

EXECUTIVE SUMMARY SHEET
CITY OF SAN DIEGO

DATE ISSUED: March 28, 2010
ATTENTION: Natural Resources & Culture Committee
Agenda of April 20, 2011
ORIGINATING DEPARTMENT: Public Utilities
SUBJECT: Purchase of Ferrous Chloride, Supplies and Services for Peroxide
Regenerated Iron - Sulfide Control (PRI-SC/PRI-CEPT)
COUNCIL DISTRICTS: City-wide
STAFF CONTACT: Christopher McKinney (858) 292-6447

REQUESTED ACTION:

1. Authorizing the Mayor to award a phase funded contract to U.S. Peroxide, LLC., for the purchase of ferrous chloride, supplies, and services necessary for Peroxide Regenerated Iron-Sulfide Control (PRI-SC). The price for ferrous chloride shall be fixed at \$659 per dry ton from May 15, 2011 through October 14, 2011. Additionally authorizing the Mayor to approve a price increase for ferrous chloride, not to exceed 8%, on October 15, 2011.
2. Authorizing expenditures in FY 2011 from the Public Utilities Wastewater Operating Fund 700001- \$320,500 and Fund 700000 - \$5,500.
3. Authorizing expenditures in FY 2012 from the Public Utilities Wastewater Operating Fund 700001- \$2,704,000 and Fund 700000 - \$46,000 contingent upon approval of the FY 2012 appropriation ordinance.
4. Authorizing expenditures in FY 2013 from the Public Utilities Wastewater Operating Fund 700001- \$806,000 and Fund 700000 - \$14,000 contingent upon approval of the FY 2013 appropriation ordinance.

STAFF RECOMMENDATION: Adopt the Resolutions.

EXECUTIVE SUMMARY:

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 use of iron salts (specifically ferrous chloride, FeCl₂ or ferric chloride, FeCl₃) in the wastewater treatment process. PRI-SC™ optimizes use of iron salts for sulfide control (i.e., odor control) via upstream hydrogen peroxide (H₂O₂) addition to regenerate iron ions which have reacted with odorant hydrogen sulfide (H₂S) molecules. The regenerated iron ions may then react with more H₂S, thus reducing the amount of FeCl₃ ultimately added to the system. This reduction has financial benefits (approximately \$1.2 million per year in net reduced chemical costs) and environmental benefits (less iron in the effluent water and a more efficient disinfection process). The current program adds FeCl₂ at Pump Station 1, H₂O₂ at Pump Station 2, and H₂O₂ at the influent to the Point Loma Wastewater Treatment Plant (PLWTP). The financial savings are realized by elimination of FeCl₃ addition at Pump Station 2 and a reduction of FeCl₃ used at the PLWTP.

After the successful pilot demonstration, the use of the PRI-SC™/PRI-CEPT™ program became a permanent part of the PLWTP process. Via this proposed contract, the Department plans to introduce this program at other wastewater treatment plants, specifically the North City Water Reclamation Plant and its feeder facilities. US Peroxide will provide technical expertise, mechanical equipment, and sensors necessary to install the process, monitor it, and optimize chemical use. 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 sole source approval number 2407 to procure the necessary chemicals, supplies and technical services from US Peroxide. Although the sole source authorizes purchase of both FeCl₂ and H₂O₂, only FeCl₂ purchases are included in this request. H₂O₂ purchases are already under contract.

EQUAL OPPORTUNITY CONTRACTING:

This agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. 18173, Section 22.2701 through 22.2708). This agreement is subject to the City's Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

FISCAL CONSIDERATIONS:

The total cost of this action is \$3,896,000 during FY 2011, FY 2012, and FY 2013. Funding is available from the FY 2011 operating budget in the amount of \$326,000. Funding is available from the FY 2012 operating budget in the amount of \$2,750,000, contingent upon approval of the FY 2012 appropriation ordinance. Funding is available from the FY 2013 operating budget in the amount of \$820,000, contingent upon approval of the FY 2013 appropriation ordinance.

PREVIOUS COUNCIL/COMMITTEE ACTION:

None.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

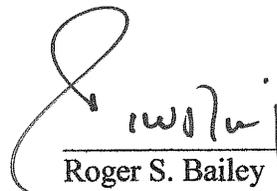
The initial demonstration study was presented to the Metro Commission and the Public Utilities Advisory Commission (PUAC) in April, 2006. This proposed contract will be presented to the MetroTAC on April 20, 2011 and to the Metro Commission on May 5, 2011.

KEY STAKEHOLDERS:

The regional ratepayers for the Metropolitan Wastewater System will benefit further from reduced treatment expenses and improved environmental stewardship.



Ann Sasaki
Assistant Public Utilities Director



Roger S. Bailey
Director of Public Utilities