



ADMINISTRATIVE REPORT

TO: PUBLIC WORKS COMMISSION

FROM: Brad B. Underwood, Public Works Director

PREPARED BY: Department of Public Works

MEETING DATE: May 11, 2016

SUBJECT: Clean Water Program Odor Control Strategy

RECOMMENDATION

Public Works Commission receive information about odor impacts in sanitary sewer and wastewater treatment systems, methods for managing odors, and odor control strategies proposed for the Clean Water Program.

BACKGROUND

The City of San Mateo is currently under a Regional Water Quality Control Board (RWQCB) Cease and Desist Order (CDO) requiring improvements to its collection system and wastewater treatment plant to eliminate sanitary sewer overflows and unauthorized discharges. The Clean Water Program (CWP) is a large capital improvement program established to upgrade aging infrastructure, enhance reliability and provide capacity for wet weather flows in the sanitary sewer collection system and wastewater treatment plant as required in the 2009 Regional Water Quality Control Board Cease and Desist Order and 2013 National Pollutant Discharge Elimination System permit.

The Clean Water Program proposes to reconstruct significant portions of the existing wastewater treatment plant (WWTP), including preliminary, primary, and secondary treatment processes, as new facilities on a site adjacent to the existing plant. The existing solids handling facilities upgraded in 2005-2009 will remain in place, although the CWP is conducting a bio-solids master planning effort to provide a road map for future bio-solids improvements focused on reuse and energy recovery. The CWP also includes certain rehabilitation projects at the existing WWTP to replace aging components and ensure reliability of treatment facilities. Extensive rehabilitation is also planned in areas of the collection system with high inflow and infiltration.

Odors associated with the sanitary sewer collection system and wastewater treatment plant have been expressed to be a nuisance by some community members primarily in the geographic areas near the WWTP, Dale Avenue Pump Station, and in the Parkside/Shoreview area, notably in the vicinity of Norfolk and Eisenhower Streets. Comments concerning odors have been received at Public Works Commission meetings, public outreach events, and via phone calls and emails.

The Clean Water Program is currently conducting an odor study in the sanitary sewer collection system basins east of highway 101. The results will be used to model odor generation and migration in the existing system, and evaluate odor control strategies to be used in developing the scope of improvements for proposed rehabilitation projects in those basins.

An odor study will also be conducted at the WWTP to establish a community acceptance threshold and criteria for odor control system design. A human's ability to detect odors is more sensitive than regulatory limits for odor control. New WWTP facilities included in the Clean Water Program will be designed to exceed regulatory requirements and meet the higher standard of eliminating odors based on an established community acceptance threshold. Thus these newly constructed facilities "will not smell", and will replace some of the existing facilities that currently generate odors. The existing solids handling process facilities at the WWTP are not being replaced at this time and therefore are not part of the odor control efforts. The community acceptance threshold criteria will apply to the design of odor control systems for any In-System storage facility(ies) constructed under the Clean Water Program.

BUDGET IMPACT

The ongoing odor investigation in the collection system is already funded as part of the budget for the Sewer System I/I Rehabilitation projects. Odor investigations for the development of community acceptance thresholds for the new WWTP facilities are planned for budget Year 3 of the Program Management contract for the CWP.

ENVIRONMENTAL DETERMINATION

The Public Works Commission is receiving information about the ongoing odor investigation. While this action is being undertaken as part of the Clean Water Program, the investigation itself is not subject to CEQA review (CEQA Guidelines Section 15061(b) (3).)

NOTICE PROVIDED

All noticing requirements met.

ATTACHMENTS

None

STAFF CONTACT

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