

RECLAMATION

Managing Water in the West

Finding of No Significant Impact

South Bay Advanced Recycled Water Treatment Facility

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Date: 2/22/10

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Date: 2/22/2010

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Bureau of Reclamation
Mid-Pacific Region
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BACKGROUND

The Bureau of Reclamation (Reclamation) has prepared a final environmental assessment (EA) in February 2010 to evaluate the effects of constructing and implementing the South Bay Advanced Recycled Water Treatment Facility (ARWTF) adjacent to the existing San Jose/Santa Clara Water Pollution Control Plant (SJ/SC WPCP) in northern San Jose. The facility will use secondary effluent from the SJ/SC WPCP to produce high-purity recycled water using microfiltration (MF), reverse osmosis (RO), and ultraviolet (UV) disinfection. The high-purity effluent from ARWTF will blend with filtered tertiary effluent from SJ/SC WPCP and feed into the South Bay Water Recycling (SBWR) system via the SBWR Transmission Pump Station (TPS).

At peak capacity, the ARWTF will produce approximately 9 million gallons of recycled water per day (MGD). The ARWTF will consist of a series of discrete structures to house various mechanical and chemical components; several isolated storage tanks; miscellaneous yard structures; and a paved internal access driveway and parking area on a 200,000-square foot (4.6-acre) enclosed site. The ARWTF will also employ a series of pipelines to transport water from the TPS and convey waste by-products and secondary effluent between the facility and the SJ/SC WPCP. Work will start in the summer of 2010 and will last approximately 22 months. Project construction will be phased, with some activities occurring simultaneously at the project site and other activities requiring sequential implementation.

The purpose of the action is to expand Santa Clara Valley Water District (District) existing recycled water service and increase the marketability of the existing recycled water supply. The Action is needed to provide the District with a cost-effective means of reducing demand on the potable water supply. Additionally, the proposed project will reduce the salinity of the recycled water supply, which will lessen potential total dissolved solids (TDS) impacts on underlying groundwater and will also benefit protected habitats and species in the South Bay. The target TDS concentration in the blended recycled water will be 500 mg/L.

FINDINGS

Based on the EA, the Division of Planning of the Mid-Pacific Region of Reclamation has found that the Proposed Action is not a major Federal action that will significantly affect the quality of the human environment. Therefore, an environmental impact statement is not required for carrying out the Proposed Action.

The EA written by Reclamation meets the requirements of Section 46.320 (Adopting EAs) of the Department of the Interior's NEPA Regulations. The EA complies with the Council of Environmental Quality's NEPA Regulations and other requirements such as the Endangered Species Act, the National Historic Preservation Act, and local and State requirements (see below). It meets Reclamation's public involvement requirements.

Following are the reasons why the impacts of the Proposed Action are not significant:

1. The Proposed Action will not significantly affect agricultural resources. The Proposed Action will not result in changes in agriculture or conflict with zoning for agricultural use or existing Williamson Act contracts, nor will it result in the conversion of farmland.

2. The Proposed Action will not adversely affect air quality. Short-term impacts to air quality may occur during construction; however, the magnitude of air quality impacts associated with mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from clearing the land, and other activities is considered to be short term and minor. Construction-related air quality effect will be reduced to a less-than-significant level with implementation of the best management practices (BMPs) and mitigation measures described in the EA/IS.

3. The Proposed Action will not significantly affect climate change. Climate change is the result of greenhouse gas (GHG) emissions, and GHGs are emitted by innumerable sources worldwide. GHG generation during construction represents a one-time contribution and thus will have short term and minor global climatic effects. Operational GHG emissions will represent a small fraction of California's emissions, which is equivalent to .0007 percent of global emissions.

4. The Proposed Action will not significantly affect water quality, and will not create any compliance issues with SJ/SC WPCP's existing NPDES Permit. Prior to construction, the project proponent and/or contractor will be required to comply with the City of San Jose's NPDES General Construction Activities Permit through development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). Compliance with the existing NPDES General Construction Permit will minimize the potential for the project to increase erosion, siltation, flooding, or excess runoff.

5. The Proposed Action will not affect threatened or endangered terrestrial species. No listed threatened or endangered species occur at the project site.

Impacts to non-listed special-status species, including golden eagle (*Aquila chrysaetos*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), western burrowing owl (*Athene cunicularia hypugea*), and other raptors and migratory nesting birds will be avoided or minimized by implementing the best management practices (BMPs) and mitigation measures discussed in the EA/IS.

6. The Proposed Action will not adversely affect threatened or endangered fish. Central California coast steelhead is listed as federally threatened and may occur in Artesian Slough. However, due to the absence of steelhead migratory, rearing, or spawning habitat in the slough and minor anticipated changes in water quality due to operational discharges, effects on steelhead are not expected to be significant.

On September 1, 2009, Reclamation requested concurrence from the National Marine Fisheries Service that the project will not adversely affect the Central Valley steelhead. NMFS concurred with Reclamation's determination on January 26, 2010.

7. The Proposed Action will not affect historic properties. A report was prepared in January 2010 entitled "Archaeological Extended Phase 1 Report South Bay Advanced Recycled Water Treatment Facility, Santa Clara county California." Based in part on the results described in the report, Reclamation made a finding of no historic properties affected pursuant to 36 CFR Part 800.4(d)(1). Reclamation submitted the report to the California State Historic Preservation Officer (SHPO) on January 21, 2010 seeking concurrence on the findings. On January 26, 2010, SHPO concurred with Reclamation's finding that the project would not affect any historic properties.

The Proposed Action includes environmental commitments to follow 36 CFR Part 800.13 that address unanticipated discoveries of cultural resources or human remains during construction. Given the implementation of these environmental commitments, no significant impacts on cultural resources will occur.

8. The Proposed Action will not create a significant hazard to the public or environment from hazardous materials. Hazardous materials present at the project site during construction will likely include substances such as fuels and oils in construction vehicles and/or equipment. However, contractors employed on the proposed project will be contractually required to transport, store, and handle construction-related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the U.S. Department of Transportation, Santa Clara County Department of Environmental Health, and the Regional Water Quality Control Board.

Project operation will involve the routine transport, use, and storage of hazardous water treatment materials such as sodium hypochlorite, aqua ammonia, citric acid, sodium hydroxide, and sulfuric acid. A number of these materials have the potential to create a hazard to the public if they are accidentally released into the environment. However, the potential for accidental release will be reduced because chemicals will be stored in appropriate secondary containment within reinforced concrete containment areas. Furthermore, these materials will be handled, stored, and, if necessary, remediated in according to pre-defined procedures in a Hazardous Materials Business Plan.

9. The Proposed Action will not significantly impact transportation and traffic. The Proposed Action will temporarily increase vehicular traffic on State Route (SR) 237 and at the Zanker Road/SR 237 intersection during project construction. Implementation of the traffic control BMPs and proposed mitigation measure discussed in the EA/IS will minimize these impacts. Operational traffic will not result in substantial volumes of traffic and thus will not substantially degrade area roadway levels of service.

10. The Proposed Action will not have adverse direct or indirect effects on land use. Construction activities involved in the project will be consistent with the San Jose General Plan and with permitted uses within applicable zoning districts as defined in the City Zoning Ordinance. Therefore, the Proposed Action will not result in significant land use impacts.

11. The Proposed Action will not significantly affect noise. Construction activities will result in a temporary increase in noise; however, there are no sensitive receptors near the project site. Further, the applicant will follow the standard construction BMPs, which will reduce noise levels. Ground-born vibration and noise will be temporary and occur only during daylight hours. Therefore, no significant noise impacts are anticipated to occur.

12. The Proposed Action will not affect any Indian trust assets. The nearest ITA to the project area is the Lytton Rancheria, which lies approximately 42 miles northwest of the project area.

13. The Proposed Action will not significantly affect aesthetics, mineral resources, population and housing, or recreation.

14. The Proposed Action will not disproportionately impact minority and disadvantaged populations or communities.

15. The Proposed Action will require energy during construction and operations. The amount of energy used will be extremely small and energy resources efficiency standards will be implemented. Therefore, there are no significant impacts on energy.

16. The Proposed Action will not increase the demand on public services or utilities and service systems. The proposed project will not result in the need for additional service or the expansion of existing facilities for any of the public services provided by Alviso or Santa Clara County. Waste generated during construction will not exceed the permitted capacity of the Zanker Road Landfill.

17. The Proposed Action will not significantly increase the exposure of people or structures to geologic events or hazards. The Proposed Action will be required to adhere to the building safety standards specified in the California Building Code, which include measures designed to prevent significant structural damage from seismic ground acceleration, as well as any additional recommendations identified in the site-specific geotechnical study prepared during project design. The Proposed Action will be required to implement BMPs as part of its Storm Water Pollution Prevention Plan, which will prevent substantial soil erosion or the loss of topsoil during construction. Therefore, there are no significant impacts to geology and soils.

18. The Proposed Action will not result in adverse cumulative effects. Impacts to most resources will be highly localized and temporary, primarily occurring during construction, and they will not contribute to a significant cumulative impact in combination with other past, present, and reasonably foreseeable projects. The effects of the Proposed Action are individually and cumulatively limited in scope, scale, and duration, and the proposed BMPs and mitigation measures will offset the effects of the Proposed Action on air quality, biological resources, cultural resources, and transportation and traffic.