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W37a

CDP approved: 5/10/2017
Staff report prepared by: Daniel Robinson
Staff report date: 5/19/2017
Hearing date: 6/7/2017

REVISED FINDINGS

Application Number: 3-16-0233

Applicant: South San Luis Obispo County Sanitation District

Project Location: 1600 Aloha Place, Oceano, San Luis Obispo County.

Project Description: Installation of redundancy/backup infrastructure and other improvements, including minor flood-proofing, and recognition of after-the-fact development at the District's Oceano Wastewater Treatment Plant.

Commission Action: Approved with Conditions (May 10, 2017)

Staff Recommendation: Adopt Revised Findings

STAFF NOTE

On May 10, 2017, the Coastal Commission unanimously approved a coastal development permit (CDP) with conditions for the South San Luis Obispo County Sanitation District's wastewater treatment plant improvements. At that time, the Commission modified the staff recommendation to allow a 30-year term for the CDP, subject to verification of progress towards meeting the terms and conditions of the CDP at 10-year intervals. Because the Commission-approved project substantially differed from staff's recommendation (i.e., staff had recommended a 10-year term for the CDP), this report contains revisions reflecting the Commission's deliberations and action on this matter. Changes to the staff recommended conditions and findings are shown in ~~striketrough~~ (for deletions) and underline (for additions). Commissioners who are eligible to vote on the revised findings are those from the prevailing side at the May 10, 2017 hearing (i.e.,

Commissioners Bochco, Brownsey, Cox, Groom, Howell, Luévano, Peskin, Shallenberger, Sundberg, Turnbull-Sanders, Uraga, and Vargas).

SUMMARY OF ~~STAFF RECOMMENDATION~~ COMMISSION ACTION

The South San Luis Obispo County Sanitation District (SSLOCSD) (“the District”) owns and operates a wastewater treatment plant (WWTP) that is permitted under National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048003 and Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements Order No. R3-2009-0046. The existing plant provides secondary treatment with disinfection to treat wastewater through the use of a system of mechanical screens, primary clarifiers, fixed film reactors, one secondary clarifier, and chlorination. The plant is designed and permitted to treat a peak dry weather flow of 5.0 million gallons per day (mgd).

Currently, the existing treatment plant cannot meet effluent limits at the permitted design flow if the fixed film reactors or the secondary clarifier are out of service because there is no backup, or redundant, system for either process. To address this issue, RWQCB Order R3-2009-0046 anticipated the addition of redundancy infrastructure to be installed at this WWTP so that major wastewater facility components can be removed from service for routine maintenance or repairs, or be shut down in case of mechanical failure or emergency, without risking violation of effluent permit limits. The addition of redundancy infrastructure does not add capacity to handle higher flows than currently permitted, and no additional treatment capacity is intended to be pursued by the District based on current plans and policies adopted by the member agencies and within the service area. The project also includes other new development scheduled to be constructed in 2017,¹ as well as after-the-fact (ATF) recognition of development that has previously occurred at the WWTP site without proper authorization through a coastal development permit (CDP).² Finally, to ensure certain critical components of the WWTP are safe from potential flooding in the near-term, the project also ~~proposes to improve~~/raises four existing critical components above the 100-year flood elevation level. All proposed redundancy components, the ATF and the new proposed development (including the flood-proofing improvements) will be, or have been, installed within the existing plant site on property that has been previously disturbed. No sensitive species or sensitive habitat is found on the site, which is enclosed by chain link fencing on all sides.

The Commission ~~staff~~ believes the ~~proposed~~ redundancy infrastructure is necessary and warranted in the near term and critical to avoiding potential water quality problems, and notes

¹ In terms of other new development proposed, the project includes installation of a new biosolids concrete slab and improvements to the headworks facility building.

² Violations of the Coastal Act exist on the subject property including, but not limited to a) installation of a new chlorine contact chamber, including a new concrete basin tank and pump station completed in 2004; b) installation of a replacement floodwall and new flood gates to protect the headworks building completed in 2006; c) installation of a new dewatered sludge conveyor system completed in 2014; and d) installation of a new grit removal system completed in 2016. Approval of this application pursuant to the staff recommendation, issuance of the permit, and the Applicant’s subsequent compliance with all terms and conditions of the permit will result in resolution of the above described violations.

that it is also anticipated by the RWQCB. The other new proposed development and ATF development is minor and provides needed improvements to ensure a functioning facility and one that helps to protect human health and the environment and prevent sewage spills due to aging infrastructure. Finally, the flood-proofing work ensures certain critical components are above the 100-year flood elevation. These are all appropriate approvals in the near-term.

However, the Commission staff believes adding new infrastructure to the site in the long term would be inappropriate and inconsistent with Coastal Act Section 30253, which requires new development to minimize risk to life and property from flooding. This project does not minimize risk, but substantially adds risk by placing new infrastructure in a high flood hazard area. Staff, including the Commission's senior coastal engineer and sea level rise team, has concluded (based on an analysis of submitted reports) that the WWTP is already impacted by flooding and that flooding impacts to the WWTP are likely to become even more frequent in the future at this location. The site is in a low-lying location, located between Arroyo Grande Creek, the Meadow Creek Lagoon complex and the Pacific Ocean. A range of flooding events has occurred in this area in the past, some of which have impacted the District's WWTP (including a major event in 2010). These flooding events are more likely to occur in the future because of changes in climate.

Thus, in order to find consistency with Section 30253, the Commission approves a staff is recommending a limited ten 30-year temporary authorization, with two 10-year Executive Director reevaluation requirements (see below), to both address shorter-term water quality and flood-proofing issues that require immediate attention, but also require a thorough evaluation of a long-term relocation option, to ensure minimized risk occurs in the long term. To better understand flooding and sea level rise impacts over time and to inform the 10-year reevaluations over the life as part of the ten 30-year authorization provided here, the District is required to submit a Coastal Hazards Monitoring Plan within six months of approval (i.e., by November 10, 2017). In addition, the District is required to submit a Life Expectancy Analysis within two years (i.e., by May 10, 2019) in order to provide information on the expected costs of maintaining and upgrading the existing plant over time relative to the life expectancy of individual components and the plant as a whole. Finally, the District is also would be required to submit a Coastal Hazards Response Plan within five years (i.e., by May 10, 2022) to expand on prior work done by the District to study alternative site locations and feasibility issues and costs related to eventual total plant relocation.³

To ensure that the District makes adequate progress towards meeting the terms and conditions of this approval, including with respect to the aforementioned plans and analyses, the Executive Director is tasked with verifying that significant and diligent progress has been made on meeting the terms and conditions of this approval, with formal evaluations at 10-year intervals (i.e., May 10, 2027 and May 10, 2037). If the Executive Director is satisfied with the progress made towards such compliance at these intervals, then the authorization will continue. If the Executive Director is not satisfied with the progress, then the matter will be brought to the Commission for

³ The District has provided a preliminary analysis of three alternative locations and some preliminary information on projected relocation costs.

consideration and potential action, which may include, but not be limited to, changes to the CDP authorization duration.

Additional conditions, including final plans, a construction plan, visual conditions to ensure new infrastructure is less visible from Highway 1, and an indemnity provision, all combine to result in an approvable project at this location for the specified term (ten years), consistent with the Coastal Act.

Therefore, as conditioned, the Commission-approved project is consistent with the Coastal Act, and staff recommends **approval** of the CDP. ~~The motion is found on page 5 below.~~

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EXHIBITS

Exhibit 1 – Project Location Maps

Exhibit 2 – Project Site Photos

Exhibit 3 – Project Site Plan, dated March 2017

Exhibit 4 – San Luis Obispo County LCP Flood Hazard Map

Exhibit 5 – 2015 Preliminary FEMA FIRM Map

Exhibit 6 – San Luis Obispo County Applicable LCP Hazard Policies

Exhibit 7 – Kennedy/Jenks Technical Memorandum, dated September 6, 2016

Exhibit 8 – MKN Technical Memorandum, dated September 9, 2016

Exhibit 9 – View of WWTP from Highway 1

CORRESPONDENCE

I. MOTION AND RESOLUTION

Staff recommends a **YES** vote on the motion below. Passage of this motion will result in adoption of revised findings as set forth in this report. The motion requires a majority vote of the members of the prevailing side present at the revised findings hearing, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings. The Commissioners eligible to vote are Commissioners Bochco, Brownsey, Cox, Groom, Howell, Luévano, Peskin, Shallenberger, Sundberg, Turnbull-Sanders, Uranga, and Vargas.

***Motion:** I move that the Commission adopt the revised findings in support of the Commission's action on May 10, 2017 approving Coastal Development Permit Number 3-16-0233, and I recommend a yes vote.*

***Resolution:** The Commission hereby adopts the revised findings set forth below for Coastal Development Permit Number 3-16-0233 on the grounds that the findings support the Commission's decision made on May 10, 2017, and accurately reflect the reasons for it.*

~~Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.~~

~~***Motion:** I move that the Commission **approve** Coastal Development Permit Number 3-16-0233 pursuant to the staff recommendation, and I recommend a yes vote.*~~

~~***Resolution to Approve CDP:** The Commission hereby approves Coastal Development Permit Number 3-16-0233 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*~~

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

- 1. Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Approved Project.** This CDP authorizes: installation of South San Luis Obispo County Sanitation District (SSLOCSO) redundancy equipment and other related development, including flood-proofing, some of which is being authorized after the fact, all as described and shown on the plans titled “Site Plan – Proposed Development” prepared by Kennedy/Jenks Consultants dated March 2017 and dated received in the Central Coast District Office on March 22, 2017 (see **Exhibit 3**).

By acceptance of this CDP, the Permittee acknowledges and agrees that the intent of this approval is an interim, and thus temporary, authorization for the Approved Project in order to allow for the continued operation and function of the SSLOCSO wastewater treatment plant (WWTP) in the shorter term, including to protect water quality and public health, while simultaneously allowing time to plan and consider alternatives for future WWTP relocation away from coastal hazard risks in the longer term. Thus, this approval represents the appropriate amount and duration of development at this time, but which necessarily requires planning for long-term adaptation to coastal hazard risks, including future WWTP relocation, while also providing for continued function and operation of the WWTP in the short term. This approval additionally recognizes limited additional measures to ensure continuing function of the WWTP in the shorter term as may be necessary, including measures to address flooding and other coastal hazards (including as these hazards may be exacerbated by sea level rise) upon determination by the Executive Director that the limited additional measures fall within the scope of authorized development of this CDP or do not require a CDP amendment.

Any such additional measures shall be the minimum necessary to abate the identified problem, and only be allowed if they are required to ensure the continuous operation of the WWTP to protect water quality and public health, and shall be removed and the affected area

restored to its pre-construction state or better upon WWTP relocation or expiration of this CDP. By acceptance of this CDP, the Permittee agrees to waive any rights that it may have under Coastal Act section 30235, the County's LCP, or other applicable laws, to shoreline protection to protect the development authorized by this permit.

- 2. Duration of Authorization.** The Approved Project identified in Special Condition 1 is authorized for ~~ten~~ 30 years from the date of approval (i.e., through May 10, ~~2047~~ 2027, the expiration date of this CDP). By acceptance of this CDP, the Permittee acknowledges and agrees that the project authorized pursuant to this CDP is thus interim and temporary, and is permitted for the time frame identified in order to provide a reasonable period of time for the Permittee to plan, develop, consider, and implement a long-term solution to address flooding and related coastal hazard threats to the SSLOCSD WWTP, and to address coastal resource impacts associated with maintaining the WWTP at this location (e.g., impacts associated with any coastal hazards protection measures, including potentially lagoon management or creek levee maintenance or expansion to protect the existing WWTP from coastal hazards risk, etc.). The long-term solution must include evaluation of the eventual relocation of the plant to an area that is safe from these and other coastal hazards, and to an area that does not require protective devices or substantial alterations of rivers and streams, including lagoon breaching and other lagoon management.

In early 2027 and early 2037 (and in no event later than May 10, 2027 and May 10, 2037, respectively) the Permittee shall request a determination from the Executive Director about whether significant and diligent progress has been made on meeting the terms and conditions of this CDP. At that time, the Permittee shall submit to the Executive Director documentation specified in the CDP that the Permittee or the Executive Director deems necessary or appropriate to evaluate and demonstrate compliance in this regard. If the Executive Director is satisfied with the progress made towards such compliance at these intervals, then the Executive Director shall notify the Permittee of this determination, and the authorization will continue. If the Executive Director reasonably concludes that the Permittee is not making significant and diligent progress with respect to the terms and conditions of this CDP, then the Executive Director shall notify the Permittee of this determination, and the matter will be brought to the Commission for consideration and potential action, which may include but not be limited to changes to the CDP authorization duration.

The Permittee also acknowledges and agrees that it shall remove the approved development in its entirety and restore the affected areas to their pre-development condition or better within one year of the expiration date of this CDP or submit a complete (i.e., including all necessary information identified by Commission staff as required for filing purposes) CDP amendment request to the Commission prior to the expiration date of this CDP (i.e., before May 10, ~~2047~~ 2027) to extend the expiration date of this CDP as necessary to retain the approved development in its current location as part of that request. Any CDP amendment that includes retention of the approved development in its current location may not be approved without a showing of significant and diligent action taken in furtherance of the proposals recommended in the approved Coastal Hazards Response Plan (see **Special Condition 6**), and not just reliance on an expectation of long-term operation of the WWTP at the present location.

- 3. Redundancy Project Plans.** PRIOR TO ISSUANCE OF THE CDP, the Permittee shall submit two full-scale sets of Redundancy Project Plans to the Executive Director for review and approval. The Redundancy Project Plans shall be substantially in conformance with the overall site plan submitted to the Coastal Commission, dated March 2017 by Kennedy/Jencks Consultants and received in the Coastal Commission's Central Coast District office on March 22, 2017. The Redundancy Project Plans shall include site plans, elevations, grading plans, drainage plans, and plans showing how all new and after-the-fact infrastructure (tanks, buildings, equipment, etc.), and all other WWTP components if possible (e.g., such as the white "digester" tanks), that will be (or is) visible from Highway 1 will be painted or stained green or an earth-tone color to minimize visibility from Highway 1 and to blend into its surroundings. The Permittee shall undertake development in accordance with the approved Redundancy Project Plans. Minor adjustments to the approved Redundancy Project Plans may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.
- 4. Coastal Hazards Monitoring Plan.** WITHIN SIX MONTHS OF THE DATE OF THE APPROVAL OF THIS CDP (i.e., no later than November 10, 2017), the Permittee shall submit two copies of a Coastal Hazards Monitoring Plan to the Executive Director for review and approval. The Monitoring Plan shall establish the framework and parameters for: (1) regularly monitoring flood and other coastal hazards at the site and management responses to those hazards both on and off-site (e.g., lagoon management, levee expansion, etc.); (2) identifying how those hazards are impacting and affecting the operations of the wastewater treatment plant; (3) identifying changes necessary to allow continued appropriate and required functioning of the plant; and (4) identifying flood/hazard 'triggers' to establish when actions (such as retrofits, upgrades, and including plant relocation) need to be pursued in response to specific flood/hazard events or flood management activities. At a minimum, the Monitoring Plan shall include metrics for assessing site conditions and potential responses related to flooding of the site from Arroyo Grande Creek as it may be influenced by coastal flooding and sea level rise during both typical and extreme storm events, including in relation to emergency effluent discharge, violations of effluent discharge limits, emergency response measures (e.g., lagoon management, levee expansion, etc.), use of redundancy equipment, flood-required repairs, incidents where prior flood-proofing failed, and other appropriate evaluation metrics. Upon Executive Director approval of the Monitoring Plan, the Permittee shall implement the monitoring and other measures identified in the Plan, and shall submit monitoring reports as established in the Plan at least annually for Executive Director review and approval, with the first monitoring report due by no later than May 10, 2019. Each such report shall include and describe changes since the prior year's report, as well as cumulatively describing changes over time. Extension to the six-month deadline for submittal of the Coastal Hazards Monitoring Plan may be granted by the Executive Director for good cause.
- 5. Life Expectancy Analysis.** WITHIN TWO YEARS OF THE DATE OF THE APPROVAL OF THIS CDP (i.e., no later than May 10, 2019), the Permittee shall submit two copies of a Life Expectancy Analysis to the Executive Director for review and approval. The Analysis shall include an evaluation of the annual and long-term costs of maintaining the existing plant at its current location (including repairing/maintaining and replacing existing components, upgrading existing components to meet regulatory (RWQCB or other)

requirements/specifications, and responding to coastal hazards risk (including flood-proofing existing and new components over time (including in relation to offsite flood-proofing mechanisms such as lagoon management and expansion of the Arroyo Grande Creek Levee), etc.). The primary purpose of such Analysis is to help determine when the plant cannot function without substantial investment in new infrastructure and protective measures, all serving to help define the point at a future date when it might be appropriate to relocate the existing WWTP.

The Analysis shall, at a minimum, include information on each component at the WWTP (e.g., headworks, clarifiers, digesters, etc.), the installation date of each component, upgraded component dates and the current condition of that equipment, major upgrade events, the expected lifespan and repair/maintenance and replacement costs of each component based on industry accepted sources, manufacturers' information, and the reports of other municipalities with similarly sized facilities, and remaining years for each component and the overall WWTP. The Analysis shall include costs of anticipated habitat mitigation requirements for impacts from potential flood control projects, and conclusions must be included regarding the expected point in time when investments in infrastructure (included continued flood protection measures) at the current plant location outweigh investing in a relocated plant at a location that is safe from flooding and other coastal hazards. All conclusions shall be supported by clear supporting documentation and evidence. Extension to the two-year deadline for submittal of the Life Expectancy Analysis may be granted by the Executive Director for good cause.

- 6. Coastal Hazards Response Plan.** WITHIN FIVE YEARS OF THE DATE OF THE APPROVAL OF THIS CDP (i.e., no later than May 10, 2022), the Permittee shall submit two copies of a Coastal Hazards Response Plan to the Executive Director for review and approval. The Response Plan shall build upon the work completed to date as described in the document titled "Technical Memorandum" (by MKN dated September 9, 2016 and received in the Central Coast District Office on September 12, 2016 – see **Exhibit 8**), all of which shall be expanded to build upon the provisions of the approved Coastal Hazards Monitoring Plan (**Special Condition 4**) and the Life Expectancy Analysis (**Special Condition 5**), to provide a clear long-term plan for addressing flooding and other coastal hazards as well as coastal resource impacts at the WWTP over the long-term. The Response Plan shall, at a minimum, include a detailed cost-benefit analysis comparing the costs and benefits of maintaining the plant at the present location (via **Special Condition 5** above) versus relocating the plant to an area safe from flooding and other coastal hazards at defined times (e.g., 2027, 2037, 2047, etc.) or in response to defined triggers (e.g., as identified in the approved Coastal Hazards Monitoring Plan (**Special Condition 4**)). Expected costs of purchasing land for a relocated plant must be included, as must expected costs to decommission the existing plant and to restore the site to its natural state, and costs to upgrade the plant (including a relocated plant) to full tertiary treatment (or better) and water recycling (including addressing the potential for joint satellite facilities and/or collaborations with nearby communities for water recycling). Any costs associated with new pumps or lift stations necessary (including rerouting of sewer pipes to the relocated plant, etc.) shall also be included. The Response Plan shall include a timeline of potential major relocation events, including expected timeframes for land acquisition, planning, permitting, design, construction and eventual operation, of a relocated plant. Extension to the five-year deadline

for submittal of the Coastal Hazards Response Plan may be granted by the Executive Director for good cause.

7. **Construction Plan.** PRIOR TO ISSUANCE OF THE CDP, the Permittee shall submit two sets of a Construction Plan to the Executive Director for review and approval. The Construction Plan shall, at a minimum, include the following:
- (a) **Construction Areas.** The Construction Plan shall identify the specific location of all construction areas, all staging areas, all storage areas, and all construction access corridors (to the construction site and staging areas). All such areas within which construction activities and/or staging are to take place shall be minimized in order to have the least impact on public views and other coastal resources.
 - (b) **Construction Methods and Timing.** The Construction Plan shall specify the construction methods to be used, including all methods to be used to keep the construction areas separated from adjacent sensitive habitats, including all methods to be used to protect adjacent waterbodies, such as Meadow Creek, Arroyo Grande Creek and the Pacific Ocean. All erosion control/water quality best management practices to be implemented during construction and their location shall be noted. These measures shall be designed to prevent erosion, sedimentation, and the discharge of pollutants during construction to the maximum degree feasible, and shall be selected and designed in accordance with the California Storm Water Best Management Practices Handbook.
 - (c) **Construction Requirements.** The Construction Plan shall include the following construction requirements specified by written notes on the Construction Plan. Minor adjustments to the following construction requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.
 - All work shall take place during daylight hours (i.e., from one hour before sunrise to one hour after sunset). Nighttime work and lighting of the work area are prohibited.
 - Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.
 - Any equipment washing, servicing, and refueling activities on the site shall be located at least 50 feet from the perimeter fence, and shall only be allowed at designated locations as noted on the Plan. Appropriate best management practices shall be used to ensure that no spills of petroleum products or other chemicals take place during these activities.
 - The construction site shall maintain good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain, including covering exposed piles of soil and wastes; dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the site; etc.).

- All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday. At a minimum, silt fences, or equivalent apparatus, shall be installed at the perimeter of the construction site to prevent construction-related runoff and/or sediment from entering into adjacent riparian areas and wetlands.
- The Permittee shall notify planning staff of the Coastal Commission's Central Coast District Office at least three working days in advance of commencement of construction or maintenance activities, and immediately upon completion of construction or maintenance activities.

All requirements above and all requirements of the approved Construction Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with this condition and the approved Construction Plan. Minor adjustments to the above construction requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

8. Construction Site Documents & Construction Coordinator. DURING ALL CONSTRUCTION:

(a) Construction Site Documents. Copies of the signed CDP and the approved Construction Plan shall be maintained in a conspicuous location at the construction job site at all times, and such copies shall be available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the CDP and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.

(b) Construction Coordinator. A construction coordinator shall be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and the coordinator's contact information (i.e., address, phone numbers, email address, etc.) including, at a minimum, a telephone number and email address that will be made available 24 hours a day for the duration of construction, shall be conspicuously posted at the job site where such contact information is readily visible from public viewing areas while still protecting public views as much as possible, along with an indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the contact information (name, address, email, phone number, etc.) and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

9. Public View Camouflage Verification. IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION OF THE APPROVED PROJECT, the Permittee shall submit photographic and any other appropriate evidence demonstrating that all new and after-the-fact infrastructure (tanks, buildings, equipment, etc.) and all other WWTP components if possible (e.g., such as the white "digester" tanks) that will be (or are) visible from Highway 1

has been painted or stained green or an earth-tone color as directed by **Special Condition 3** above.

10. Assumption of Risk, Waiver of Liability, and Indemnity Agreement. By acceptance of this CDP, the Permittee acknowledges and agrees on behalf of itself and all successors and assigns:

- (a) **Coastal Hazards.** That the site is subject to extreme coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunamis, coastal flooding, landslides, bluff and geologic instability, and the interaction of same;
- (b) **Assume Risks.** To assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development;
- (c) **Waive Liability.** To unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards;
- (d) **Indemnification.** To indemnify and hold harmless the Coastal Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; and,
- (e) **Property Owner Responsible.** That any adverse effects to property caused by the permitted project shall be fully the responsibility of the property owner.

11. Indemnification by Permittee/Liability for Costs and Attorneys' Fees. By acceptance of this CDP, the Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys' fees (including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys' fees that the Coastal Commission may be required by a court to pay) that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this CDP. The Coastal Commission retains complete authority to conduct and direct the Commission's defense of any such action against the Coastal Commission.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION, BACKGROUND, AND DESCRIPTION,

Project Location and Background

The proposed project site is at the South San Luis Obispo County Sanitation District's (District's) Wastewater Treatment Plant (WWTP), which is located at 1600 Aloha Place in the unincorporated community of Oceano, in southern San Luis Obispo County. The WWTP is

located on a 10.84-acre parcel just south of and adjacent to the Oceano County Airport and just north of Arroyo Grande Creek and its associated levee (see **Exhibit 1** for location maps and aerials). The surrounding area between the ocean and Highway 1 to the northeast is comprised of residential and industrial development, and visitor serving facilities. This area of Oceano is within the Commission's original (retained) permitting jurisdiction in a low-lying area (between 11 and 14 feet NAVD)⁴ near to the coast (i.e., about 1,200 feet inland of the beach).

The WWTP also sits at the confluence of Arroyo Grande Creek and the Meadow Creek Lagoon complex, which form a series of lagoons near the beach to the west of the site. Because of its location, the site currently experiences flooding events from primarily winter storms that produce flows that swell these nearby adjacent waterbodies. For this reason, and specifically due to the presence of Arroyo Grande Creek, the site is located wholly within the County's Flood Hazard (FH) zone. Oceano Dunes State Vehicular Recreation Area (ODSVRA) is located immediately to the southwest of the WWTP on the other side of Arroyo Grande Creek.

The WWTP was originally designed and built in the mid 1960's with an original flow capacity of 2.5 million gallons per day (mgd). Today the WWTP, which serves the communities of Oceano, Arroyo Grande, and the City of Grover Beach, has an overall flow capacity of 5.0 mgd,⁵ provides secondary treatment, and discharges into the Pacific Ocean via an ocean outfall west of the plant. The Commission has issued permits and waivers in the past for upgrades, new components, and improvements to the facility.⁶

Project Description

The primary reason for the proposed project is to provide redundancy or backup infrastructure⁷ to the WWTP so that major wastewater facility components can periodically be removed from service for routine maintenance or repairs, or be shut down in case of mechanical failure or emergency, while maintaining operation of the WWTP and without risking violation of Regional Water Quality Control Board (RWQCB) effluent permit limits.⁸ The redundancy component of the project has been anticipated for some time by the RWQCB at this site through its Permit Order No. R3-2009-0046 (on file in the Commission's Central Coast District office).

⁴ NAVD refers to the North American Vertical Datum of 1988, a fixed reference for elevations determined by geodetic leveling.

⁵ A plant enlargement in 1986 increased capacity from the original 2.5 mgd to 3.3 mgd (CDP 4-86-129), and further improvements in 1990 increased the capacity to 5.0 mgd through design modifications and RWQCB approval.

⁶ For example, the Commission approved CDPs 152-31, 197-11, 417-34, 4-86-129, 3-02-028, and CDP waivers 3-95-095-W and 3-08-056-W

⁷ In July 2005, Kennedy Jencks Consultants completed a long range plan for the WWTP. The Plan determined that no expansion of capacity or flow is necessary and that the plant meets current discharge requirements. However, a lack of critical backup systems threatens the plant's ability to reliably meet discharge standards at all times, particularly during maintenance and repair operations. The Plan recommended improvements that will provide sufficient redundancy to ensure uninterrupted meeting of current and future wastewater treatment standards under all circumstances.

⁸ The addition of redundancy infrastructure does not add capacity to handle higher flows than currently permitted by the RWQCB (in terms of the volumetric discharges of wastewater), and thus the proposed project does not include an increase in wastewater treatment capacity.

The proposed project includes a number of different components, which will be installed within the existing WWTP site on previously disturbed surfaces.⁹ See **Exhibit 2** for photos of the project site and **Exhibit 3** for the project's site plan.

Redundancy

The proposed redundancy infrastructure includes the following:

- Installation of two new activated sludge aeration basins, one new secondary clarifier, one new fixed film reactor effluent pump station, one new waste activated sludge thickening centrifuge, and modifications to the existing dewatering platform to accommodate the new centrifuge.
- Installation of a new motor control center building, which includes a new blower and electrical equipment.
- Installation of associated development, including yard piping, instrumentation, power and control panels, electrical ducts, and control and power conduits.

Other New Development

The District also proposes to install a new biosolids storage slab adjacent to the existing centrifuge building on the far eastern edge of the WWTP, as well as make minor improvements within the headworks facility building (i.e., replacement of augers with mechanical bar screens, including some electrical panel relocation and bypass piping).

After-the-fact Development

The project also includes after-the-fact (ATF) recognition of development that has previously occurred on the project site without a CDP, including: a) installation of a new chlorine contact chamber, including a new concrete basin and pump station (completed in 2004); b) installation of a floodwall and flood gates to protect the headworks building (completed in 2006); c) installation of a new dewatered sludge conveyor system (completed in 2014)¹⁰; and d) installation of a new grit removal system (completed in 2016).

Flood-Proofing

The project also includes elevation measures to move four existing critical WWTP components above the 100-year flood elevation level. Specifically, existing flood brackets would be raised at the standby power building, the power generation station, and the control building/office; and a new flood barrier would be installed around an existing transformer located northeast of the control building/office.

B. STANDARD OF REVIEW

The proposed project is located within the Commission's retained/original CDP jurisdiction area because it is in an area of historic tidelands that were filled, and thus the standard of review is Chapter 3 of the Coastal Act, with the San Luis Obispo County Local Coastal Program (LCP) policies and standards providing guidance.

⁹ Approximately 90% of the WWTP site is paved and/or built over with structures or equipment; the remaining 10% consists of undeveloped areas consisting of a mix of imported fill soils and disturbed native soils.

¹⁰ The conveyor system will be removed upon completion and operation of the biosolids storage slab (see below).

C. HAZARDS

Coastal Act Section 30253 requires that new development minimize risk to life and property in areas of high flood hazard areas, and ensure long-term structural integrity, and states in relevant part:

Section 30253. New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Coastal Act Section 30253 requires that new development minimize risks to life and property from geologic and coastal hazards, such as flooding. Section 30253 also requires new development to assure stability and structural integrity, to not create or contribute to erosion or geologic instability, and not to rely on protective devices.

The San Luis Obispo County LCP, which acts as guidance for the proposed project, also includes a number of policies and standards designed to minimize risk of new development located in high flood hazard areas, including Hazards Policy 1, which requires that all new development proposed within areas subject to natural hazards from geologic or flood conditions (including beach erosion) be located and designed to minimize risks to human life and property. The LCP also contains a Flood Hazard (FH) combining designation (zone) for areas where new development and associated uses may be subject to potential hazards to life and property from potential inundation by a 100-year flood or for sites located within coastal high hazard areas.¹¹ If new development is to occur in such areas, certain siting, construction, and other requirements apply. For example, LCP Hazard Policy 1 requires that all new development proposed within areas subject to natural hazards from geologic or flood conditions (including beach erosion) shall be located and designed to minimize risks to human life and property. Further, the LCP's Flood Hazard (FH) combining, or overlay, designation (see **Exhibit 4**) maps specific areas of the coastal zone where terrain characteristics present new development and associated uses with potential hazards to life and property from potential inundation by a 100-year frequency flood or from other coastal hazards. In these areas, which include the project site, to comply with the Coastal Act and relevant LCP policies regarding coastal hazards, new development must adhere to certain general hazard avoidance requirements (i.e., it must be located outside of the flood hazard areas to the maximum extent feasible) and, in situations where it is infeasible to site new development outside of the flood hazard area, must be constructed to certain construction standards, pursuant to LCP Coastal Zone Land Use Ordinance (CZLUO) Section 23.07.066 (see

¹¹ The areas of special flood hazard are identified by the Federal Insurance Administration, through the Federal Emergency Management Agency, in a scientific and engineering report entitled "The Flood Insurance Study for San Luis Obispo County," dated July 18, 1985, with accompanying flood insurance rate maps and flood area boundary maps, as they may be subsequently revised from time to time. The flood insurance study is on file in the County's Public Works office.

Exhibit 6 for the full construction standards required per Section 23.07.066 and all other relevant LCP policies and standards related to hazards).

Analysis

Coastal Act Section 30253 requires that new development minimize risks to life and property from geologic and coastal hazards, such as flooding. Section 30253 also requires new development to assure stability and structural integrity, and that it neither create nor contribute to erosion or geologic instability nor rely on protective devices. As stated above, the proposed project is located wholly within the Commission's original jurisdiction, which consists of an area of low-lying former tidelands, and is within the County's Flood Hazard (FH) zone due to the presence of a number of creeks and lagoons in the immediate vicinity of the WWTP. In addition, the project site is located about 1,200 feet inland from the beach.

The Applicant submitted a sea level rise analysis (SLR analysis) prepared by ESA, dated August 3, 2016, to evaluate the existing and future exposure of the WWTP to flooding. The ESA report indicates that the WWTP (and other development in this area) is subject to flooding in three main ways: 1) existing and future coastal flooding and erosion impacts associated with wave overtopping of the Arroyo Grande Creek levee and into the Meadow Creek Lagoon complex; 2) fluvial flooding on Arroyo Grande Creek, associated with extreme rainfall-runoff events, which overtops the levee; and 3) estuarine flooding caused by elevated water levels in Meadow Creek Lagoon, and associated with moderate fluvial flows in combination with a closed and elevated Arroyo Grande Creek Lagoon. According to the SLR analysis, the primary flood mechanism that will increase due to climate change will be the estuarine flood.

A major flooding event in the area occurred in December 2010, and primarily resulted from estuarine flooding (i.e., high water levels in Arroyo Grande Lagoon blocked drainage through a tide gate (between Arroyo Grande and the Meadow Creek Lagoon complex) and backed up water levels into the Meadow Creek Lagoon complex). The peak water level at that time was reported by the County and the District to be 12.3 feet NAVD. Floodwaters at that time flooded several low-lying residences in the area as well as the main access entrance¹² to the WWTP and also damaged the electrical system that powers the pumps, which resulted in a wastewater spill and operational failures. It should be noted that the County's flood threshold to implement measures to protect adjacent residential development in the area and the WWTP's main access point is 10.4 feet NAVD. Due to a limited record regarding flood events, this 2010 flood level was used as the "maximum" flood level in the modeling analysis for future flood conditions, as described in more detail below.

Current Site Characteristics

From the Applicant's SLR analysis, the WWTP ground elevations (excluding the access road), range from approximately 11 feet NAVD to over 14 feet NAVD, with most of the site located between 12 and 13 feet NAVD (see page 3 of **Exhibit 7** for topographic site elevations). The current FEMA Flood Insurance Rate Map (FIRM) for this area indicates that the 100-year Base Flood Elevation (BFE) at the WWTP site is approximately 2.5 feet *above* the existing ground

¹² The WWTP's main access entrance is at the intersection of Aloha Place and Honolulu Avenue at the northwest corner of the site. A secondary access point is located near the existing centrifuge building at the far southeastern end of the site. This secondary access is at elevation 13 feet NAVD.

elevations, but generally ranges from between 14 and 16 feet, or approximately 15 feet over the whole of the site (see **Exhibit 5**). Thus, the WWTP is currently vulnerable to extreme events, such as a large storm with a 100-year return period, as well as events comparable to the December 2010 flood.

However, the existing WWTP does include flood protection designed to ensure certain components, especially “critical” components,¹³ are protected during flood events (including through the use of flood brackets, floodwalls, floodgates, barriers, etc.). Per CZLUO Section 23.07.066, all non-residential development in the FH zone must be flood-proofed to a minimum of one-foot above the 100-year storm flood profile level. The Applicant has also provided a technical memorandum, by Kennedy/Jenks Consultants, dated September 7, 2016 and received on September 12, 2016 (and which uses data from the above SLR analysis), which identifies elevations of existing components on site. Based on the technical memorandum, the lowest elevation of existing flood protection for any component on the site is 12.8 feet¹⁴ (see **Exhibit 7** for a full list of WWTP components and their corresponding elevations).¹⁵ Commission staff’s understanding is that certain existing facilities were installed with flood proofing measures as part of an improvement project in 1979 and that further flood protection measures were added more recently: some in 2006 (i.e., raising the flood protection wall height around the headworks and pumping plant, and installing heavy-duty floodgates),¹⁶ and some soon after the 2010 flood event.¹⁷

Future Site Characteristics

The WWTP site will experience more frequent and more intense flooding episodes in the future due to expected sea level rise (SLR) and associated flooding of Arroyo Grande Creek and its lagoon and the Meadow Creek Lagoon complex. These episodes will be as a result of coastal flooding, fluvial flooding, or estuarine flooding, as described in the above section, with the estuarine flooding being the primary risk.

¹³ Critical components are those components of the WWTP that must remain functioning at all times in order to continue to provide service without potentially causing unintended effluent discharges.

¹⁴ This is the transformer, which is one of four critical components of to be protected above the 100-year BFE as part of this project. The existing flood protection elevation of the standby power building is 13.81 and the centrifuge includes flood protection to 17.75 feet. The standby power building is proposed as part of this project to be raised from 13.81 to 15.75 feet NAVD, one-foot above (freeboard) the 100-year BFE.

¹⁵ The Applicant’s SLR analysis states that “critical facilities have been protected with flood barriers and gates to elevation 14.4 feet NAVD. This statement from the SLR analysis is based on “personal communication with a former plant superintendent (John Clemmons).”

¹⁶ This development project is one of the four ATF components of the proposed project requested by the District to be recognized as part of this project.

¹⁷ For example, Gerhardt Hubner, District Manager, has stated (in an email dated April, 11, 2017) that silt gates were installed around certain building/areas prior to the 2010 event, which are designed to prevent debris or mud from entering a critical piece of equipment or room. In addition, after 2010, the WWTP relocated electrical wires/wiring to eliminate vulnerability, constructed a v-ditch in front of the standby generator area to divert stormwater (one area that had standing water in 2010 event), and routinely runs and checks the bypass pump at the headworks and other pumps for functionality.

The SLR analysis uses the Commission’s recently adopted Sea Level Rise Policy Guidance document (2015), which recommends using scenarios that represent a range of possible sea level rise amounts that may result from climate change and focuses specifically on the medium and high SLR projections.¹⁸ As stated above, because there is limited data on extreme flooding events for the site, the SLR analysis used the 2010 flood event (that peaked at 12.3 feet NAVD) as the “maximum” flood event in the modelling simulations. Based on this analysis, for the year 2050, the maximum flood elevation is expected to range from 12.7 to 13.2 feet NAVD, for medium and high sea level rise projections, respectively. For the year 2100, the maximum flood elevation is expected to be 13.9 to 15.6 feet NAVD, for medium and high projections, respectively. To reiterate, current flood thresholds related to the WWTP are as follows: 10.4 feet NAVD for the WWTP’s main access point and adjacent residential development in the area; 12.3 feet NAVD represents the peak flood elevation reached by the 2010 flood event; and 12.8 feet NAVD represents the lowest critical component currently flood proofed to. Thus, by 2050, the maximum flood elevation will be above the 2010 peak flood elevation and well above the flooding threshold of the WWTP’s main access point.

To better understand how the site and WWTP infrastructure may be impacted in the future, the Applicant’s SLR analysis identifies how often flooding events may occur on the site in the future. Due to the limited flood record, the analysis could not evaluate the return periods of extreme events with sufficient confidence. Instead, the analysis uses a semi-quantitative method that identifies generalized event frequencies (as defined below) to describe how often a given water level would occur at the WWTP. Event frequencies are described as follows where the “% exceedance” refers to the percentage of time that the water level (or flood event) would be greater than a certain elevation:

- **Rare (extreme) water levels:** less than 1% exceedance, expected to have a 10-year return period or greater and occur during a relatively large storm.
- **Nuisance water levels:** between 1% and 10% exceedance, expected to have approximately a 1-year return period.
- **Typical water levels:** greater than 10% exceedance, expected to be representative of typical conditions and daily water levels.¹⁹

The current frequency of a flood that is comparable to the 2010 event benchmark of 12 feet NAVD at the site is defined as rare (specifically, a less than 0.01% exceedance value), as is the flooding frequency for the County’s threshold for residences and WWTP main access at 10.4

¹⁸ Sea level rise projections are typically presented in ranges due to several sources of uncertainty regarding future greenhouse gas emissions and the physical responses of earth systems (such as ice sheet loss) to climate change. Here, the range in SLR projections for both 2050 and 2100 represent possible sea level rise based on two specific scenarios of future greenhouse gas emissions (so four scenarios total). The high SLR projection relates to the high emissions scenario which assumes continued fossil-fuel intensive energy use, along with population growth that peaks mid-century, high economic growth, and development of more efficient technologies. The medium scenario assumes the same population, economic, and technological growth as the high scenario, but also assumes that energy would be derived from a balance of sources, thereby reducing greenhouse gas emissions.

¹⁹ These terms are defined relative to existing site grades at the WWTP and the associated potential flood consequences.

feet NAVD (a 0.2% exceedance value). Based on the SLR analysis for the project that includes the proposed flood protection, the risk that the WWTP infrastructure would be flooded by a somewhat large storm (such as a storm with a 10-year return period) is reduced to almost zero in the short term.

In the future, the Applicant's analysis concludes that by 2050 (33 years from now), under the "high" SLR scenario (24 inches of SLR), adjacent residential areas and the WWTP's two access points would be routinely flooded by "typical" water levels, even though the WWTP itself may still be safe from relatively large storms (those with a 10-year return period) due to its existing and proposed flood protection measures. By 2100 (83 years from now), however, under the "high" SLR scenario (66 inches of SLR), adjacent residential areas and the WWTP's two access points would again be routinely flooded, and the WWTP itself would see "nuisance" flooding from even moderate-size storms, such as those with an annual (or even more common) return period.

Thus, based on the Applicant's analysis, the WWTP site and several of the existing buildings and critical facilities are currently at elevations where they may be subject to rare flooding currently, and flooding could increase in frequency with rising sea level. The elevation of some of the WWTP components (and as part of this project, four critical facilities at the WWTP are to be elevated at least up to 15.75 feet NAVD) will avoid or minimize flood impacts from somewhat large storms (those with a 10-year return period) for current conditions and as influenced by SLR until approximately 2070 (53 years from now) under the high SLR scenario.

However, the existing access to the WWTP is at a low elevation and it is likely to be regularly impacted by 2050.²⁰ Also, the 12-foot NAVD flood thresholds, based on the 2010 event, will continue to be exceeded somewhat *rarely* by 2050, but by the end of the century will be exceeded on a *typical* basis. The secondary access point will be relied on more heavily as the main access point is routinely flooded; however, at 13 feet NAVD, this access will also be flooded (albeit rarely) by 2050, and routinely flooded earlier than the WWTP itself. Importantly, in addition to increasing flood risk from the smaller events (10-year return periods or less) included in the SLR analysis, the site would also be expected to flood from more extreme events, such as a 100-year event, which were not explicitly included in the SLR analysis.

Preliminary Inconsistency with 30253

Even though the frequency of flooding of the WWTP itself is not expected to be significant for several decades, adding any new development to a low-lying flood prone area, particularly for critical infrastructure like redundancy or backup infrastructure (within the County's FH zone) does not minimize risk to life and property, as required by the first part of Coastal Act Section 30253. In fact, adding any new development, especially development that adds significant infrastructure and investment to the site (including in terms of size, scope, and cost, etc.) actually *increases* risk to life and property at an already inherently risky location. The WWTP also *currently* suffers from periodic flooding events, and is only able to function adequately and safely at this location because of its existing flood protection measures. Thus, the long-term

²⁰ The typical water levels in the Meadow Creek Lagoon will be greater than 10 feet NAVD by 2050, and greater than 12 feet NAVD by 2100. Changes in the typical water levels represent permanent inundation and imply that land use changes will need to be implemented.

allowance of the development approved here would be inconsistent with 30253 on the basis that it does not minimize risk to life and property.

Consistency with 30253 as Conditioned

While it would be inconsistent with the Coastal Act and the Commission's Sea Level Rise guidance to approve critical infrastructure in a location that is subject to the above-described SLR and flooding hazards, the proposed project is ancillary to existing critical infrastructure and is needed to ensure the existing development operates safely, even in the short term. This is because the WWTP would be without redundancy, or backup, infrastructure that are critically needed so that major wastewater facility components can periodically be removed from service for routine maintenance and repairs, or be shut down in case of mechanical failure or emergency, while maintaining operation of the WWTP. And specifically, the flood-proofing (i.e., "elevation") components of the proposed project are necessary to prevent recurrence of a wastewater spill in case of flooding of magnitude such as the one that occurred in 2010 and to ensure compliance with the RWQCB's effluent permit limits. Thus, the proposed project is necessary to ensure proper functioning of the WWTP to current standards and measures at this time, when the flooding risks discussed above are not yet significant. In addition, the proposed project has been anticipated by the RWQCB at this site through its Permit Order No. R3-2009-0046. Furthermore, the RWQCB strongly supports this project because the upgrades will presently protect human health and the environment and prevent sewage spills due to aging infrastructure.

The Commission concurs that the project is needed in the *immediate* term. However, adding new permanent infrastructure to the site is inappropriate and inconsistent with Section 30253(a) of the Coastal Act over the long term, given the conclusions based on the technical review of projected SLR and future flooding data for this site, as described above. As mentioned, the site is in a low-lying location (former tidelands that have been filled), located between the Arroyo Grande Creek and Lagoon to the south and Meadow Creek and Lagoon to the north, and the Pacific Ocean to the west. Flooding events have occurred in this area in the past which have impacted the WWTP, including a major flooding event in 2010 that resulted in a wastewater spill. The Commission's senior engineer, Dr. Lesley Ewing, has concluded that without efforts to elevate or flood proof portions of the WWTP, site flooding and resultant damage to the facilities is likely to occur more frequently at the WWTP in the future with more serious consequences due to changes in climate and associated sea level rise.

Coastal Act Section 30253 requires the project to minimize future risk, assure long-term stability and structural integrity, and not require protective measures in the future that would substantially alter natural landforms along bluffs and cliffs. For the proposed project, the main concern under Section 30253 of the Coastal Act is minimizing risk to life and property. This is particularly critical given the dynamic estuarine and coastal environment within which the proposed project would be surrounded. The Commission finds that the approval of the proposed redundancy system, other minor development to improve the functioning of the facility, ATF recognition of previous work done on site, and flood-proofing improvements, are appropriate *interim* measures to provide continuing wastewater services to the Oceano community while the District explores long-term solutions for the WWTP given future increased flooding scenarios, including options

for future relocation of the entire WWTP.²¹ The Commission believes that a 30-year authorization, with 10-year Executive Director progress evaluation requirements (see below), is appropriate in this case given the issues facing this wastewater treatment plant. In addition, a 30-year authorization will also help the District in its efforts to secure funding for the project.

Thus, **Special Condition 1** authorizes the proposed project on a *temporary* basis to allow for the continued operation and function of the WWTP, including to presently protect water quality and public health, while simultaneously allowing time to plan for future WWTP relocation away from coastal hazard risks when the time is right. **Special Condition 1** also recognizes that limited measures to ensure continuing function of the WWTP may be necessary in the interim, including measures to address flooding and other coastal hazards (including as these hazards may be exacerbated by sea level rise), that they shall be the minimum necessary to abate the identified problem, shall only be allowed if they are required to ensure the continuous operation of the WWTP to protect water quality and public health, and shall be removed and the affected area restored to its pre-construction state upon WWTP relocation or expiration of this CDP.

Special Condition 2 authorizes the project for 30 ~~40~~-years to both address present-term water quality and flood-proofing issues that require immediate attention, and to allow for a thorough evaluation of the relocation option to an area that is safe from flooding and other coastal hazards and does not require protective devices or substantial alterations of rivers and streams. Special Condition 2 also requires 10-year and 20-year Executive Director evaluation requirements to ensure that the District is showing significant progress on meeting the terms and conditions of this approval (see below).

Specifically, to ensure that the District makes adequate progress towards meeting the terms and conditions of this approval, the Executive Director is tasked with verifying that significant and diligent progress has been made on meeting the terms and conditions of this approval, with formal evaluations at 10-year intervals (i.e., May 10, 2027 and May 10, 2037). If the Executive Director is satisfied with the progress made towards such compliance at these intervals, then the authorization will continue. If the Executive Director reasonably believes that adequate progress is not being made toward such compliance at these intervals, as required by the terms and conditions of the CDP, then the matter will be brought to the Commission for consideration and potential action, which may include, but not be limited to, changes to the CDP authorization duration. See **Special Condition 2.**

Special Conditions 4, 5, and 6 are vitally important to assessing progress made towards meeting the terms and conditions of this CDP. In terms of **Special Condition 4**, critical to the task of minimizing risk and ensuring long-term stability, as required by Section 30253, is a formal long-term monitoring program for the WWTP. If the approved project is damaged in the future (e.g.,

²¹ It is worth noting that although expiration of the authorization for the development approved by this CDP may not necessarily require SSLOCSD to remove the portions of the WWTP which are authorized by prior CDPs with continuing validity, as a practical matter continuing future operation of the WWTP may depend on authorization of this CDP and the results of the every-10-year progress evaluation. Or, the District may need to seek a permit amendment for those prior CDPs in order to address future SLR-related flooding hazards (which may not be found consistent with Section 30253(a) of the Coastal Act for substantially the same reasons discussed herein, although that would be evaluated at the time of a future application). Therefore, it is incumbent on the District to consider future relocation of the entire WWTP, and the District should not assume that long-term operation of the WWTP at its present location can necessarily be found Coastal Act consistent.

as a result of flooding), this could lead to potentially serious water quality impacts, similar to that which occurred as a result of the 2010 flooding event. Such damages could adversely affect nearby beaches resulting from sewage spills and/or create a health hazard to the public using the beaches. Thus, in order to ensure that the Applicant and the Commission understand how flooding impacts are affecting the WWTP over time, the Applicant is required to submit a Coastal Hazards Monitoring Plan (**Special Condition 4**) to establish the framework and parameters for: (1) regularly monitoring flood and other coastal hazards at the site and management responses to those hazards both on and off-site (e.g., lagoon management, levee expansion, etc.); (2) identifying how those hazards are impacting and affecting the operations of the WWTP; (3) identifying changes necessary to allow continued appropriate and required functioning of the plant; and (4) identifying flood/hazard ‘triggers’ to establish when WWTP changes (including up to and including plant relocation) need to be pursued in response to specific flood/hazard events or flood management activities.

Further, to ensure that the District and the Commission fully understand the annual and long-term costs of maintaining the existing plant at its current location, **Special Condition 5** requires a Life Expectancy Analysis to be submitted within two years of approval. The primary purpose of such an analysis is to determine when the WWTP cannot function without substantial investment in new infrastructure and protective measures, at which point it might be appropriate to relocate the existing WWTP. The Life Expectancy Analysis shall include information on each component at the WWTP (e.g., headworks, clarifiers, digesters, etc.), the installation date of each component, upgraded component dates and the current condition of that equipment, major upgrade events, the expected lifespan and repair/maintenance and replacement costs of each component based on industry accepted sources, manufacturers’ information, and the reports of other municipalities with similarly sized facilities, and the expected remaining years of use for each component and for the overall WWTP. Conclusions must be included regarding the expected point in time when investments in infrastructure (including continued flood protection measures) at the current WWTP location outweigh investing in a relocated plant at a location that is safe from flooding and other coastal hazards.

Finally, to ensure that the District is planning for a relocated WWTP in order to ensure consistency with Section 30253(a) of the Coastal Act, **Special Condition 6** requires a Coastal Hazards Response Plan to build upon the work completed to date as described in the document titled “*Technical Memorandum, Evaluation of Wastewater Treatment Plant Site Alternatives and Conceptual Costs for CDP Application*” by MKN and dated September 9, 2016 (see **Exhibit 8**), which provides initial information on conceptual costs for a relocated WWTP that meets current effluent requirements and provides a similar level of treatment to the existing facility. This memorandum identified three offsite locations that have at least 12 acres of area, are located outside of the flood hazard designation, and are an allowed use in the applicable land use zone (see page 6 of **Exhibit 8** for the three identified sites).²² The Coastal Hazards Response Plan is intended to also expand upon the required Coastal Hazards Monitoring Plan (**Special Condition 4**) and the Life Expectancy Analysis (**Special Condition 5**) to provide a clear long-term plan for

²² Costs for relocation to any of the three sites range from \$110 million to \$130 million in 2016 dollars, and \$130-\$160 million in 2026 (at anticipated midpoint of construction), but does not include costs for property acquisition, easement acquisition or other categories that cannot be reasonably estimated. The memorandum also anticipates a timeline of seven to 11 years for planning, permitting, design, and construction of such a new facility.

addressing flooding and other coastal hazards as well as coastal resource impacts at the WWTP over the long-term, including total relocation of the WWTP. The Coastal Hazards Response Plan would build upon the costs of maintaining the plant at the present location (via **Special Condition 5**), by requiring an assessment of costs and benefits of relocating the plant to an area safe from flooding and other coastal hazards over time. The analysis would include expected costs of purchasing land for a relocated plant, as well as expected costs to: decommission the existing plant and to restore the site to its natural state; upgrade the plant (including a relocated plant) to full tertiary treatment (or better); provide for water recycling (including addressing the potential for joint satellite facilities and/or collaborations with nearby communities for water recycling); and include a timeline of potential major relocation events, including expected timeframes for land acquisition, planning, permitting, design, construction and eventual operation, of a relocated plant. The intent would then be for the District to eventually submit a CDP amendment request or new CDP application to the Commission to authorize implementation of the approved Coastal Hazards Response Plan. **Special Condition 3** also requires submittal of full-scale project plans for the redundancy project.²³

In addition, in terms of recognizing and assuming the hazard risks for shoreline development, the Commission's experience in evaluating proposed developments in areas subject to hazards has been that permittees continue to pursue development despite periodic episodes of heavy storm damage and other such occurrences. Development in such dynamic environments is susceptible to damage due to such long-term and episodic processes. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) in the millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden for damages onto the people of the State of California, applicants are regularly required to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, this approval is conditioned for the Applicant to assume all risks for developing at this location (see **Special Condition 10**).

Lastly, Coastal Act Section 30620(c)(1) authorizes the Commission to require Applicants to reimburse the Commission for expenses incurred in processing CDP applications. Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application in the event that the Commission's action is challenged by a party other than the Applicant. Therefore, consistent with Section 30620(c), the Commission imposes a condition requiring reimbursement for any costs and attorneys' fees that the Commission incurs in connection with the defense of any action brought by a party other than the Applicant challenging the approval or issuance of this CDP (**Special Condition 11**).

²³ 100% project plans have not been produced yet for the redundancy portion of the proposed project, based on an expected timeline provided by the District for this project. Plan sets for other proposed and ATF development as part of this project, including the: 1) Biosolids Storage Slab 2) Grit Removal Equipment; 3) Headworks Improvements; 4) Chlorine Contact Chamber Improvements; 5) Floodwall Replacement and Flood Gates; and 6) Dewatered Sludge Conveyor System, have all been received in the Commission's Central Coast District Office. Finally, flood-proofing components must be in substantial conformance with the Site Plan, pursuant to Special Condition 3.

Hazards Conclusion

The existing WWTP is currently threatened with flooding events. The proposed project has been designed to ensure that critical WWTP components are located above the 100-year base flood elevation. Even so, the site is in an area of high flood hazard that will be flooded more frequently over time due to sea level rise. However, the proposed project includes redundancy/backup components that are critically needed at the present time so that major wastewater facility components can periodically be removed from service for routine maintenance and repairs, or be shut down in case of mechanical failure or emergency, while maintaining operation of the WWTP. And specifically, the flood-proofing (i.e., the “elevation” measures) components of the proposed project are necessary to help prevent recurrence of a wastewater spill such as the one that occurred in 2010 and to ensure compliance with the RWQCB’s effluent permit limits. Thus, the proposed project is necessary to ensure proper functioning of the WWTP to current standards and measures, in the near term. Special Conditions are included to ensure that the project is allowed in the near-term for these purposes, and that a long-term solution to the WWTP is initiated. Therefore, with respect to coastal hazards, the project, as conditioned, can be found consistent with Coastal Act Section 30253.

D. MARINE RESOURCES/WATER QUALITY

The Coastal Act protects the marine and freshwater resources and offshore habitat located in the vicinity of this site. Coastal Act Sections 30230 and 30231 specifically state:

Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Analysis

The project site is located in a low-lying area, which currently experiences flooding events primarily during winter storms that produce flows that swell and overtop nearby waterbodies such as Arroyo Grande Creek and Lagoon, and Oceano and Meadow Creeks and Lagoons. For this reason, the site is located wholly within the LCP’s Flood Hazard (FH) zone.

As discussed above, the primary purpose of the proposed project is to install redundancy or backup infrastructure to the WWTP so that major wastewater facility components can periodically be removed from service for routine maintenance or repairs, or be shut down in case

of mechanical failure or emergency, while maintaining operation of the WWTP and without risking violation of RWQCB effluent permit limits. The District is also proposing to elevate four existing critical WWTP components above the 100-year flood elevation level. Thus, as proposed, the project, as operational, will protect marine and freshwater resources and water quality by helping to prevent wastewater spills into nearby creeks that flow into the ocean.

However, with respect to construction impacts, this project will require the movement and placement of large equipment, workers, materials, and supplies. To protect the water quality of nearby creeks (which flow into the ocean) during construction, **Special Condition 7** requires submission of a Construction Plan that includes the methods typically required by the Commission to protect water quality and marine resources during construction (including maintaining good construction site housekeeping controls and procedures, the use of appropriate erosion and sediment controls, requiring any equipment washing, refueling, or servicing at the site to be done at least 50 feet from the site's perimeter fence, etc.). To further protect marine resources and offshore habitat, **Special Condition 8** requires construction documents to be kept at the site for inspection, and also requires a construction coordinator to be available to respond to any inquiries that arise during construction. Thus, as conditioned, the project is consistent with Coastal Act Sections 30230 and 30231 regarding protection of marine and freshwater resources and offshore habitat.

E. SCENIC AND VISUAL RESOURCES

Coastal Act Section 30251, cited below, protects the aesthetic and visual quality of coastal areas.

Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Analysis

Coastal Act Section 30251 requires that scenic and visual qualities of coastal areas be considered and protected as a resource of public importance. New development must be sited and designed to protect views to and along the ocean and scenic coastal areas and where feasible to restore and enhance visual quality in visually degraded areas. The proposed project includes new development located within the existing WWTP site. The project site is located less than half a mile from Highway 1. Currently, the view from Highway 1 includes dense vegetation with the ocean in the distance. The tops of certain components of the existing WWTP extend up from the dense surrounding vegetation and are visible from Highway 1, specifically the WWTP's white-colored tanks (see **Exhibit 9**). Some of the proposed redundancy infrastructure, the ATF infrastructure, as well as some of the proposed flood-proofing components, may be visible from Highway 1.

Thus, the proposed project will likely have new impacts on public views in a scenic coastal area. To ensure consistency with Coastal Act Section 30251, **Special Condition 3** and **9** requires that all new infrastructure, as well as the ATF infrastructure authorized by this CDP, that is visible from Highway 1, is to be painted or stained green or an earth-tone to blend in with the dense vegetation that surrounds the WWTP. In addition, this condition also authorizes the Applicant to paint the existing non-ATF infrastructure these same colors in order to achieve enhanced consistency with Section 30251 of the Coastal Act at the site. Thus to mitigate for new impacts, which can be limited with conditions but not completely avoided, enhancement of public views from Highway 1 and other public areas can be achieved through the painting and/or staining of existing infrastructure. As conditioned, the proposed project is consistent with the visual protection requirements of Coastal Act Section 30251.

F. PUBLIC ACCESS AND RECREATION

Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public road and the sea “shall include a specific finding that the development is in conformity with the public access and public recreation policies of [Coastal Act] Chapter 3.” The proposed project is located seaward of the first through public road (Highway 1). Coastal Act Section 30210 requires maximization of public access consistent with public safety needs, etc., Coastal Act Sections 30212(a)(1) and (a)(2) require new public access in development projects located between the nearest public roadway to the shoreline and along the coast except where it is inconsistent with public safety, etc., and where adequate access exists nearby:

***Section 30210.** In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

***Section 30212(a)(1)(2).** Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby...*

The proposed project is located between the nearest public road and the sea and within an existing, fenced wastewater treatment facility. Providing for public access through this industrial site, however, would be inconsistent with public safety due to the presence of substantial industrial wastewater equipment and materials. In addition, public access to the shoreline in the Oceano area is readily available, including south of the WWTP along the Arroyo Grande Creek levee and to the northwest at the ends of Juanita Avenue, Pier Avenue, and a number of other roads that terminate at the beach in Oceano. Thus, adequate public access exists nearby the WWTP and the project, as proposed, is consistent with Coastal Act Section 30210 and 30212(a)(1)(2).

G. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Coastal Act Section 30240(b) requires that development adjacent to ESHA be sited and designed to prevent impacts to such areas, and states:

Section 30240(b). Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The proposed project includes development adjacent to riparian and wetland habitats, which are located just outside of the project site (see aerial photos and on-site photos in **Exhibits 1 and 2**, respectively). However, all proposed and ATF development would be located and constructed on existing paved or previously disturbed soils located within the fenced-in boundary of the WWTP site. Furthermore, **Special Condition 7** includes adequate protections of the adjacent habitats during construction through the use of erosion and sediment controls (such as silt fencing), construction site housekeeping controls and procedures, and a prohibition on equipment washing, servicing, and refueling within 50 feet of the WWTP's perimeter fence. As conditioned, the project is consistent with Coastal Act Section 30240(b).

H. VIOLATION

Violations of the Coastal Act exist on the subject property including, but not limited to the following unpermitted development: a) installation of a new chlorine contact chamber, including a new concrete basin tank and pump station completed in 2004; b) installation of a replacement floodwall and new flood gates to protect the headworks building completed in 2006; c) installation of a new dewatered sludge conveyor system completed in 2014; and d) installation of a new grit removal system completed in 2016. Issuance of the CDP and compliance with all of the terms and conditions of this permit will result in resolution of the aforementioned violations of the Coastal Act on the subject property.

Although development has taken place prior to submission of this permit application, consideration of this application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Commission review and action on this permit does not constitute a waiver of any legal action with regard to the alleged violations, nor does it constitute an implied statement of the Commission's position regarding the legality of development, other than the development addressed herein, undertaken on the subject site without a coastal permit. In fact, approval of this permit is possible only because of the conditions included herein and failure to comply with these conditions would also constitute a violation of this permit and of the Coastal Act. Accordingly, the Applicant remains subject to enforcement action just as it was prior to this permit approval for engaging in unpermitted development, unless and until the conditions of approval included in this permit are satisfied.

Failure to comply with the terms and conditions of this permit may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act. Only as conditioned is the proposed development consistent with the Coastal Act.

I. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The Applicant, South San Luis Obispo County Sanitation District (SSLOCSD), acting as the CEQA lead agency, adopted a Mitigated Negative Declaration (MND) for the proposed project on July 7, 2010. The SSLOCSD also prepared an Addendum to the adopted MND, dated September 7, 2016, to bring the existing MND documentation up to date as appropriate. This Addendum updated sections related to Biological Resources and Sea Level Rise and Flooding. The Coastal Commission's review and analysis of coastal development permit applications has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. (14 CCR Section 15251(c).) The preceding coastal development permit findings discuss the relevant coastal resource issues with the proposal, and the permit conditions identify appropriate modifications to avoid and/or lessen any potential for adverse impacts to said resources.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as conditioned, would have on the environment within the meaning of CEQA. Thus, if so conditioned, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

1. *SSLOCSD Wastewater Treatment Facility Redundancy Project, Sea Level Rise Analysis*, Environmental Science Associates (ESA), dated August 3, 2016.
2. *Long Range Plan Wastewater Treatment Plant Improvements, South San Luis Obispo County Sanitation District*, Kennedy Jenks Consultants, July 2005.
3. *Technical Memorandum, Evaluation of Wastewater Treatment Plant Site Alternatives and Conceptual Costs for CDP Application*, MKN, September 9, 2016.
4. *Technical Memorandum, Redundancy Project – Flood Risk Mitigation Strategy*, Kennedy/Jenks Consultants, September 7, 2016.
5. *Mitigated Negative Declaration*, July 7, 2010, and Addendum, September 7, 2016
6. *Delineation of Waters of the United States and State of California, South San Luis Obispo County Sanitation District Wastewater Facility Redundancy Project*, Kevin Merk Associates, LLC (KMA), August 2016.

APPENDIX B – STAFF CONTACT WITH AGENCIES AND GROUPS

South San Luis Obispo County Sanitation District (Gerhardt Hubner, District Manager)

Regional Water Quality Control Board (Katie DiSimone)

Northern Chumash Tribal Council (Fred Collins)