2018.

U.S. Department of Transportation's National Highway Traffic Safety Administration. 2021 (August). Available: https://www.nhtsa.gov/press-releases/fuel-economy-standards-2024-2026-proposal. Accessed December 10, 2021.

U.S. Environmental Protection Agency. 2010. *Green Remediation Best Management Practices: Soil Vapor Extraction & Air Sparging*. Available https://semspub.epa.gov/work/HQ/147896.pdf. Accessed December 29, 2021.

———. 2012 (September). *A Citizen's Guide to Soil Vapor Extraction and Air Sparging*. Available: https://www.epa.gov/sites/default/files/2015-04/documents/a_citizens_guide_to_soil_vapor_extraction_and_air_sparging.pdf. Accessed December 29, 2021.

———. 2019 (August). Environments and Contaminants: Criteria Air Pollutants. In America's Children and the Environment. Updated Third Edition. Available: https://www.epa.gov/sites/production/files/2019-07/documents/ace3-criteria-air-pollutants-report-section.pdf. Accessed: December 14, 2021.

U.S. Fish and Wildlife Service. 2021a. Information for Planning and Consultation Database (IPaC). Available: https://ecos.fws.gov/ipac Accessed: August 20, 2021, printed September 13, 2021.

———. 2020b. National Wetlands Inventory Online Wetland Mapper. Available: https://www.fws.gov/wetlands/data/mapper.html Accessed: August 20, 2020, printed September 13, 2021.

USFWS. *See* U.S. Fish and Wildlife Service.

Wagner, D.L., C.W. Jennings, T.L. Bedrossian, and E.J. Bortugno. 1981. Geologic Map of the Sacramento Quadrangle, California, 1:250,000.

This page intentionally left blank.