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Addendum to Mitigated Negative Declaration

Addendum Date:	**March 7, 2019**
Case No.:	**2015-006224ENV**
Project Title:	**Southeast Plant Headworks Replacement Project**
MND:	2015-006224ENV, adopted December 19, 2016
Project Sponsor:	San Francisco Public Utilities Commission
Lead Agency:	San Francisco Planning Department
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INTRODUCTION

This addendum evaluates the potential environmental effects of the proposed modifications to the Southeast Plant Headworks Replacement Project (Headworks Replacement Project). Table 1 provides an overview of the Headworks Replacement Project and the proposed changes to the project. This section discusses the project background and need for the project modifications. The proposed modifications and construction are discussed in more detail in the section below, followed by analysis of potential environmental effects of the proposed changes to the project.

Background

A mitigated negative declaration (MND) for the subject project, Case Number 2015-006224ENV, was adopted on December 19, 2016. The project analyzed in the MND is the replacement of the headworks[1] at the San Francisco Public Utilities Commission's (SFPUC's) Southeast Water Pollution Control Plant (Southeast Plant or treatment plant) to improve the existing preliminary treatment process facilities. The project as previously approved included improvements to the existing Bruce Flynn pump station, which is located across Evans Avenue from the treatment plant, and also included new sewer lines connecting the pump station to the plant (see Figure 1, Headworks Replacement Project – Bruce Flynn Pump Station Sewer Connection. Refer to MND for regional vicinity map). The improvements would have allowed the pump station to operate as an all-weather pump station able to receive and pump all flow that is currently conveyed by the Southeast Lift Station,[2] which is currently located within the Southeast Plant. The existing lift station would then be demolished. See the MND for the project's purpose and objectives and glossary of technical terms. The MND determined that the project would have no significant

[1] The headworks of a wastewater treatment plant is the initial treatment stage of the wastewater treatment process. The treatment at the headworks consists of screening to remove coarse material such as trash, rags, and other debris; and grit removal to remove sand, gravel and other heavy inorganic materials.

[2] A lift station is a pump station for pumping wastewater from a lower elevation to a higher elevation.

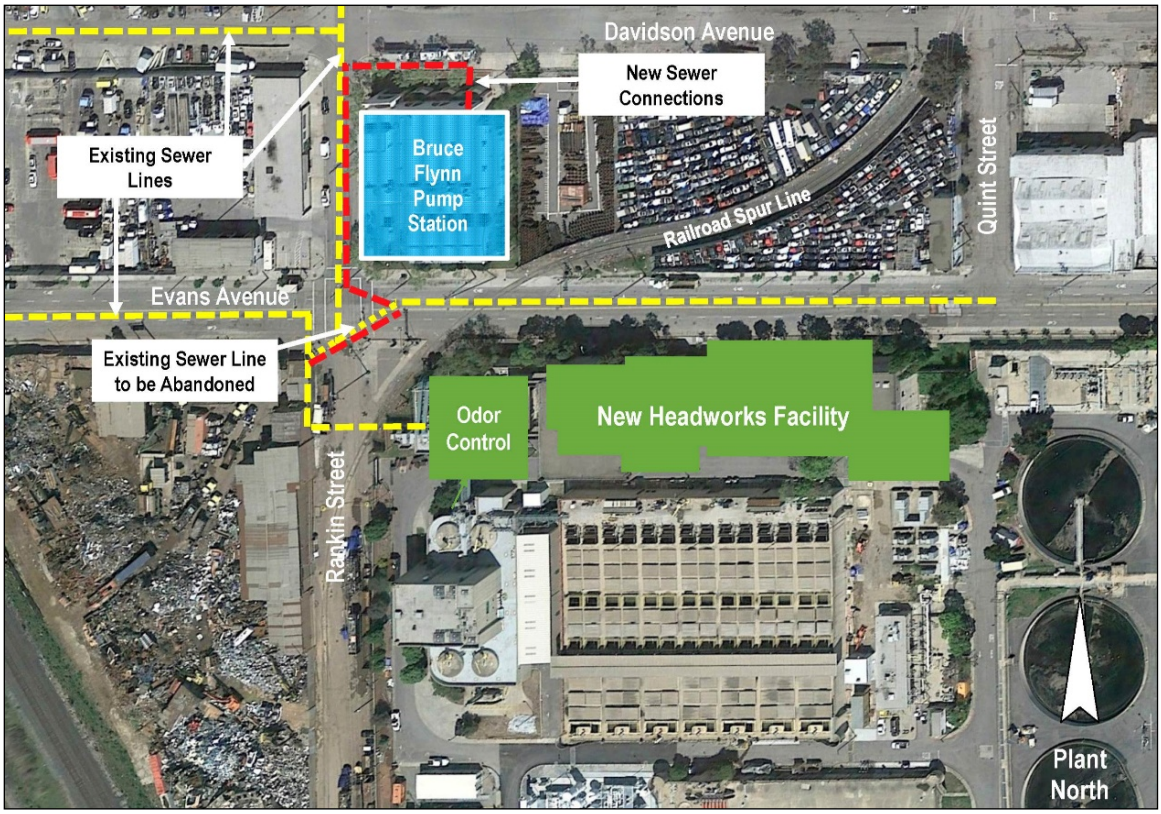
environmental impacts with implementation of mitigation measures. Following adoption of the MND, the SFPUC approved the project.

TABLE 1: COMPARISON OF ADOPTED PROJECT AND MODIFIED PROJECT

Component	Adopted Project	Modified Project
Bruce Flynn Pump Station (Improvements)	• Replace or modify existing equipment within the Bruce Flynn Pump Station to allow all-weather operation • Provide additional miscellaneous upgrades • Provide 750-kilowatt emergency generator • Demolish 398 Quint Street building (5,300 square feet) • Construct new sewer lines along Evans Avenue, Rankin Street, and Davidson Avenue	• Upgrade Bruce Flynn Pump Station to enhance reliability in wet weather events • Modify influent sewer • No new emergency generator at this location • Demolish 398 Quint Street building No sewer construction in Evans Avenue, Rankin Street and Davidson Avenue
SEP 010 Influent Control Structure/ Southeast Lift Station (Demolition)	• Demolish SEP 010 Influent Control Structure/Southeast Lift Station • Reroute CHS and Bruce Flynn Pump Station force main pipe connections to the Influent Junction Structure	• Demolish SEP 010 Influent Control Structure/ Southeast Lift Station Construct new SEP 005 – Southeast Lift Station and associated piping
Odor Control Facility (New Construction at site of SEP 010 Influent Control Structure/ Southeast Lift Station)	• Construct new 14,400-square-foot structure at grade, with height up to 65 feet • Install exhaust fan system and two-stage odor control scrubbers	Same, no changes
SEP 011 and SEP 012 Old Headworks (Demolition)	• Demolish SEP 011 and SEP 012 headworks. The SEP 012 headworks would be demolished only after the New Headworks Facility has operated for two wet seasons.	Same, no changes
New Headworks Facility up to 65-feet-tall (Replacement of structures at SEP 011 headworks site)	**Influent Junction Structure** • Construct 700-square-foot structure • Install new pipe stub-outs for connections to various existing and future pipelines • Reroute SEP 011 headworks pipe to carry wet-weather overflow to SEP 040/041 primary sedimentation tanks • Construct temporary pipeline connecting to the SEP 012 headworks influent pipe upstream of the control valve **Bar Screen Facility/Screenings Handling Facility** • Construct new structures totaling 10,150 square feet • Install multi-rake bar screens, isolation gates, screenings conveyance/washer-compactors/loading systems **Grit Tanks/Grit Handling Building** • Construct new structures totaling 16,250 square feet • Install grit removal tanks, slurry pumps, washing and dewatering units, and storage bins/loading system **Support Facilities** • Construct common process/operations control room and electrical room for the odor control and the new headworks facilities	Same, no changes

Source: SFPUC, 2018.

Figure 1: Headworks Replacement Project – Bruce Flynn Pump Station Sewer Connection



Source: SFPUC, email from Monika Krupa to Robin Cort and others, June 22, 2016, adapted by RMC Water and Environment

San Francisco Public Works is designing the upgrades to the Bruce Flynn pump station, which include modifications to the influent sewer. The 95 percent design was completed in September 2017. During design of the pump station upgrade it was discovered that the sewer connection from the pump station to Southeast Plant had major constructability issues, and hydraulic modeling showed that there could be operational problems with solids deposition during dry weather operations. In addition, it was determined that inclusion of a replacement lift station within the Southeast Plant could substantially increase operational flexibility and reliability.[3] The public works design team evaluated options and determined that construction of a replacement lift station within the Southeast Plant would provide the best operational solution.[4] The currently proposed solution would entail construction at an additional project location in the Southeast Plant, and construction of a large box sewer and pipelines in the plant between the new lift station and the new headworks, but would eliminate major sewer work on Davidson Avenue, Evans Avenue, and Rankin Street that was identified in the approved project. Locating a new lift station within the Southeast Plant would also avoid problems associated with constructing the previously-approved new pipeline between the new headworks odor control facility and the existing Bruce Flynn pump station (shown in red in Figure 1), which would have resulted in potential conflicts with other

[3] SFPUC. 2018. SEP 005 – *Southeast Lift Station Final Conceptual Engineering Report 2*. September 2018. This document (and all other documents cited in this report, unless otherwise noted) is available for review at 1650 Mission Street, Suite 400, San Francisco, CA as part of Case No. 2015-006224ENV.

[4] Ibid.

utilities within the roadway and impacts on traffic within the affected roadways during construction.

This environmental review focuses on the proposed new lift station and pipeline connections from the new lift station to the odor control facility that will be constructed as part of the adopted Headworks Replacement Project.. The proposed upgrade of the Bruce Flynn pump station that is included in the adopted Headworks Replacement Project would still occur, but internal improvements to the pump station would focus on enhancing reliability during wet weather events and the pipeline between the new headworks and the Bruce Flynn pump station in the adopted project would not be required.

PROPOSED PROJECT MODIFICATIONS – SOUTHEAST LIFT STATION

The SFPUC determined that there is sufficient space within the Southeast Plant between Rankin Street and the new liquid oxygen facility to construct a new lift station, as shown on Figure 2.[5] The proposed new lift station is designated as SEP 005 – Southeast Lift Station.[6]

The SEP 005 – Southeast Lift Station would provide a firm capacity of 50 million gallons per day (MGD). The lift station would be about 115 feet long and 26 feet wide, and would be primarily below grade, with the deepest point being the wet well[7] floor at 37 feet below grade. There would be three above-ground pump motors, two of which would extend about 18 feet above grade, with the third extending about 15 feet above grade.[8]

Figure 3 shows the site plan for the new SEP 005 – Southeast Lift Station. The major elements of the SEP 005 – Southeast Lift Station include the following:

- An SEP 005 – Southeast Lift Station (shown in yellow on Figure 3), which consists of a below-grade influent channel, mechanically-cleaned bar screens and screening handling equipment, and a trench-type wet well with three vertical turbine solids handling pumps with 450-horsepower motors;
- A new below-grade approximately 6-foot by 6-foot by 390-foot long sewer extension box sewer connecting the existing SEP 011 – Headworks south influent channel (leading to the existing Southeast Lift Station pumps) to the influent channel inside the proposed SEP 005 - Southeast Lift Station with two other pipelines to be constructed within the same trench:
    - A new 42-inch force main discharging from SEP 005 – Southeast Lift Station into the SEP 020 influent junction structure;
    - 20-inch diameter pipeline conveying non-potable chlorinated effluent
- Odor control facilities (outlined in blue in Figure 3);
- New access gate;
- Electrical transformers; and

[5] Ibid.

[6] Most buildings at the Southeast Plant are identified with a unique 3-digit number, which is preceded by "SEP" and followed by the buildings name or description, per SFPUC convention (e.g., SEP 005 - Southeast Lift Station).

[7] A wet well is an underground pit that stores wastewater

[8] SFPUC. 2018. SEP 005 – *Southeast Lift Station Final Conceptual Engineering Report.* September 2018

Figure 2: Proposed Location of SEP 005 Southeast Lift Station

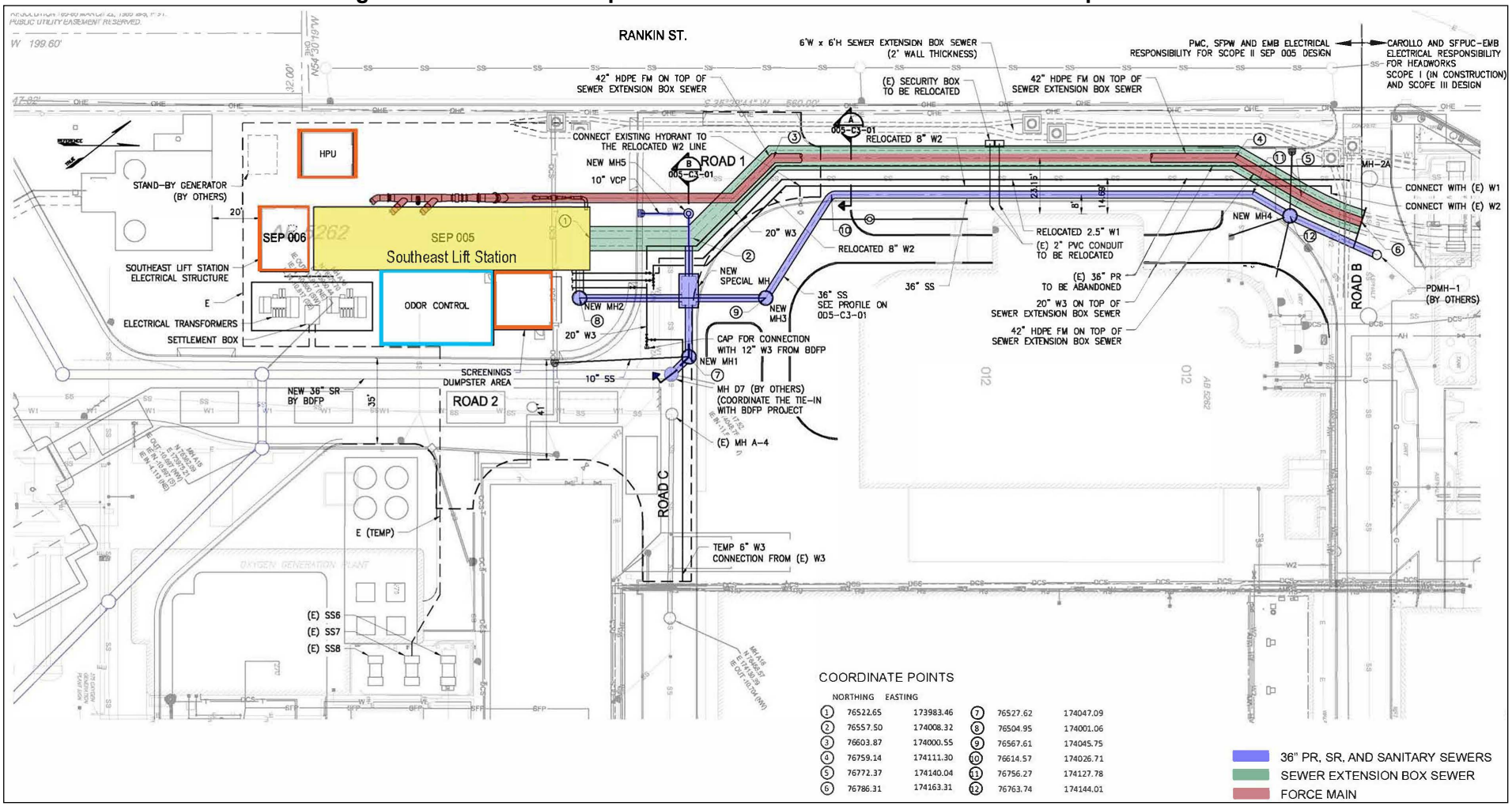
Source: SFPUC 2018, Final Conceptual Engineering Report 2 SEP 005 Southeast Lift Station, September 2018

- Three facilities in above-ground single-story concrete masonry buildings with a steel roof (outlined in orange on Figure 3), located on the east side of Rankin Street, immediately west of the new Southeast Plant liquid oxygen facility:
    - Screenings handling and dumpster area (approximately 24 feet by 25 feet);
    - Electrical structure (SEP 006) (approximately 20 feet by 27 feet); and
    - Enclosed hydraulic power unit room (approximately 21 feet by 19 feet).

The below-grade structures including the trench type wet well, screen channels, influent channel and transition boxes in the SEP 005 – Southeast Lift Station would be completely enclosed with a concrete deck forming a roof at elevation +13.35 feet North American Vertical Datum of 1988 (NAVD88), in consideration of the potential for future sea level rise. A single outlet connection would collect foul air from within the lift station structure and connecting sewers. The project would use a two-stage odor control system using bio-scrubbers followed by carbon polishing to satisfy the Bay Area Air Quality Management District fence-line odor control requirements. All structures and most buried pipelines would need to be supported in piers. Piers would likely be drilled. Depths of piers would be from 75 to 100 feet. [9]

[9] SFPUC. 2019. Southeast Water Pollution Control Plant SEP 005 Southeast Lift Station Pile Plan.

Figure 3: Site Plan for Proposed SEP 005 Lift Station and Associated Pipelines



Source: SFPUC 2018, Final Conceptual Engineering Report 2 SEP 005 Southeast Lift Station, September 2018

In addition to the new influent box sewer described above, some replacement of internal piping within the Southeast Plant would be needed. The following new pipes would be constructed along essentially the same alignment as existing pipelines within the Southeast Plant:

- 36-inch diameter sanitary sewer running parallel to the sewer extension box sewer (excavation approximately 390 feet long, 4 feet wide and 6 feet deep) connecting to a new special manhole
- Relocated 2.5-inch diameter potable water line running parallel to the sewer extension box sewer (excavation approximately 390 feet long, 4 feet wide and 6 feet deep)
- Relocated 8-inch diameter pipeline carrying filtered non-potable chlorinated effluent running parallel to the sewer extension box sewer (excavation approximately 390 feet long, 4 feet wide and 6 feet deep)

Southeast Lift Station Construction

Construction of the proposed SEP 005 – Southeast Lift Station and associated pipelines is expected to start in June 2019 with completion expected in March 2021. Construction would typically (about 98 percent of the time) occur from 7:00 am to 5:00 pm Monday through Friday. Occasional morning, evening or weekend work might be required. This is consistent with the hours described on page 21 of the MND: "Construction could take place Monday through Friday from 7:00 a.m. to 8:00 p.m., and Saturdays and Sundays as needed during these same hours. Work may also occur on holidays and 24 hours per day only if needed for critical facility connections."

Staging areas would be the same as those described for the original Headworks Replacement Project. Construction of the new SEP 005 – Southeast Lift Station and associated pipelines would disturb an area of about 30,000 square feet and would require the removal of trees in the planter area along an internal road at the Southeast Plant, plus a small amount of weedy vegetation within the Southeast Plant site, but no street trees would be removed. Site preparation at the SEP 005 – Southeast Lift Station site would require removal of two existing trailers, one of which would be relocated within the Southeast Plant. The second trailer would be demolished, and debris would be hauled off site to an approved disposal site.

Pipelines would be constructed using open cut construction methods. Excavations for the 6-foot by 6-foot box sewer would average about 27 feet deep, and the excavation for the SEP 005 – Southeast Lift Station would be 39 feet deep. Pilings under the lift station and associated structures would be 18 to 36 inches in diameter and up to 100 feet deep. Pilings under the new box sewer would be 36 inches in diameter and 75 to 95 feet deep. Under the other pipelines that would parallel the box sewer, pilings would be 18 inches in diameter and 75 to 95 feet deep. Project construction would remove about 9,500 cubic yards of excavated soil. Most excavated soil would be hauled to an offsite location, but suitable soil would be retained onsite as needed.

About 45 construction crewmembers, divided into three to five crews, would be on site each day. An estimated 12 to 16 worker vehicles are expected to be used to commute to the site each day. The portion of Rankin Street adjacent to the project site, which dead-ends at the Caltrain railroad tracks, may be closed during construction.

Construction Equipment and Vehicles

Construction equipment that would be used for the construction of the SEP 005 – Southeast Lift Station is listed in Table 2. Construction of the new lift station, box sewer and pipelines would include removal of about 9,500 cubic yards of excavated soils, requiring about one dump truck per hour, with a total of 633 truck round trips over the duration of project construction. In addition, there would be about 430 truck round trips for concrete delivery, 167 truck round trips for delivery of backfill material and an additional 2,112 truck round trips for other deliveries of equipment and material and removal of demolition debris. A total of about 3,342 truck round trips is thus expected over the entire construction period. Table 3 provides an updated summary of workers and trucks required for each component of the Modified Headworks Replacement Project (modified project); this table is an updated version of Table 5 from the MND, with the vehicles from the Bruce Flynn Pump station improvements deleted and the vehicles from the new SEP – Southeast Lift Station added. These trips would occur on the same designated truck routes that were discussed in the MND: Evans Avenue, Third Street (between Cesar Chavez Street and Evans Avenue), and Cesar Chavez Street to the I-280 and U.S. 101 freeways.

TABLE 2: CONSTRUCTION EQUIPMENT

Equipment Category	Details
Excavators/Muckers	• Backhoe • Mid-size Excavator • Large Excavator
Loaders	• Crawler Loader • Rubber-tired Loader
Lift Units	• Tower Crane • Large Crawler Crane • Hydraulic Crane • Hydraulic Crawler Crane • Articulating Boom Lift • Boomtruck • Telescopic Material Handlers
Concrete Equipment	• Concrete Ready-Mix Truck • Concrete Pump
Paving Equipment	• Grader • Paver
Compactors	• Roller Compactor • Sheepsfoot Soil Compactor
Plant Equipment	• Compressor
Attachments	• Pile Driver (vibratory or impact)
Trucks	• Water Truck • Semi-tractor truck, End Dump Trailer, Long Trailer • Flat Bed Truck • Diesel Pickup Truck

TABLE 3: UPDATED SUMMARY OF WORKERS AND TRUCKS DURING CONSTRUCTION

MODIFIED HEADWORKS REPLACEMENT PROJECT

Activity	Estimated Average Number of Workers Per Day	Maximum Number of Workers Per Day	Approximate Number of Trucks per day	Total Number of Hauling Truck Trips (Excavation/ Demolition and Backfill) [1]
Site Preparation				
Reroute SEP 012 Excess Flow to Primary Clarifiers	31	43	15 – 22	1,906 (Demolition Hauling) [2]
SEP 011 Headworks; 398 Quint Street Demolition				
SEP 005 – Southeast Lift Station				
Lift Station, Box Sewer and Pipelines	25	56	3-11	633 (Excavation Hauling) 167 (Backfill) [3]
Main Headworks Project				
SEP 011 Headworks Excavation and Backfill	106	186	8 – 20	3,555 (Demolition and Excavation Hauling) 2,767 (Backfill) [4]
Civil and Yard Piping				
Influent Junction Structure and Influent Sampling				
Bar Screen Facility				
Screenings and Handling Facility				
Grit Basins				
Grit Handling Building				
Primary Influent Distribution Structure				
Odor Control Facility				
Engineering Instrument & Control				
Evans Avenue Improvements				
SEP 010 Influent Control Structure/Southeast Lift Station Demolition, Excavation, and Backfill				
SEP 012 Demolition				
SEP 012 Existing Headworks Demolition	25	25	15	1,906 (Demolition Hauling) [5]

Source: Carollo Engineers, Inc., 2016, with 2018 update from SFPUC for Southeast Lift Station
Notes:
1. Assumes 18 cubic yards per truck.
2. 34,300 cubic yards demolition ÷ 18 cubic yards per truck = 1,906 truck trips for demolition hauling
3. 12,054 cubic yards excavation ÷ 18 cubic yards per truck = 670 truck trips for excavation hauling; 7,972 cubic yards backfill ÷ 18 cubic yards per truck = 443 truck trips for backfill hauling
4. (10,000 cubic yards demolition + 52,920 cubic yards excavation (SEP 011) + 1,061 cubic yards excavation (SEP 010)) ÷ 18 cubic yards per truck = 3,555 truck trips for demolition and excavation hauling; (42,200 cubic yards backfill (SEP 011) + 7,598 cubic yards backfill (SEP 010)) + 18 cubic yards per truck = 2,767 truck trips for backfill hauling
5. 34,300 cubic yards demolition ÷ 18 cubic yards per truck = 1,906 truck trips for demolition hauling

Modified Project Construction Schedule

With implementation of this project modification (the new SEP 005 – Southeast Lift Station), the construction duration for all phases of the modified project would be increased from approximately 5½ years to 6¼ years, from November 2017 to September 2023 (construction of the modified project), and from April 2025 to October 2025 (demolition of the headworks). The updated schedule is shown in Table 4 below.

TABLE 4: ESTIMATED DURATION AND TIMING OF CONSTRUCTION ACTIVITY

Construction Activity	Original Schedule	Updated Schedule	Estimated Duration
Site Preparation	January 2017 – March 2018	November 2017 - April 2020	29 months
Bruce Flynn Pump Station Improvements	January 2018 – January 2019	December 2018 – September 2020	21 months
SEP 005 - Southeast Lift Station & Pipelines	NA	September 2019 - September 2021	24 months
Main Headworks Project	April 2018 – December 2021	April 2019 - September 2023	54 months
Existing Headworks Demolition (SEP 012)	January 2024 – June 2024	April 2025 - October 2025	6 months
Source: SFPUC, 2018			

APPROVALS REQUIRED

The modified project is expected to require essentially the same approvals as the adopted project. The SFPUC is pursuing a State Revolving Fund Loan for the project, so approvals associated with state funding would also be required. It is anticipated that permits or approvals would be required from the following agencies:

- San Francisco Department of Public Health: Approval of Site Mitigation Plan.
- SFPUC Wastewater Enterprise – Batch permit for discharging groundwater to SFPUC wastewater facilities.
- SFPUC Wastewater Enterprise – Permit for construction stormwater management.
- Bay Area Air Quality Management District — Authority to Construct and Permit to Operate.
- State Water Resources Control Board – Construction General Permit, Stormwater Pollution Prevention Plan.
- San Francisco Public Works : Approval of Sidewalk Changes (SFPW Order) and Street Improvement Permit
- San Francisco Board of Supervisors: Approval of Sidewalk Legislation
- San Francisco Port Commission: Approval of use of Pier 94 and Pier 96 for construction staging

The SFPUC proposes to conduct all construction activities in compliance with all relevant local regulations and ordinances. Relevant requirements are typically included in the construction specifications that are developed during design, prior to the bidding of a project and its construction.

The modified project and revisions to the mitigation monitoring and reporting program would require approval by the SFPUC at a duly noticed public hearing.

ANALYSIS OF POTENTIAL ENVIRONMENTAL EFFECTS

Section 31.19(c)(1) of the San Francisco Administrative Code states that a modified project must be reevaluated and that, "If, on the basis of such reevaluation, the Environmental Review Officer determines, based on the requirements of California Environmental Quality Act (CEQA), that no additional environmental review is necessary, this determination and the reasons therefore shall be noted in writing in the case record, and no further evaluation shall be required by this Chapter."

CEQA Guidelines section 15164 provides for the use of an addendum to document the basis for a lead agency's decision not to require a subsequent MND for a project that is already adequately covered in a previously certified MND. The lead agency's decision to use an addendum must be supported by substantial evidence that the conditions that would trigger the preparation of a subsequent MND, as provided in CEQA Guidelines section 15162, are not present.

The previously approved project was subject to an MND issued by the planning department on December 19, 2016. The MND determined that the only potentially significant environmental impacts from the adopted project would result from air quality impacts during construction and the potential to disturb prehistoric archaeological resources during construction. Mitigation included measures to reduce NOx emissions during construction and monitoring of construction to ensure protection of any buried resources, data recovery if resources would be affected by the project, and measures that address the possible discovery of tribal cultural resources. This section evaluates the potential environmental effects of the proposed modifications, herein referred to as the modified project, relative to the impacts of the adopted project as disclosed in the MND.

Since adoption of the MND, no changes have occurred in the circumstances under which the project would be undertaken, and no new information has emerged that would materially change any of the analyses or conclusions of the MND. For the reasons discussed below, the modified project would not result in any substantial changes that would require major revisions to the MND, nor would new significant environmental effects or a substantial increase in the severity of previously identified effects occur.

Plans and Policies

The MND discusses plans and policies relevant to the adopted project and provides an evaluation of the project's consistency with various San Francisco plans and policies. The plans and policies relevant to the modified project are identical to those for the adopted project, and the consistency of the modified project with those plans and policies would be the same as that described in MND because the change in the project would not alter the nature or purpose of the project, nor would it affect planning areas that were not considered in the MND for the adopted project. The new SEP 005 – Southeast Lift Station would be constructed entirely within the Southeast Plant, which is owned by the City and County of San Francisco. The modified project would not alter the discussion of consistencies with applicable plans and policies that was presented in the MND.

Land Use and Land Use Planning

The new SEP 005 – Southeast Lift Station would be located entirely within the Southeast Plant, and existing land uses in the vicinity of the modified project are the same as described for the adopted project. The modified project would not divide an established community, would not conflict with applicable land use plans, is consistent with the existing use of the Southeast Plant, and would not have a substantial impact on the existing character of the vicinity. The modified project would thus not result in any new significant effects on land use or an increase in the severity of an impact.

Aesthetics

The existing visual resource conditions, visual character and scenic resources for the modified project are identical to those described for the adopted project. The new SEP 005 – Southeast Lift Station would be located within the existing Southeast Plant, where no scenic vistas would be affected, and construction would entail construction activities similar to construction of the adopted project. Because the new location for the Southeast Lift Station is entirely within the treatment plant there would be no additional loss of street trees associated with construction. The modified project would be similar in visual character to the adopted project and would not degrade the existing visual character of the site or its surroundings. The modified project would thus not result in any new significant aesthetic effects or an increase in the severity of an impact.

Population and Housing

The new SEP 005 - Southeast Lift Station would be located within the existing Southeast Plant and, like the adopted project, would not displace housing or people. Neither the modified project nor the adopted project would increase the capacity of the existing headworks or increase the number of permanent workers at the treatment plant, and therefore the modified project would not induce population growth. The modified project would thus not result in any new significant effects on population and housing or an increase in the severity of an impact.

Cultural Resources

The MND evaluated impacts of the adopted project on cultural resources within the original project footprint. The project footprint has changed slightly because the modified project includes construction of a new structure within the treatment plant that was not part of the approved project, including deep excavations and pilings in locations not previously evaluated for archaeological resources as part of the approved project. The new project areas, however, have been evaluated in conjunction with related projects. The results of these analyses are presented below. Based on the studies discussed below, the modified project would not result in any new significant effects on historic, archaeological or tribal cultural resources or an increase in the severity of an impact and, as discussed below, existing mitigation measures would be sufficient to ensure that impacts would be less than significant.

Historic Resources

The MND determined that the adopted project would have less-than-significant impacts on historic resources of the built environment. Eliminating the Bruce Flynn Pump Station sewer connections from the project would result in avoidance of any impacts associated with construction in Evans Avenue where pipelines for the historic San Francisco Fire Department Auxiliary Water Supply System (AWSS) are located. Although the adopted project would not have diminished the integrity of the AWSS sufficiently to result in a significant impact, avoidance of the AWSS reduces the potential for impacts to this historic resource. No permanent structures would be demolished for construction of the SEP 005 - Southeast Lift Station. A portion of the Southeast Plant has been determined to be a California Register-eligible historic district.[10] The Central Shops buildings, located southeast of the lift station site, also have been determined eligible for the California Register. The location of the proposed new lift station is outside of and not adjacent to the Southeast

[10] Brewster, B., Department of Parks and Recreation (DPR) form, Southeast Treatment Plant Streamline Moderne Industrial Historic District, April 2016.

Treatment Plant Streamline Moderne Industrial Historic District boundary and also is not in close proximity to the Central Shops buildings. The modified project would thus not result in any new significant effects on historic resources of the built environment or an increase in the severity of an impact.

Archaeological Resources

The MND found that the adopted project has the potential to result in significant impacts on prehistoric and historical archaeological resources, human remains and/or tribal cultural resources due to the potential to encounter those resources during construction. As discussed, the Southeast Plant has an elevated sensitivity for submerged prehistoric archeological sites based on an identified prehistoric shell midden and an isolated flake recovered from a beach deposit, as well as for historic period resources related to former pier/wharf development and early tannery businesses in the vicinity.

Mitigation Measures M-CR-2a: Archaeological Data Recovery and **M-CR-2b: Archaeological Monitoring, i**ncluded in the Headworks MND, would reduce impacts of project excavations and pile construction upon archaeological resources that may be present to less-than-significant levels by requiring archaeological testing and monitoring for resource identification and evaluation, archaeological data recovery for any significant resources thus identified, and measures to address any discoveries during construction.

Since the MND was issued in December 2016, archaeological testing as required by **Mitigation Measure M-CR-2a** has been conducted for portions of the headworks project.[11] This included two phases of geoarchaeological coring to further assess the project for the presence of prehistoric resources, and one phase of archaeological trenching to assess the potential for surviving historic period resources associated with the historic tannery complex. The first phase of coring recovered a second prehistoric stone artifact buried at 56 to 63 feet below the surface, near and in a similar stratigraphic setting to the prior buried/submerged archaeological find. Like the first find, this artifact had clearly been carried to this location by erosion and water movement associated with the prehistoric rising of the bay. No buried/submerged landforms are present in the adopted project footprint that were considered likely to contain intact prehistoric archaeological deposits, and no additional prehistoric archaeological materials were identified. While the finding of deeply buried and very old prehistoric artifacts at the project site is significant, the report concluded that the fact that the finds had been moved from their original locations by erosion, in combination with the absence of intact landforms that might harbor intact deposits, indicates that the potential for impacts on significant prehistoric archaeological resources in the original project footprint is low. Based on these findings, and in consultation with the San Francisco Planning Department, no additional prehistoric archaeological identification or treatment measures were recommended for the adopted project.

The two phases of geoarchaeological coring for the Headworks project also included geoarchaeological coring at 25-meter intervals of the Liquid Oxygen Tanks and Cryogenic Oxygen Plant Replacement project site, which is located immediately east of the proposed lift station

[11] Far Western Anthropological Research Group, Prehistoric Archaeological Testing Report for the SEP 020 – Headworks (WW-628), SEP 042 Seismic Reliability/Condition (SE-08), and Liquid Oxygen (LOX) Tanks and Cryogenic Oxygen Plant Replacement (WW-599R) Project, Southeast Water Pollution Plant, San Francisco, California, June 2018

location, as well as four cores approximately along the alignment of the proposed box sewer and pipelines north of the proposed lift station site. No significant archaeological material was recovered.[12] Additional geoarchaeological coring conducted for the Biosolids Digester Facilities Project included eight cores that covered the location of the proposed SEP 005 - Southeast Lift Station site.[13] No prehistoric materials or soils considered likely to harbor prehistoric materials were recovered in these cores. Based on the information provided by prehistoric coring, no effects on prehistoric archaeological resources are anticipated from construction of the additional project elements covered by this addendum.

With respect to historic period archaeological resources, mechanical trenching south of the existing headworks building revealed extensive repeated ground disturbance related to Southeast Plant construction and operations, including a mixture of demolition debris, a small number of artifacts likely associated with the historic tanneries, and modern debris. No intact historical archaeological features or deposits, or artifacts or features that could qualify as historical resources were identified in the portion of the project area that was tested.[14] A second phase of historic archaeological investigations will be conducted during demolition of the existing headworks. This will consist of archaeological monitoring during the ground-disturbing portions of demolition, followed by additional archaeological test trenching or hand excavation and data recovery, as warranted, consistent with **Mitigation Measures M-CR-2a: Archaeological Data Recovery and M-CR-2b: Archaeological Monitoring**.

One core in the vicinity of the proposed lift station contained historic-era metal fragments, including a wire (modern-type) nail, at the base of a bay mud deposit, more than 52 feet below the surface. The report concluded that the fragments were an anomalous and isolated occurrence, in soils that reflect very rapid sedimentary deposition at this location during the historic period.[15] However, subsequent coring immediately south of the proposed lift station site[16] revealed substantial quantities of historic material in one core (Core 17) at a depth of 12.5 to 14.5 feet. This material was assessed as representing a historic trash dump dating to the first decades of the 20th century, which is illustrated in a 1938 historic aerial photograph.[17] The photograph indicates that this dump extended north along the east side of what is now the alignment of Rankin Street. On this basis, project excavations along the alignment of the proposed sewer extension box sewer have the potential to encounter materials associated with this dump, the significance of which has not been determined.

In addition to the dump features that may be present in the modified project footprint, historic mapping (e.g. 1900 Sanborn Fire Insurance map) indicates that the tannery complex that was located within the northern end of the Southeast Plant extended westward as far as Rankin Street. While prior demolition and extensive ground disturbance appear to have destroyed tannery-

[12] Ibid

[13] Far Western Anthropological Research Group, Archaeological Testing Report for the Biosolids Digester Facilities Project, Southeast Water Pollution Plant, Part 2, San Francisco, California, April 2018, FINAL.

[14] Ibid., Appendix A. Melissa Cascella, ICF, Historical Archaeological Testing for the Headworks/ SE-08/ LOX Project, September 2017.

[15] Ibid

[16] Ibid

[17] Ryker 1938

associated features south of the existing headworks building, tannery-associated features, which could include remnants of historic piers, industrial features and refuse deposits, and domestic materials associated with worker housing, may be present in the excavation area for the sewer extension box sewer. If significant remains are present, excavation for the sewer extension box sewer, under the modified project, could result in significant impacts.

Mitigation Measure M-CR-2b: Archaeological Monitoring would ensure that monitoring occurs during construction to ensure appropriate treatment of any cultural materials that might be discovered during excavations. This will require a second amendment to the archaeological testing/monitoring plan previously prepared for the project (which addressed both historic archaeological testing and monitoring).[18] As with the adopted project, implementation of this mitigation measure would ensure impacts remain less-than significant.

Tribal Cultural Resources

The MND found that the potential impacts of the adopted project on previously unidentified archaeological resources, as discussed above, would represent a potentially significant impact on tribal cultural resources. In San Francisco, prehistoric archaeological resources generally are considered likely to constitute tribal cultural resources. As discussed above, it is not anticipated that prehistoric archaeological resources would be encountered during construction. However, if such a resource is encountered, **Mitigation Measure M-CR-3: Tribal Cultural Resources Interpretive Program** would require either preservation in place or implementation of an interpretive program developed in consultation with Native American representatives. Combined with **Mitigation Measures M-CR-2a** and **M-CR-2b**, the measures would reduce potential adverse effects on tribal cultural resources to less-than-significant levels. All three measures would apply to the modified project and would adequately address potential impacts of unanticipated discoveries associated with construction of the SEP 005 - Southeast Lift Station.

Implementation of the modified project would not result in any new significant impacts beyond those identified in the MND or a substantial increase in the severity of a significant impact on cultural resources.

Transportation and Circulation

The existing roadway network, traffic volumes, transit service, pedestrian and bicycle circulation, and regulatory framework described in the MND for the adopted project also apply to the modified project. The MND found that the adopted project meets the planning department screening criteria for vehicle miles traveled (VMT) because it is a public service land use within 0.5 miles of a major transit stop, and therefore would not generate substantial increases in VMT. The modified project is still less than 0.5 miles from the nearest transit stop at the intersection of Third Street and Evans Avenue, and thus does not require a VMT analysis.

As described below, implementation of the modified project would not result in any new significant effects on transportation and circulation beyond those identified for the adopted project or a substantial increase in the severity of a significant impact.

[18] Far Western Anthropological Research Group, Archaeological Testing Plan for the SEP 020 – Headworks (WW-628), SEP 042 Seismic Reliability/Condition (SE-08), and Liquid Oxygen (LOX) Tanks and Cryogenic Oxygen Plant Replacement (WW-599R) Projects Southeast Water Pollution Control Plant, San Francisco, California, April 2017.

Roadways

The modified project would generate short-term increases in traffic during construction, but the number of workers trips and construction vehicle trips would be similar to those projected for the adopted project. The adopted project was estimated to generate a maximum of 344 construction worker trips per day, while the modified project is projected to generate a maximum of 186 worker trips per day during the peak construction period.[19] The maximum number of workers is lower for the modified project because phasing has been changed such that there is less overlap between elements of the project that require a large number of workers. Truck traffic for the adopted project (haul trucks, plus material and equipment delivery trucks) was estimated to be up to 130 truck trips per day, as compared to 100 trips per day for the modified project.[20] The adopted project would have required closure of travel lanes for construction of the Bruce Flynn Pump Station sewer connection. Rankin Street between Evans Avenue and Davidson Avenue would have been closed for up to nine months and the southern lane of Davidson Avenue between Rankin Street and Quint Street would have been closed for up to five months. The modified project would not require those road closures because new pipelines would now be located entirely within the Southeast Plant.

Because of differences in phasing, the maximum number of both worker trips and truck trips would be slightly less for the modified project. Additionally, impacts associated with road and lane closures would be reduced and implementation of the traffic control plan for construction activities that is proposed as part of the adopted project (described in Section B.4.7 of the MND) would ensure that construction traffic is managed safely. For these reasons, temporary traffic and circulation impacts during construction of the modified project would be less than significant.

Vehicle, Bicycle and Pedestrian Safety

As with the adopted project, the modified project would result in temporary traffic safety hazards for vehicles, bicycles and pedestrians during construction, but impacts would be reduced with the project modifications because fewer road and lane closures would be required. Thus, the modified project would not have new or more severe traffic safety impacts than the adopted project.

Public Transit

The modified project would result in similar demands on transit associated with construction workers traveling to and from the site. Construction of the headworks under the modified project would still require temporary closure of the sidewalk, parking lane and one traffic lane on the south side of Evans Avenue between Rankin Street and Quint Street for staging during construction, which would alter access to the Muni 19-Polk bus stop on the southwest corner of the Evans Avenue and Quint Street intersection. The traffic control plan would require the contractor to obtain SFMTA approval for temporary location of the Muni 19-Polk bus stop. The modified project would thus have the same less-than-significant impacts on transit as the adopted project.

Bicycle Facilities

The modified project would have the same impact on bicycle conditions as the adopted project. Construction vehicles would still use Cesar Chavez Street, Evans Avenue, and Third Street, all of which contain bicycle facilities which could result in potentially hazardous conditions for

[19] Ramboll Environ, *Updates to Air Quality Technical Analysis SFPUC Southeast Plant Headworks Replacement Project*, San Francisco, CA, February 26, 2019. Appendix D-Construction Trucks and Vehicle Trip Rates

[20] Ibid.

bicyclists. The traffic control plan would require flaggers or temporary traffic signals at the intersection of Evans Avenue and Rankin street and advance warning signs would inform bicyclists about construction activities and alternate routes. The modified project would thus have the same less-than-significant impacts on bicyclist safety as the adopted project.

Pedestrian Facilities

The modified project would still generate worker pedestrian traffic and would require closure of the sidewalk on the south side of Evans Avenue between Rankin Street and Quint Street for staging during construction, but pedestrian access along Evans Avenue would be maintained at all times. The modified project would reduce impacts on pedestrian facilities because it would no longer be necessary to close the sidewalks on the east side of Rankin Street and north side of Evans Avenue to construct the Bruce Flynn Pump Station sewer connection. The traffic control plan includes measures to ensure safe passage of pedestrians, including construction workers walking from parking areas to the construction site. Impacts would remain less than significant.

Parking

As with the adopted project, construction worker parking demand for the modified project would be accommodated by off-site staging areas. Construction of the modified project would still entail loss of parking along Evans Avenue, however there is sufficient on-street parking in the vicinity and therefore, this impact would be less than significant. Operational parking impacts of the modified project would be the same as the adopted project and would be less than significant.

Emergency Access

The modified project would no longer require the closure of Rankin Street between Evans Avenue and Davidson Avenue, though the closure of travel lanes on Evans Avenue would still be needed. Impacts on emergency access would thus be less than for the adopted project and would remain less than significant because the traffic control plan described in Section B.4.7 of the MND, which requires advance notification of emergency service providers, would be implemented as part of the project.

Operations Impacts on Traffic and Circulation

As with the adopted project, no net increase in vehicle trips is expected after construction, and therefore, no operational impacts are expected.

Noise and Vibration

The information presented in the MND on noise descriptors, the existing noise environment, vibration, and the regulatory framework also applies to the modified project. As identified in the MND, the nearest sensitive noise receptor with a direct line of sight to the treatment plant is a residence at 1700 Kirkwood Avenue. This residence is about 1,550 feet from the SEP 005 - Southeast Lift Station site. However, while the residence at 1700 Kirkwood Avenue is directly across the street from the Phelps Street boundary of the SEP, there are several intervening structures within the plant that would attenuate construction noise from the new lift station, including the existing digesters, which would still be in place during the construction period for the modified project.

As described below, implementation of the modified project would not result in any new significant noise and vibration effects beyond those identified for the adopted project nor would it substantially increase the severity of a significant impact.

Construction Noise

Construction equipment for the modified project would be similar to that proposed for the adopted project, and the noise levels during construction would thus be expected to be comparable.

Daytime construction noise levels from non-impact equipment are limited by section 2907 of the San Francisco Police Code to 80 a-weighted decibels (dBA) at a distance of 100 feet from the equipment. Non-impact equipment used for the modified project would still be expected to generate maximum noise levels ranging from 67 to 79 dBA at a distance of 100 feet from the source, which is consistent with the 80-dBA threshold. Use of impact tools would comply with requirements to limit noise by using acoustically attenuating shields or shrouds. Noise impacts from daytime construction of the modified project would remain less than significant.

Nighttime construction has been evaluated for compliance with noise limits in sections 2908 and 2909(d) of the police code. Although construction would not typically occur after 8 p.m., as with the adopted project, there may be limited occasions when construction of the modified project requires nighttime work for critical facility connections. Section 2908 of the police code prohibits nighttime construction noise exceeding the ambient noise level by 5 dBA at the closest property plane from the two loudest pieces of equipment without a special permit. The closest property planes for the modified project would still be Evans Avenue and Phelps Street. The adopted project was predicted to comply with the ambient plus 5 dBA limit at the property plane at Phelps Street and Evans Avenue and Phelps Street and Jerrold Avenue, but not for the property plane at Evans Avenue. The SEP 005 - Southeast Lift Station site of the modified project is farther from the Evans Avenue property plane and noise levels from lift station construction would comply at all three property planes, as shown in Table 5. Impacts from the modified project would remain less than significant.

TABLE 5: NOISES LEVEL AT PROPERTY PLANE

Property Plane	Nighttime Construction Noise Limit (Ambient L_{eq} +5 dBA)	Highest Noise Level	
		Adopted Project	New Lift Station Site at SEP 005 - Southeast Lift Station
SEP at Evans Avenue	73[1]	**87**	70
SEP at Phelps Street and Evans Avenue	73[1]	62	60
SEP at Phelps Street and Jerrold Avenue	65[2]	59	60

Bold numbers represent values over noise limit.
[1] Based on 68 Leq nighttime ambient conditions
[2] Based on 60 Leq nighttime ambient noise conditions

Operational Noise

The SEP 005 – Southeast Lift Station would include pumps, wash presses, bar screens and odor control fans that are estimated to generate a combined operational noise level of 86 dBA at a distance of 10 feet from the equipment. At the nearest property plane of the Southeast Plant, which is on Rankin Street, 53 feet from the lift station, the ambient noise level is 59 dBA (L_{90} measured). Operational noise at the property plane would be 72 dBA. This noise level would exceed the noise limits established in section 2909(b) of the police code, because the noise level would be more than 8 dBA above the lowest measured L_{90} of 59 dBA. Because noise levels at the property plane would exceed the limit, noise impacts at the nearest residential receptor were evaluated. The lift station is located about 1,550 feet from the nearest residential receptor at 1700 Kirkwood Avenue, where

noise attenuation with distance would result in a noise level of 42 dBA. Operational noise would thus be under the section 2909(d) limit of 45 dBA[21]; operational noise impacts from the modified project would thus remain less than significant.

Vibration

Neither the adopted nor modified project would entail operational vibration impacts as facilities would not include equipment that would result in groundborne vibration. The MND evaluated vibration impacts associated with pile driving during construction and determined that pile driving activity would need to be at least 52 feet away from historic buildings to remain at or below the vibration threshold at which damage could occur. The closest historic buildings are the Central Shops A and B, which are about 300 feet from the SEP 005 - Southeast Lift Station site; vibration would thus not adversely affect those structures. The vibration threshold for occupied buildings is 31 feet for building damage and 106 feet for annoyance. The nearest off-site occupied building is about 700 feet from SEP 005 - Southeast Lift Station site at the northeast corner of Evans Avenue and Quint Street, and thus vibration during construction of the lift station would not affect the building or its occupants. Vibration impacts of the modified project would remain less than significant.

Air Quality

The existing air quality conditions for the modified project are the same as described in the MND for the adopted project and the same receptors are present. Please refer to the MND for descriptions of criteria air pollutants, ozone precursors, and particulate matter (PM_{10} and $PM_{2.5}$), and local health risks and hazards. The project site is within an Air Pollutant Exposure Zone; projects within this zone require special consideration to determine whether the project's activities would add a substantial amount of emissions to areas already adversely affected by poor air quality. The MND evaluated air quality impacts based on the Bay Area Air Quality Management District's CEQA Air Quality Guidelines and considered lower health risk thresholds applicable because the project is within an Air Pollutant Exposure Zone.

The MND determined that operation of the adopted project would not result in any net new emissions other than from operation of an emergency generator at the Bruce Flynn pump station. The modified project no longer includes an emergency generator, so there would be no operational emissions**.**

As described below, construction of the modified project would not result in any new significant effects on air quality beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact. **Mitigation Measure M-AQ-1: NO_x Construction Emissions Minimization** would continue to be required for the modified project. The following provides further analysis of the modified project's air quality impacts.

Fugitive Dust

The MND determined that the adopted project would generate fugitive dust, but that compliance with Article 22, Construction Dust Control Ordinance, of the San Francisco Health Code would reduce fugitive dust emissions during construction to a less-than-significant level. Compliance

[21] Woodard & Curran. 2018. SEP Headworks Replacement; Lift Station Operational Noise Screening Analysis.

with the ordinance would continue to be required and would reduce fugitive dust emissions associated with the modified project to less than significant.

Criteria Pollutants

The MND determined that while construction-period emissions of reactive organic gases (ROG) and PM_{10} and $PM_{2.5}$ exhaust were below significance thresholds, emissions of nitrogen oxides (NO_X) during construction would be potentially significant. Construction-related emissions were calculated using the California Emission Estimator Model (CalEEMod).[22] Implementation of **Mitigation Measure M-AQ-1: NO_X Construction Emissions Minimization**, would reduce NO_X emissions to a less-than-significant level by requiring *tier 4 final* engines on all equipment greater than or equal to 140 horsepower for all years, and renewable diesel in all haul trucks in year five of construction. Construction of the modified project would entail a slightly different schedule of equipment use, and haul trip distance assumptions were refined, so construction-period emissions estimates were updated using CalEEMod. As with the original project, construction emission results for the modified project indicate that NO_X emissions would exceed the applicable threshold. Specifically, the analysis finds that even with the emissions controls required under the San Francisco Clean Construction Ordinance, NO_X emissions from construction of the modified project in years 2 - 4 would exceed the threshold of 54 pounds per day. Table 6 shows estimated uncontrolled emissions during each year of construction. To reduce NO_X emissions below the threshold, additional controls would be required. Further, the planning department has determined that it is difficult to enforce requirements for use of renewable diesel in on-road haul trucks, so this control measure has been replaced with other controls that would reduce NO_X emissions. Multiple different control scenarios could be used to reduce NO_X emissions from the modified project, and Mitigation Measure M-AQ-1 would be replaced as shown below. With implementation of the control scenario described in Mitigation Measure M-AQ-1, NO_X emissions for all years would be less than 54 pounds per day.[23]

TABLE 6: DAILY PROJECT CONSTRUCTION EMISSIONS (POUNDS PER DAY)

	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Year 1	1.1	47	0.27	0.26
Year 2	3.7	**140**	0.85	0.83
Year 3	3.5	**113**	0.51	0.50
Year 4	1.1	**97**	0.36	0.36
Year 5	5.2	17	0.08	0.07
Year 6	0.6	49	0.20	020
Project Average Daily Emissions [1,2]	2.9	**83**	0.41	0.41
Significance Threshold	54	**54**	82	54
Exceeds Threshold?	No	**Yes**	No	No

Source: Ramboll Environ, *Updates to Air Quality Technical Analysis SFPUC Southeast Plant Headworks Replacement Project*, San Francisco, CA, February 26, 2019.
Notes:
Bold represents values over the threshold.
1. Average over 250 days of construction per year for Years 1 through 5, and 125 days for Year 6.
2. Represents using Tier 2 off-road construction equipment with diesel particulate filters, as required by the San Francisco Clean Construction Ordinance.

[22] Ramboll Environ, *Air Quality Technical Report Southeast Plant 250 MGD New Headworks Facility Project*, September 20, 2016.

[23] Ramboll Environ, *Updates to Air Quality Technical Analysis SFPUC Southeast Plant Headworks Replacement Project*, San Francisco, CA, February 26, 2019.

Table 7 shows estimated mitigated daily project construction emissions using the control scenario, which requires that all off-road construction equipment equal to or greater than 140 horsepower and all 98 horsepower backhoes be consistent with the EPA Tier 4 Final off-road emission standards; use of renewable diesel is not required. In addition, 80 % of on-road haul trucks in years 1-3 shall be model year 2010 or newer. As shown in Tables 6 and 7, Year 2 has the highest level of NO_X emissions. Table 7 shows that estimated NO_X emissions for Year 2 under the proposed control scenario would be reduced below the 54 pounds per day significance threshold, with even lower NO_X emissions in other years. As with the adopted project, impacts of the modified project would remain less than significant with implementation of revised Mitigation Measure M-AQ-1.

TABLE 7: MITIGATED DAILY PROJECT CONSTRUCTION EMISSIONS (POUNDS PER DAY)

	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Year 1	1.4	16	0.19	0.19
Year 2	4.5	53	0.64	0.62
Year 3	4.6	28	0.38	0.37
Year 4	2.2	14	0.24	0.23
Year 5	5.3	10	0.07	0.06
Year 6	1.0	16	015	015
Project Average Daily Emissions [1,2]	3.6	24	0.30	0.29
Significance Threshold	54	54	82	54
Exceeds Threshold?	No	No	No	No

Source: Ramboll Environ, *Updates to Air Quality Technical Analysis SFPUC Southeast Plant Headworks Replacement Project*, San Francisco, CA, February 26, 2019.
Notes:
1. Average over 250 days of construction per year for Years 1 through 5, and 125 days for Year 6.
2. Represents using Tier 2 off-road construction equipment with diesel particulate filters, as required by the San Francisco Clean Construction Ordinance as a minimum control for all equipment less than 140 horsepower, All off-road construction equipment equal to or greater than 140 horsepower and all 98 horsepower backhoes shall be consistent with the EPA Tier 4 Final off-road emission standards; use of renewable diesel is not required; 80 % of on-road haul trucks shall be model year 2010 or newer for years 1-3.

Mitigation Measure M-AQ-1: NO_X Construction Emissions Minimization

All equipment requirements, construction emissions minimization plan, monitoring and reporting are subject to the San Francisco Clean Construction Ordinance. The SFPUC's contractors shall implement the following in addition to the requirements of the Clean Construction Ordinance:

A. Engine Requirements

~~1. All off-road construction equipment equal to or greater than 140 horsepower shall be consistent with the United States Environmental Protection Agency (USEPA) Tier 4 Final off-road emission standards.~~

~~2. Renewable diesel shall be used in all diesel on-road trucks and vehicles in Year 5 (only) of construction.~~

1. SFPUC shall implement the following control scenario beginning in Year 2 of construction:

    - All off-road construction equipment equal to or greater than 140 horsepower and all 98 horsepower backhoes shall be consistent with the

EPA Tier 4 Final off-road emission standards; use of renewable diesel is not required.

2. 80 % of on-road haul trucks shall be model year 2010 or newer for years 1-3.

Should any deviations from the requirements or the equipment above be proposed prior to or during construction, the project sponsor shall demonstrate, to the satisfaction of the San Francisco Planning Department Environmental Review Officer (ERO), that an equivalent amount of emissions reduction would be achieved.

~~*B. Waivers*~~

~~1. The ERO or designee may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO or designee grants the waiver, the contractor must submit documentation that the equipment used for on site power generation meets the requirements of Subsection (A)(1).~~

~~2. The ERO or designee may waive the equipment requirements of Subsection (A)(1) if a particular piece of off road equipment with Tier 4 Final standards or CARB Level 3 VDECS is technically or commercially[24] not feasible, the equipment would not produce desired emissions reduction due to expected operating modes, installation of the equipment would create a safety hazard or impaired visibility for the operator, or there is a compelling emergency need to use off road equipment that is not retrofitted with a CARB Level 3 VDECS. If the ERO or designee grants the waiver, the contractor must use the next cleanest piece of off road equipment, according to the following table:~~

~~Compliance Alternative~~	~~Engine Emission Standard~~
~~1~~	~~Tier 4 Interim~~
~~2~~	~~Tier 3~~
~~3~~	~~Tier 2~~

~~NOTES: How to use the table: If the Environmental Review Officer (ERO) or designee determines that the equipment requirements cannot be met, then the contractor would need to meet Compliance Alternative 1. If the ERO or designee determines that the contractor cannot supply off-road equipment meeting Compliance Alternative 1, then the contractor must meet Compliance Alternative 2. If the ERO or designee determines that the contractor cannot supply off-road equipment meeting~~

Toxic Air Contaminants

The MND considered the results of a *health risk assessment*, which evaluated excess lifetime cancer risks and health effects related to $PM_{2.5}$ concentrations. As described in the MND, construction of the adopted project would result in less-than-significant impacts associated with $PM_{2.5}$ and excess cancer risks to sensitive receptors. An updated heath risk assessment was prepared for the modified project. The results showed that, as compared with the adopted project, the modified project would result in modest increases in cancer risk and $PM_{2.5}$ concentrations, but all remained below thresholds.[25] Table 9 shows the health risk of the modified project as compared to the

[25] Ramboll Environ, *Updates to Air Quality Technical Analysis SFPUC Southeast Plant Headworks Replacement Project*, San Francisco, CA, February 26, 2019

adopted project. As with the adopted project, impacts of the modified project would remain less than significant.

TABLE 9: CONSTRUCTION EMISSIONS AND HEALTH RISK ASSESSMENT RESULTS AT OFF-SITE RECEPTOR

	Cancer Risk (in one million)	$PM_{2.5}$ Concentration (ug/m^3)
Adopted Project	0.64	0.0024
Modified Project	0.66	0.0026
Significance Threshold	7.0	0.2
Exceeds Threshold?	No	No

Odors

Both the adopted project and modified project include additional odor control facilities that would reduce off-site odor impacts associated with operation of the SEP. Odor impacts would remain less than significant.

Greenhouse Gas Emissions

Both the adopted and modified project would comply with the city's greenhouse gas (GHG) reduction strategy. SFPUC would comply with the energy efficiency requirements of the Stormwater Management Ordinance, Commercial Lighting Efficiency Ordinance, Water Efficient Irrigation Ordinance and Energy Conservation Ordinance. Electricity to operate the project would be supplied by the SFPUC Power Enterprise from facilities at Hetch Hetchy, which does not cause GHG emissions because the power is generated from hydroelectric facilities. Impacts would thus be less than significant. For these reasons, the modified project would not result in any new significant GHG impacts beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact.

Wind and Shadow

The MND found that the adopted project would have no shadow impacts and that wind impacts would be less than significant. The modified project would entail construction of a new lift station, with the majority of the structures buried below grade. Thus, the modified project would not result in any new significant effects related to wind and shadow beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact.

Recreation

The MND found that the adopted project would have no impacts on recreation. The modifications to the project would be constructed and operated entirely within the Southeast Plant and would thus not directly affect any recreational facilities. The MND also documented that the adopted project would not induce growth that would generate new recreational demand and would thus not necessitate the construction or expansion of recreational facilities. The modified project would not increase operational staff levels at the plant. Thus, the modified project would not result in any new significant recreational impacts beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact.

Utilities and Service Systems

The MND found that the adopted project would have less-than-significant impacts on utilities and service systems as it would not require expansion of existing facilities other than those proposed as part of the project. Impacts related to water, wastewater, and stormwater treatment would be

less than significant. Because operation of the modified project would be essentially the same as the adopted project, impacts to water supply and generation of wastewater and stormwater would be the same as for the adopted project. Operational water supply demands for both the adopted and modified project would be similar to current conditions and would be less than significant. The MND found that solid waste generated by construction and operation of the adopted project would not cause landfills to exceed their permitted capacities. The modified project would generate about 9,500 more cubic yards of soil for disposal and require minimal additional demolition to remove a small trailer from the site and would thus not generate substantial additional solid waste. Impacts would remain less than significant. Thus, the modified project would not result in any new significant impacts on utilities and service systems beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact.

Public Services

The MND determined that the adopted project would have no impact on fire protection, police protection, schools, parks or other services because it would not require additional personnel and thus would not increase the number of service calls or the service population in the area. The Southeast Plant is already served by police and fire protection services and the modifications to the adopted project would be constructed entirely within the existing treatment plant. Thus, the modified project would not result in any new significant public services impacts beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact.

Biological Resources

The biological setting for the modified project is the same as the study area described in the MND for the adopted project. The MND found that adopted project would have no impacts on sensitive species or sensitive habitats because no habitat is present in the project area, and there are no Habitat Conservation Plans covering the project area. The modifications to the adopted project would be located entirely within the Southeast Plant and would thus not affect any sensitive biological resources including wetlands or waters of the U.S., which do not occur within the plant. The MND identified that some street trees would be removed for the adopted project, but the modified project would not entail the removal of any additional street trees, so impacts would remain less than significant. Thus, the modified project would not result in any new significant biological resources impacts beyond those identified for the adopted project nor would it result in a substantial increase in the severity of a significant impact.

Geology and Soils

Existing geology, soils, and seismicity conditions for the modified project are the same as those described for the adopted project. The MND found that there would be no impact associated with landslides or changes to topography or unique geologic features and that impacts associated with ground shaking, ground failure, erosion, unstable soils, expansive soils, and paleontological resources would all be less than significant. The depth of excavations and installation of piles for the proposed lift station and associated pipelines would be similar to the depths described in the MND for the adopted project, therefore, impacts of the modified project would be the same as for the adopted project. Both the adopted project and the modified project would be constructed in accordance with applicable building codes and well-established industry design criteria and would comply with SFPUC *General Seismic Requirements for the Design of New Facilities and Upgrade of Existing Facilities: Revision 3*. SFPUC would implement erosion control measures in accordance with

Article 4.1 of the San Francisco Public Works Code and would prepare and implement a Storm Water Pollution Prevention Plan to control erosion during construction. Excavation for the modified project is not expected to affect deeper formations under the project site that could have the potential to contain paleontological resources.

As described above, implementation of the modified project would not result in any new significant effects beyond those identified for the adopted project or an increase in the severity of a significant impact on geology, soils, and seismicity.

Hydrology and Water Quality

Existing hydrologic and water quality conditions for the modified project are the same as described for the adopted project in the MND. The MND found that the adopted project would have no impacts associated with alteration of drainage patterns causing erosion or flooding, hazards associated with dam or levee failure, and locating housing in a floodplain. The SEP 005 - Southeast Lift Station is not within a tsunami inundation zone. The modified project would not result in any additional impacts from alteration of drainage patterns or flood-related hazards.

The MND determined that impacts of the project on water quality, potential depletion of groundwater, generation of runoff, flood hazards and inundation by seiche were all less than significant. The modified project would be subject to the same controls as the adopted project requiring management of construction-related discharges of stormwater and dewatering from excavations, and impacts would remain less than significant. Operations-related combined sewer discharges during construction would be the same for the modified project as for the adopted project and would be in compliance with the Southeast Plant National Pollutant Discharge Elimination System Permit, and thus impacts would remain less than significant. The modified project would require limited construction dewatering and would not increase impervious surface area, so impacts associated with depletion of groundwater would be less than significant. The modified project facilities would be designed to accommodate projected sea level rise. The adopted project was designed to account for sea level rise, with a floor elevation of +13.35 feet NAVD88, and the top of the roof of the buried lift station that is proposed to be constructed as part of the modified project also would be at elevation +13.35 feet NAVD88 to allow for future sea level rise.[26] The modifications to the adopted project would not result in any topographic changes or new structures that would increase the extent of storm-surge related flooding relative to existing conditions.

Therefore, implementation of the modified project would not result in any new significant effects on hydrology and water quality beyond those identified in the MND or an increase in the severity of a significant impact.

Hazards and Hazardous Materials

Existing hazards and hazardous materials conditions for the modified project are the same as described in the MND for the adopted project. The MND determined that because the Southeast Plant is not near a school or public airport, impacts associated with air traffic safety or emissions near a school were not applicable to the adopted project. Because the SEP 005 - Southeast Lift Station site is located within the plant, those criteria are still not applicable to the modified project. The MND found that impacts related to hazardous materials use, existing hazardous materials

[26] SFPUC. 2018. SEP 005 – *Southeast Lift Station Final Conceptual Engineering Report 2*. September 2018

sites, interference with emergency evacuation plans and wildfire risk were all less than significant. The modified project would still require use of hazardous materials such as fuels, lubricants, paints and solvents during construction, but implementation of protocols for the proper use, transport and disposal of hazardous materials would be required for the modified project and impacts during construction would thus be less than significant. Operational use of hazardous materials would remain the same as under existing conditions and would be governed by the Hazardous Materials Business Plan for the Southeast Plant; impacts of the modified project would thus be less than significant. The modified project remains within a portion of the treatment plant that has been identified as containing 0.5 percent natural occurring asbestos in the soil and would be required to comply with requirements of the Air Resources Board's Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations. Mandatory compliance with these regulations and the dust control plan required by Article 22B, Construction Dust Control Ordinance, of the San Francisco Health Code would reduce impacts related to possible exposure to naturally occurring asbestos to less than significant. The MND identified the presence of elevated levels of lead in soil at headworks but did not include sampling at the SEP 005 - Southeast Lift Station site. Because of the proximity of the sites it is presumed that the subsurface environment is likely to be similar, and there is a potential for soil contamination. Under Article 22A of the Health Code, a *phase I environmental site assessment* must be prepared for the SEP 005 - Southeast Lift Station site, and SFPUC would be required to remediate potential soil contamination. The modified project would thus not result in a significant hazard and the impact would remain less than significant. The modified project would require demolition of the existing on-site trailer, which was constructed about six years ago. Because the trailer is of fairly recent construction it is not expected to contain any hazardous building materials. The potential hazards associated with asbestos or lead-containing building materials would be the same as for the adopted project. The modified project would still require lane closure on Evans Avenue between Rankin Street and Phelps Street, but closure of Rankin Street would no longer be required because the Bruce Flynn Pump Station sewer connection would not be necessary. The modified project would thus have less impact on emergency response or evacuation activities and the impact would remain less than significant. The modified project would comply with Cal/OSHA regulations for handling of flammable materials and would comply with San Francisco Building and Fire Codes, which would reduce impacts associated with fire risk to less than significant.

Thus, implementation of the modified project would not result in any new significant effects related to hazards and hazardous materials beyond those identified for the adopted project nor would it result in an increase in the severity of a significant impact.

Mineral and Energy Resources

The MND found that there are no sites in San Francisco that are designated areas of significant mineral deposits, so there are no potential impacts on mineral resources associated with either the adopted or modified project. The MND determined that fuels and water would not be used wastefully during construction of the adopted project, and that operational use would incorporate energy efficiency designs or features that would ensure conformance with GHG reduction strategies. Energy impacts of the adopted project were determined to be less than significant, and the modified project would incorporate similar energy efficiencies. Thus, implementation of the modified project would not result in any new significant effects related to mineral and energy resources beyond those identified for the adopted project nor would it result in an increase in the severity of a significant impact.

CONCLUSION

Based on the foregoing, it is concluded that the analyses conducted, and the conclusions reached in the final MND adopted on December 19, 2016 remain valid. The proposed modifications to the project would not cause new significant impacts not identified in the MND or substantially increase the severity of a significant impact. No changes have occurred with respect to circumstances surrounding the proposed project that would cause significant environmental impacts to which the project will contribute considerably, and no new information has become available that shows that the project will cause significant environmental impacts. Therefore, no supplemental environmental review is required beyond this addendum.

I do hereby certify that the above determination has been made pursuant to State and Local requirements.

Date of Determination:

March 7, 2019

LISA GIBSON
Environmental Review Officer

cc: Scott MacPherson, SFPUC
Bulletin Board
Master Decision File
Distribution List