EXECUTIVE SUMMARY SHEET
CITY OF SAN DIEGO

DATE ISSUED:	October 5, 2011
ATTENTION:	Natural Resources & Culture Committee Agenda of October 19, 2011
ORIGINATING DEPARTMENT:	Public Utilities
SUBJECT:	Purchase of Additional Ferrous Chloride for Sulfide Control in Wastewater Treatment Plant Digesters and Sludge Pipelines
COUNCIL DISTRICTS:	City-wide
STAFF CONTACT:	Christopher McKinney (858) 292-6447

REQUESTED ACTION:
Authorizing the Mayor, or designee, to amend the existing contract with Kemira Water Solutions, Bid Number 10015313; Contract Number 4600000766, for the purchase of ferrous chloride in the amount of $1,856,782.48, provided that the City Comptroller first furnishes a Comptroller's Certificate demonstrating that the funds necessary for expenditure are, or will be, on deposit with the City Treasurer. This amount includes an increase of $990,644.88 in addition to the previously approved amount of $866,137.60.

Authorizing the Mayor, or designee, to exercise options to renew the contract with Kemira Water Solutions, for up to four additional one (1) year periods, with annual per unit cost increase not to exceed 15%, provided the City Comptroller first issues a Comptroller's Certificate certifying that the funds necessary for expenditure are, or will be, on deposit with the City Treasurer.

Authorizing the Chief Financial Officer to expend $990,644.88 in addition to the previously approved expenditure of $866,137.60 from the Public Utilities Wastewater Operating Fund 700001- for the purchase of ferrous chloride for sulfide control in wastewater treatment plant digesters and sludge pipelines.

STAFF RECOMMENDATION: Adopt the Resolutions.

EXECUTIVE SUMMARY:

Ferrous chloride ($FeCl_2$) is a chemical used for hydrogen sulfide (H_2S) control in wastewater treatment plant digesters and sludge pipelines. H_2S is a corrosive chemical that is hazardous to human health. It is a byproduct of bacterial activity in wastewater. Control of H_2S concentrations in the wastewater treatment process is a regulatory and employee safety requirement. Additionally, control of H_2S concentration is important for preserving the collection system infrastructure.

The Point Loma Wastewater Treatment Plant (PLWTP) sludge pipelines suffer from buildup of a hard mineral called vivianite. Buildup of this mineral reduces the effective size of the pipelines, thus leading to more-frequent pump failures and reduced plant reliability. The Wastewater Treatment and Disposal (WWTD) Division conducted a pilot study using ferric chloride ($FeCl_3$) – another iron salt similar to $FeCl_2$ – in an effort to reduce vivianite buildup while still controlling the concentration of H_2S. The study aimed to determine whether using $FeCl_3$ rather than $FeCl_2$ would slow the rate of mineral buildup and therefore reduce maintenance costs. However, the study determined that to achieve the same sulfide control results, the cost of $FeCl_3$ was greater than the cost of $FeCl_2$. Analysis revealed that the

avoided maintenance cost when using $FeCl_3$ is less than the added cost of this chemical. Therefore, as of July 1, 2011, the PLWTP suspended use of $FeCl_3$ for H_2S control in wastewater treatment plant digesters and sludge pipelines and returned to the traditional use of $FeCl_2$.

The Public Utilities Department requests amending the existing contract with Kemira Water Solutions, under the terms of Bid No. 10015313; Contract No. 4600000766, to meet anticipated additional needs for $FeCl_2$. The anticipated increased expenditure of $990,644.88 for $FeCl_2$ will result in a larger decreased expenditure for $FeCl_3$. The net decrease in chemical expenditures will be approximately $650,000.

$FeCl_2$ purchased under Bid No. 1001513 is used at multiple WWTD facilities, including the Point Loma Wastewater Treatment Plant, the Metropolitan Biosolids Center, and the North City Water Reclamation Plant. The total expenditure requested ($1,856,728.48) is anticipated to meet all the Division's $FeCl_2$ needs.

The Public Utilities Department requests authorization to renew the contract with Kemira Water Solutions, for up to four additional one (1) year periods, with annual per unit cost increase not to exceed 15%.

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 amount budgeted at Point Loma Wastewater Treatment Plant for $FeCl_2$ will be comparable to the amount budgeted in FY 2011.

PREVIOUS COUNCIL/COMMITTEE ACTION:
No previous action by Council was required because the original contract value was less than $1,000,000. The requested amendment will increase the value of the contract to more than $1,000,000, thus requiring Council approval.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:
This item was reviewed by the Metro Technical Advisory Committee on September 21, 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