

2600 Capitol Avenue Suite 200 Sacramento, CA 95816 916.564.4500 phone 916.564.4501 fax

# memorandum

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to Scot A. Moody, Stockton East Water District (SEWD)

cc Bryan Burnitt and Chris Cleveland, Carollo Engineers

from Todd Gordon, Environmental Science Associates (ESA)

subject California Environmental Quality Act (CEQA) Notice of Exemption (NOE), for the Stockton East

Water District Bulk Sodium Hypochlorite System Project

## Introduction

This memorandum was prepared by ESA to support a Categorical Exemption (CatEx) Under CEQA for the Bulk Sodium Hypochlorite System Project (proposed Project).

The following presents information in support of filing a Class 1 Categorical Exemption per CEQA Guidelines section 15301 for Existing Facilities. Section 15301Class 1 exempts from detailed environmental review the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use.

Included in this memorandum is a description of the proposed Project, and the information supporting how the proposed Project effects would not meet any of the applicable exceptions included in CEQA Guidelines section 15300.2.

# **Project Description**

### Introduction

The Stockton East Water District (SEWD) provides surface water for both agricultural and urban uses. SEWD supplies wholesale treated surface water, which is retailed to customers in the City of Stockton's Sphere of Influence (SOI) by the California Water Service Company Stockton District (CWSC), the City of Stockton, and San Joaquin County. SEWD obtains raw water from the New Hogan Reservoir on the Calaveras River and the New Melones Reservoir on the Stanislaus River which is treated at SEWD's Dr. Joe Waidhoffer Water Treatment Plant (WTP). The WTP has a capacity to treat up to 60 million gallons per day (mgd) and it uses chlorine gas as its primary disinfectant. SEWD is proposing to convert the use of chlorine gas to the use of bulk sodium hypochlorite (bleach) system (proposed Project).

# **Project Location**

The proposed Project involves replacement of the existing chlorine gas disinfectant treatment system with a bulk sodium hypochlorite disinfectant treatment system at the existing WTP located at 6767 East Main Street, Stockton, California. The WTP site is a developed site that is primarily paved, with limited grasses and landscape vegetation, including trees. Existing WTP facilities include a finished water reservoir, sedimentation basins, backup generators, chemical feed system, chemical tanks, filters, operations building, and administrative building, access roads and parking.

# **Project Objectives**

The objectives of the proposed Project are to:

- Improve operations through automation and enhanced control.
- Reduce operations and maintenance costs.
- Improve safety for staff and the public.
- Comply with current and future regulations.
- Improve chemical availability, transport, and storage.

## **Project Description**

The proposed Project involves the demolition and removal of existing facilities and supporting infrastructure at the WTP. New treatment system facilities and supporting infrastructure would be constructed within the existing WTP property in areas that have existing infrastructure and that are routinely disturbed through existing WTP operations. The components of the proposed Project are described below and are shown in **Figure 1**. Demolition and other site preparation activities are described under the Construction Considerations section.

## **Proposed New Facilities and Supporting Infrastructure**

The proposed bulk sodium hypochlorite facility would include construction of two new structures - a storage building and a chemical feed building and supporting infrastructure improvements described below.

## Hypochlorite Storage Building

The new 48-foot by 48-foot hypochlorite pre-engineered steel storage building would be constructed on a concrete containment foundation just south of the existing filters. The building would cover four 6,500-gallon hypochlorite tanks that would be delivered to the site pre-constructed and ready for installation. The building would also include a magnetically driven transfer pump for hypochlorite transfer and tank inventory management.

Truck delivery would occur in a paved containment area draining to a stormwater catch basin equipped with an isolation gate valve and position indicator to be closed during deliveries. The truck containment would connect to the storage building foundation containment and would drain to a low point sump. The low point sump would be manually operated to discharge to operator-selected location: to a truck or containers for chemical-contaminated liquid or stormwater catch basin for clean water.

### Hypochlorite Feed Building

Adjacent to the proposed hypochlorite storage building, a new 48-foot by 20-foot masonry block hypochlorite feed building would be constructed on a concrete foundation. The building would house two duplex diaphragm pump skids feeding three chlorine injection locations. The building would feature a curb-less containment area for the feed pumps and piping that collects to a low point sump. The building includes tempered water skid for both buildings' eyewashes and showers and a washdown sink and would act as the building for the system's electrical equipment.

### **Utility Trench**

Outside of the buildings' containment areas, the sodium hypochlorite suction and discharge piping will be run in polyvinyl chloride (PVC) conduits that would serve as double containment. Between the buildings, the contained piping would run within open-draining utility trenches covered with lightweight fiber-resin covers. These trenches would allow regular monitoring at leak detection points and replacement of leaking sections of chemical piping. Underdrain piping connected to the existing storm drain collection system would be installed at the low point in the primary trench between the new bulk storage building and the operations building.

### New Paved Areas and Security Gate

As part of the proposed Project, new pavement would be added to the project site. The new pavement would be laid in the southwest portion of the WTP site adjacent to existing pavement and around the proposed hypochlorite feed and hypochlorite storage buildings. During the expansion, the existing security gate would be installed on Drive "B".

The existing parking lot area would be repaved following completion of the installation of the proposed utility trench. In addition, the primary east and north access roads (Drive "B" and Drive "C" respectively) to the operations building would be repaved.

### Plant Water Expansion

During the repaving, a six-inch plant water pipeline would be routed around the operations building to complete a more reliable pressurized plant water system and replace aged asbestos cement piping. All areas in which the new piping is installed will be returned to pre-construction condition or be improved according to the project descriptions above.

Implementation of the proposed Project would include site preparation activities, including demolition and removal of existing vegetation and supporting infrastructure, and other construction considerations described below.

### Construction Considerations

## **Site Preparation**

It is anticipated that approximately ¾ acres of the WTP would be graded to accommodate construction staging area, which is located at the WTP site, and construction of new buildings. Excess clean soils from the excavation of the building foundations and regrading would be stockpiled and/or spread on the WTP site in the location indicated on **Figure 1**. Vegetation and other construction debris should be hauled off-site to a permitted disposal location by the contractor.

Approximately 160 linear-feet of the existing 8-inch drain pipe would be removed and rerouted around the new building foundation locations to the existing stormwater outfall location within the vegetated perimeter swale. Disconnected irrigation pipes in areas to be paved would be capped and abandoned in place.

### **Demolition and Removal**

The following existing features would be demolished/cleared and removed from the WTP site as part of the proposed Project:

- Approximately 19,000 square feet (sf) of asphalt paving
- One 36-inch diameter tree and one 48-inch diameter tree (to be removed prior to February 1)
- Six decorative trees (8- to 12- inches in diameter; to be removed prior to February 1)
- 25 feet of 12-inch-wide concrete mowing strip
- 380 linear-feet of 8-foot chain-link fence and 3-strand barbed wire
- The existing security gate and associated power and control appurtenances and wire

In addition, the following components of the gaseous chlorine system would be removed from the existing chlorine gas room and chlorine gas storage room in the operations building after the sodium hypochlorite system is online and active:

- Chlorine gas room:
  - Chlorinator and instrumentation
  - Piping and instrumentation
  - Outside scrubber
- Chlorine storage room:
  - Piping chlorine gas storage room
  - Inside scrubber
  - Scrubber roof duct

#### 1.5.3 Construction Considerations

### **Construction Equipment**

Construction activities would include the use of the following equipment:

- Excavators
- Graders
- Rolling compactor

- Dump trucks
- Loaders
- Asphalt milling machine
- Asphalt paver
- Concrete mixer trucks
- Concrete pumper trucks
- Concrete laser screeds
- Cranes

#### Access

Access to the project site would be from East Main Street and New Water Road. No new temporary or permanent access roads would be constructed. Access to the WTP would be preserved during construction and the WTP would remain open to visitors for site visits.

## Staging Areas

Construction equipment and materials staging area(s) would be located on site. The shoulder of Drive "B" and ¼ acre area to the west of the proposed buildings' location would be designated for construction staging and storage. Additional area in the paved parking lot to the east of the proposed buildings would be made available as well.

#### Construction Schedule

Construction activities for the proposed Project are anticipated to start in Spring 2022 and would be completed in approximately 21 months through Fall 2023. Tree removal activities would be completed prior to the beginning of nesting season (February 1 to August 31).

# **Project Operations and Maintenance**

Operation and maintenance (O&M) of the proposed bulk sodium hypochlorite disinfectant treatment system facilities and supporting infrastructure would be consistent with current O&M activities at the WTP site associated with liquid chemical storage and distribution.



SOURCE: Maxar, 2020; San Joaquin Co., 2021; ESA, 2022

SEWD Disinfection Design

Figure 1 Site Layout



## **Best Management Practices (BMPs)**

The following BMPs shall be incorporated into the construction contract for the proposed Project to minimize potential releases of soils or sediments, hazardous materials spills, and minimize air quality emissions:

- All equipment and vehicles would be checked daily for the prevention of material leaks.
  Staging/storage areas for equipment, materials, fuels, and lubricants would be located as far away as possible from open water. A spill kit would be present on site in the event of fuel leaks or spills.
- All fueling of equipment would be done more than 50 feet away from open water.
- If the potential exists for loose sediment to runoff into nearby waterways, use straw waddles or other sediment control measure to prevent sediment runoff.
- All areas would be cleaned of any trash and debris and returned, as close as possible, to the condition prior to initiation of trenching activities.
- To minimize air quality impacts, shut off all equipment not in use. If idling is necessary for running equipment during sampling, plan operations to limit idling time as much as practicable.
- Limit equipment to 15 mph on site to reduce dust produced by equipment.

# **CEQA Exemption Discussion**

Section 21084 of the Public Resources Code requires the CEQA Guidelines to include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA. A brief discussion of the applicable Class 1 exemption under Sections 15301 and CatEx exceptions per Section 15300.2 (Exceptions) of the CEQA Guidelines are discussed below.

## CEQA Guidelines Section 15301 - Existing Facilities

Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The key consideration is whether the project involves negligible or no expansion of use. Applicable examples include:

- (a) Interior or exterior alterations involving such things as interior partitions, plumbing, and electrical conveyances
- (b) Existing facilities of both investor and publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services
- (e) Additions to existing structures provided that the addition will not result in an increase of more than:
  - (1) 50 percent of the floor area of the structures before the addition, or 2,500 square feet, whichever is less; or
  - (2) 10,000 square feet if:
    - (A) The project is in an area where all public services and facilities are available to allow for maximum development permissible in the General Plan and
    - (B) The area in which the project is located is not environmentally sensitive.

## **Justification for Categorical Exemption**

The proposed Project involves the demolition and removal of existing facilities and supporting infrastructure at the WTP. New treatment system facilities and supporting infrastructure would be constructed within the existing WTP property in areas that have existing infrastructure and that are routinely disturbed through existing WTP operations. The proposed Project would be located entirely within the existing SEWD WTP and, following construction, would be consistent with current O&M activities at the WTP site. For these reasons, the proposed Project meets the conditions for a Class 1 Categorical Exemption because it involves minor alteration of existing public facilities involving negligible or no expansion of use.

## **Exceptions to CatEx**

CEQA Guidelines Section 15300.2 lists project types for which Categorical Exemptions may not apply. The following section discusses why the proposed Project is not subject to any of the exceptions, such that a CatEx is appropriate.

- (a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located—a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.
- (b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
- (c)Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.
- (d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.
- (e)Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- (f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

### (a) Location and

The CatEx that applies to the proposed Project is classified as Class 1 in the CEQA Guidelines. Therefore, item (a), above, which only applies to Classes 3, 4, 5, 6, and 11, does not pertain to the proposed Project. Therefore, the proposed Project is not subject to this exception.

#### (b) Cumulative Impacts

No known successive projects of the same type and place would occur concurrent with the proposed Project on the same site. Therefore, no long-term or growth-inducing impacts would result, and all temporary construction impacts would be less than significant with incorporation of BMPs into the construction contract. The proposed Project would not have a cumulative contribution to similar, successive projects in the project area. Therefore, the proposed Project is not subject to this exception.

### (c) Significant Effect

The Project site is at SEWD's existing WTP and would be located entirely within the WTP property at 6767 East Main Street, Stockton, California. The Project site is a developed site that is primarily paved, with limited grasses and landscape vegetation, including trees. No unusual circumstances have been identified in or around the Project site that would result in significant environmental impacts. Therefore, the proposed Project is not subject to this exception.

### (d) Scenic Highways

The proposed Project is within the boundaries of the existing WTP property, a developed site, and not located near an officially designated scenic highway. Development of the proposed Project would not result in damage to scenic resources within a highway officially designated as a scenic highway. Therefore, the proposed Project is not subject to this exception.

## (e) Hazardous Waste Sites

The proposed Project is not located in an area where any known hazardous wastes are present and is not located on a site which is included on any list pursuant to Section 65962.5 of the Government Code. As such, the proposed Project presents no risk to human health or the environment. Therefore, the proposed Project is not subject to this exception.

### (f) Historic Resource.

As discussed under the environmental analysis section, there are no architectural or structural resources on the Project site that qualify as historical resources, as defined in CEQA Guidelines Section 15064.5. In addition, it was determined that no known archaeological resources or human remains are present within the Project site. Therefore, the proposed Project would not impact a cultural and historical resource of critical concern, nor result significant effect to cultural or historical resources and the proposed Project is not subject to this exception.

## **Environmental Analysis**

The nature of the proposed Project activities including the demolition and removal of existing facilities and supporting infrastructure and construction of new treatment system facilities and supporting infrastructure at the WTP would ultimately result in no change in land use would, no increase in population, housing or economic changes would occur because the project would not induce new growth, no destruction of agricultural land would occur, and no increase in demand for public utilities or services such as police, fire, schools, parks, water, wastewater, or solid waste would result from the proposed Project.

Biological resources, cultural and historic resources, air quality and greenhouse gas emissions, and hydrology and water quality are relevant to the proposed Project and are discussed below.

#### **Biological Resources**

A California Natural Diversity Database (CNDDB) record search revealed recorded occurrences of burrowing owl, Swainson's hawk, and white-tailed kite within 5 miles of the Project site. There are 7 CNDDB recorded

occurrences of burrowing owl within five miles of the Project site. The nearest CNDDB occurrence (number 1236) is from 2009 and is approximately 2.2 miles south of the Project site. There are 20 CNDDB recorded occurrences of Swainson's hawk within five miles of the Project site. The nearest is 2.2 miles south of the Project site. The mature trees within the Project site and within 0.25 miles of the Project site provide suitable nesting habitat for this species. There is one CNDDB recorded occurrences of white-tailed kite within 5 miles of the Project site.

A site reconnaissance visit was conducted at the project site by an ESA senior biologist on October 6, 2021. The Project site is surrounded by annual grassland, and developed areas comprised of the existing WTP facilities. Developed areas a finished water reservoir, sedimentation basins, backup generators, chemical feed system, chemical tanks, filters, operations building, and administrative building, access roads, parking, and mature ornamental and native landscape trees throughout the WTP facilities. The WTP property is fenced in on all sides.

Vegetation communities are assemblages of plant species that occur together in the same area and are defined by species composition and relative abundance. Habitats within the Project site include annual grassland and developed areas. The western portion of the Project site consists of disturbed annual grassland.

Developed areas include paved driveway and parking area and landscaping. The landscaping includes native and ornamental landscape trees. Native trees within the Project site include mature cork oak (*Quercus suber*), coast live oak (*Quercus agrifolia*), and valley oak (*Quercus lobata*). No nesting activity was observed and no burrows were present during this site visit.

While no bird nesting activity was observed during the October 2021 reconnaissance visit, the native trees within and adjacent to the Project site do provide suitable habitat for nesting birds. However, as described in the Project Description, the tree removal would be completed prior to February 1.

The proposed Project would not impact a biological resource of critical concern, nor result significant effect to biological resources; therefore, it would have no effect on the environment related to biological resources.

#### **Cultural and Historical Resources**

Cultural resources staff with Environmental Science Associates (ESA) conducted a records search at the Central California Information Center (CCIC) of the California Historical Resources Information System (CHRIS) on September 29, 2021 (File No. 11922L). The records search included reviews of cultural resources and studies in the Project vicinity. The purpose of the records search was to: (1) determine whether known cultural resources have been recorded within the Project site or a 0.5-mile radius; (2) assess the likelihood of unrecorded cultural resources based on historical references and the distribution of nearby sites; and (3) develop a context for the identification of historical themes.

ESA also reviewed the Built Environment Resources Directory (BERD) for San Joaquin County, which contains information on resources of recognized historical significance—including those evaluated for listing in the National Register of Historical Resources (National Register), the California Register of Historical Resources (California Register), the California Inventory of Historical Resources, California Historical Landmarks, and California Points of Historical Interest. Historic maps and aerial imagery were also examined.

Based on the records search, there are no previously recorded cultural resources within the Project site. Nine resources have been previously recorded within a 0.5-mile radius, including one prehistoric site (CA-SJO-75), two

historic-era artifact scatters (CA-SJO-369H and CA-SJO-370H), and several isolated finds. None of these resources would be impacted by the Project.

One previous cultural resources study has been completed that included the entire SEWD and the Project site (ASI, 2001). The study did not identify any cultural resources in the Project site. The Project site has been extensively excavated and disturbed from construction of the existing facilities beginning in the mid-1970s. In 2002, the California State Historic Preservation Officer (SHPO) concurred with a finding of effect regarding cultural resources impacts to the adjacent reservoir constructed in 2003. Based on the results of the 2001 study and Native American monitoring completed during a Level 1 Site Assessment for the reservoir, the SHPO concurred with a finding of No Historic Properties Affected.

As a result of the records search and background research, it was determined that there are no architectural or structural resources on the Project site that qualify as historical resources, as defined in CEQA Guidelines Section 15064.5. In addition, it was determined that no known archaeological resources or human remains are present within the Project site. Therefore, the proposed Project would not impact a cultural and historical resource of critical concern, and would have no effect on the environment related to cultural or historical resources.

#### Air Quality and Greenhouse Gases (GHG) Emissions

Construction of the proposed Project is anticipated to begin in May of 2022 and could take approximately 21 months to complete. Following construction, operations and maintenance activity associated with the proposed Project would be similar to those activities associated with baseline preconstruction conditions.

The proposed Project would result in limited vehicle trips to and from the project area during Project construction. Construction of the Proposed project would not result in emissions of criteria air pollutants that would exceed the applicable San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds of significance. The proposed Project would not include operation of any of the types of odor-generating facilities identified by the SJVAPCD. Therefore, the proposed Project would not generate emissions of criteria air pollutants during either construction or operation that would exceed the applicable SJVAPCD thresholds of significance.

Given the short duration of the proposed Project and relatively minimal equipment being used, GHG Emissions would be substantially below the established thresholds of SJVAPCD and other agencies. Following construction, operation and maintenance of the proposed Project would resume in a manner that is similar to that of the existing WTP, and the proposed Project would not result in increased operational emissions above baseline conditions. The proposed Project would not conflict with either the Climate Change Scoping Plan, the City of Stockton General Plan policies for reducing GHG emissions, or the emission reduction measures identified in the City's Climate Action Plan (CAP).

Therefore, the proposed Project would have no effect on the environment related to air quality resources or GHG emissions.

#### **Hydrology and Water Quality**

Compliance with the Eastern San Joaquin GSP and the City of Stockton Storm Water Management Plan would ensure that the proposed Project would not violate any water quality or waste discharge requirements. The proposed Project would be required to obtain a Grading and Erosion Control Permit, as required by the City of Stockton Stormwater Management Plan, which would prevent erosion or siltation on- or off-site. Compliance

with the storm water management plan would include preparation and implementation of a SWPPP, which would help to control the amount of runoff and reduce the amount of polluted runoff. Implementation of the proposed Project does not include groundwater withdrawal and the net gain of impervious surfaces would be minimal or negligible. The proposed Project would not change the existing draining patterns of the Study Area or vicinity, and, therefore would not result in erosion or siltation on site or off site, and would have no effect on the rate or amount of surface runoff and no effect on potential flooding on or off site.

Therefore, the proposed Project would have a no effect on the environment related to hydrology or water quality.

## **Summary**

It is the determination of the SEWD that the proposed Project conforms to the description of Class 1 projects under CEQA Guidelines Section 15301 because the proposed Project consists of the demolition and removal of existing facilities and supporting infrastructure and construction of new treatment system facilities and supporting infrastructure at the WTP. The Project, as proposed would have no significant environmental impact(s), and the project is categorically exempt under CEQA Guidelines Sections 15301 and would not meet any of the exceptions listed in Section 15300.2 of the CEQA Guidelines that would make the CatEx inapplicable.

Sincerely,

Todd Gordon Project Manager