METRO JPA/TAC **REVISED: 01/04/2013**
Staff Report

Subject Title: Extension of the contract with U.S. Peroxide, LLC for the Peroxide Regenerated Iron – Sulfide Control Programs (PRI-SC™/PRI-CEPT™) which includes Chemicals (Ferrous Chloride and Hydrogen Peroxide), Supplies, and Technical Services.

Requested Action: The Wastewater Treatment and Disposal (WWTD) Division requests approval to award a contract to US Peroxide for the purchase of Peroxide Regenerated Iron – Sulfide Control Programs (PRI-SC™/PRI-CEPT™) which includes Chemicals (Ferrous Chloride and Hydrogen Peroxide), Supplies, and Technical Services.

In 2006, a demonstration study verified that the Peroxide Regenerated Iron - Sulfide Control (PRI-SC™) program and the Peroxide Regenerated Iron for Chemically Enhanced Primary Treatment (PRI-CEPT™) program optimized the use of iron salts (specifically ferrous chloride, $FeCl_2$, or ferric chloride, $FeCl_3$) in the wastewater treatment process. The Programs optimize the use of iron salts for sulfide control (i.e. odor control) via upstream $FeCl_2$ and hydrogen peroxide (H_2O_2) addition to regenerate iron ions which have reacted with odorant hydrogen sulfide (H_2S) molecules. The regenerated iron ions may then react with more H_2S, thus reducing the amount of $FeCl_3$ ultimately added to the system at the Point Loma Wastewater Treatment Plant (PLWTP).

The reduction in the use of $FeCl_3$ has financial benefits (approximately $1.2 million per year in net reduced chemical costs) and environmental benefits (less iron in the effluent water which yields a more efficient disinfection process). The current program adds $FeCl_2$ at Pump Station 1, H_2O_2 at Pump Station 2, and H_2O_2 at the influent to the Point Loma Wastewater Treatment Plant (PLWTP). The financial savings are realized by elimination of $FeCl_3$ addition at Pump Station 2 and a reduction of $FeCl_3$ used at the PLWTP.

After the successful pilot demonstration, the use of the PRI-SC™/PRI-CEPT™ Programs became a permanent part of the PLWTP process. The Department then introduced these Programs to other wastewater treatment plants, specifically the North City Water Reclamation Plant and its feeder facilities.

This action will authorize U.S. Peroxide to provide technical expertise, mechanical equipment, chemical feeds, and the sensors necessary to complete the system-wide installation of these Programs and to monitor and optimize the chemicals used. Following full implementation of the process, the Department will have a system-wide, optimized process for sulfide control.

The PRI-SC™/PRI-CEPT™ Programs are patented process technologies. Therefore, the Department obtained the Sole Source approval, Case Number 2720, to procure the necessary chemicals, equipment and technical services from U.S. Peroxide.

Recommendations:

Metro TAC:	Submitted for consideration on November 21, 2012
IROC:	N/A- This contract is included in the approved Metro operating budget and does not require IROC review.
Prior Actions: (Committee/Commission, Date, Result)	Submitted for consideration by the Natural Resources and Culture Committee on February 27, 2013; tentatively scheduled for consideration by the full Council in March 19, 2013

Fiscal Impact: Estimated Fiscal impact for JPA at 35%:

Fiscal Year	METRO	MUNI	Total Request
FY 2013	$ 4,508,000	$ 350,000	$ 4,858,000
FY 2014 thru FY 2017	*$22,214,591*	*$2,256,141*	*$24,470,732*
TOTAL	***$26,722,691***	***$2,606,141***	***$29,328,732***

Is this projected budgeted? Yes _X__ No ___	
Cost breakdown between Metro & Muni:	91% Metro 9% Muni
Financial impact of this issue on the Metro JPA:	$9,352,907 over five fiscal years (FY 2013, FY 2014, FY 2015, FY 2016, FY 2017)

Capital Improvement Program: N/A

New Project? Yes ___ No ___

Existing Project? Yes ___ No ___ upgrade/addition ___ change ___

Comments/Analysis:

Previous TAC/JPA Action: None.

Additional/Future Action: Pending Metro TAC approval on November 21, 2012 and Metro Commission on January 7, 2013.

City Council Action: To be considered by the NR&C Committee on February 27, 2013; tentatively scheduled for consideration by the full Council in March 19, 2013.