

COMPLIANCE PROJECT DESCRIPTION

Compliance Project Title:

Planning Phase for Wastewater Treatment Plant Improvements Project

Geographic Area of Interest:

City of Mt. Shasta (City) Wastewater Treatment Plant (WWTP), Siskiyou and Shasta Counties, specifically the Sacramento River watershed downstream of the WWTP

Name of Responsible Entity:

City of Mt. Shasta

Contact Information:

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Compliance Project Description and Goals:

The City of Mt. Shasta WWTP (Facility) was constructed in 1976. The original Facility consisted of a headworks, ponds, and interim sand filters. Effluent was disposed of at the leach field or the Sacramento River discharge point. Over the years, several upgrades have been constructed at the Facility to comply with increasingly stringent effluent limits contained in the Facility's National Pollutant Discharge Elimination System (NPDES) permits. These upgrades allowed the City to provide the local golf course with reclaimed water. The City's 2007 NPDES permit included effluent limits for copper, zinc, and ammonia that the City could not consistently comply with. Shortly thereafter, Cease and Desist Order R5-2010-0064 was adopted, which provided a compliance schedule and extended the interim limits for these constituents until 2012. A new permit was adopted in 2012 providing a compliance schedule and interim effluent limit for the same constituents with the addition of BOD, TSS, pH, and Title 22 disinfection requirements.

The City secured the help of PACE Engineering, Inc. to determine the most effective method of complying with the effluent limits. Documents required in the planning phase of the WWTP Improvements Project included completing necessary environmental documentation (Mitigated Negative Declaration and Initial Study for CEQA review), a Wastewater Utility Rate Study, and a Preliminary Engineering Report and Feasibility Study (PER). The PER found the existing Facility was, in large part, beyond its serviceable life and unable to be upgraded cost effectively to meet the effluent limits. The PER recommended that a new WWTP be constructed to achieve the following goals:

- Reliably meet effluent limits and improve water quality of the Sacramento River;
- Minimize impacts to rate payers;
- Be adapted or modified to meet future discharge requirements;
- Minimize operations and maintenance difficulties; and,
- Be a secure and safe Facility.

The PER evaluated seven treatment alternatives. The alternative that was most effectively able to achieve the project goals listed above was utilized as the proposed project. The proposed project includes the following components:

- Retrofitted headworks;
 - Self-cleaning screen
 - Screening washer/compactor
- Grit removal;
- Biological treatment basins - activated sludge;
- Clarifiers;
- Aerobic digesters;
- Ultraviolet disinfection;
- Mechanical dewatering; and,
- Lab/Control building.

In order to move forward with the construction and completion of the proposed project, the City must first complete the planning phase of the WWTP upgrades. This compliance project provides the planning documents that will help secure funding for the construction phase.

Water Body, Beneficial Use, and/or Pollutant Addressed by the Compliance Project:

This compliance project will benefit the Sacramento River watershed by improving effluent quality once construction of the improved WWTP is completed. After completing construction, the City will be able to consistently comply with its NPDES permit by reducing copper, zinc, ammonia, coliform, BOD, TSS, pH, and Title 22 disinfection byproducts in the effluent that is discharged to the Sacramento River.

Total Cost of Compliance Project:

The total cost of \$263,551 was used in part to complete the required documents in this Compliance Project.

Compliance Project Schedule, Milestones, and Completion Dates:

Table 1 – Compliance Project Completion Dates

Document	Completion Date
Draft PER and Feasibility Study	May 2014
Environmental Documentation (Mitigated Negative Declaration and Initial Study)	November 2015
Final PER and Feasibility Study	December 2016
Final Wastewater Utility Rate Study	April 2017

Mandatory Minimum Penalties:

The **\$108,000** of Mandatory Minimum Penalties associated with this Order will be used to fund the proposed improvements.

Final Report:

The City will submit a post-project final report documenting project completion and accounting of all expenditures. The accounting shall clearly show whether the final cost of the completed compliance project is less than, equal to, or more than the suspended liability of **\$108,000**.

The Final Report is due within 6 months of the completion of the planning phase of the WWTP Improvements Project. The report shall be completed under penalty of perjury and in accordance with the terms described in this Order.