



Agenda Date: 10/16/2019  
Agenda Placement: 8A

## Napa Sanitation District Board Agenda Letter

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**TO:** Honorable Board of Directors

**FROM:** Andrew Damron for Timothy Healy - General Manager  
NS-Technical Services/Engineer

**REPORT BY:** Karl Ono, Associate Engineer - (707) 258-6013

**SUBJECT:** Approve the Project, Concur with CEQA Determination, and Authorize the General Manager to Issue Notice Inviting Bids for the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712)

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### **RECOMMENDATION**

Approve the project, concur with staff's CEQA Determination, and authorize the General Manager to issue Notice Inviting Bids for the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712).

### **EXECUTIVE SUMMARY**

The project, which consists of repairing deteriorated mechanical equipment and failing protective coatings in the primary clarifiers and dissolved air floatation (DAF) clarifier, was identified in a 2015 condition assessment study. Operations staff has also observed similar conditions of protective coatings in the nearby dissolved air flotation (DAF) clarifier process area. Because of the similar nature of work required to rehabilitate mechanical and structural components in each process area, there is a potential for cost savings by combining work into one project.

The engineer's estimate of probable construction cost for the project is \$1,200,000.

Notice Inviting Bids will be issued in October, bids will be opened in November, and Notice To Proceed will be issued in January 2020. Construction is scheduled for the dry-weather season of 2020 to take advantage of lower plant flows during the summer.

Plans are available for review at NapaSan's office and will be available at the Board meeting on October 16, 2019.

**FISCAL & STRATEGIC PLAN IMPACT**

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	The project is budgeted in FY 19/20 and 20/21 of NapaSan's Capital Improvement Plan. The total project budget is \$1,514,000.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	Protective coatings in the primary clarifiers have reached the end of their service life and the mechanical and structural components have begun to deteriorate. Protective coatings in the DAF clarifier are showing signs of premature failure and need to be replaced in order to protect mechanical equipment from deterioration.
Is the general fund affected?	Yes
Future fiscal impact:	Construction will be completed in FY 20/21. Unused budget in this fiscal year will be carried forward into next fiscal year.
Consequences if not approved:	Protective coatings in the primary clarifiers and DAF clarifiers would continue to degrade, resulting in accelerated deterioration of structural and mechanical components. In addition to increased risks of failure, the costs to repair and replace these components would increase significantly with continued degradation.
Additional Information:	None.

**ENVIRONMENTAL IMPACT**

Staff performed a preliminary CEQA review of this project and determined the project is Categorically Exempt. This project consists of replacement or rehabilitation of existing systems and/or facilities involving no expansion of capacity, which corresponds to Categorical Exemption 15302 (c) of the California Environmental Quality Act (CEQA) Guidelines. If the Board concurs with this determination, staff will file the attached Notice of Exemption.

**BACKGROUND AND DISCUSSION**

The primary clarifiers were converted to their current use in 1998 as part of the Phase II Socol Water Recycling Facility Upgrade Project. The structures were originally constructed as flocculating clarifiers in 1977. The primary clarifiers receive wastewater from the headworks that has been screened and aerated to remove large solids and grit. The primary clarifiers allow suspended solids to settle and collect as sludge, which is then conveyed to the digester, treated, thickened, dewatered, and land-applied for disposal. Wastewater passing through the primary clarifiers continues through the treatment process.

Equipment and coatings in the primary clarifiers have been in service for approximately 20 years and are subject to a corrosive environment typical of the wastewater treatment process. Protective coatings have reached the end of their useful life, which has led to visible deterioration of some components. A condition assessment revealed that some mechanical components are in need of repair or replacement and recommended that protective coatings throughout the clarifier be replaced to prevent further deterioration.

The DAF clarifier was constructed in 2016 as part of the Phase I Recycled Water Expansion Project. During peak recycled water production periods (currently July, through September), the DAF clarifier receives water that has been treated in the ponds and removes algae before it is disinfected, filtered, and distributed for reuse as recycled water. The protective coatings on the majority of the carbon steel components are beginning to deteriorate, leaving portions directly exposed. The mechanical components in the DAF clarifier are exposed to sun and wind when the DAF is not in service and exposed to treated wastewater containing algae when the DAF is in service. NapaSan staff believes that the protective coatings are failing prematurely, and that inadequate environmental controls (dust, moisture, and temperature) associated with field coating during original construction may have led to the premature failure.

### **SUPPORTING DOCUMENTS**

- A . CEQA Notice of Exemption
- B . Presentation Slides

Napa Sanitation District: Approve

Reviewed By: Andrew Damron