# Memorandum



DATE: April 11, 2014

- TO: Honorable Mayor and Members of the City Council
- **SUBJECT:** Audit of the Department of Dallas Water Utilities' Wastewater Collection and Treatment Operations Internal Controls over Chemical Supplies<sup>1</sup>

The Department of Dallas Water Utilities (DWU) Wastewater Collection and Treatment facilities (see textbox) have established certain controls over chemical supplies used in the wastewater treatment process. For example, DWU has written policies and procedures for the purchase, use of receipt, and chemical supplies used in the wastewater treatment process.

The Central and Southside facilities' purchases of chemical supplies during the test month, April 2013, showed:

### Background

The DWU has two Wastewater processing facilities: the Central facility and the Southside facility. Both facilities use chemical supplies in the treatment of wastewater.

Chemical supplies in Fiscal Year (FY) 2013 represented:

- \$1,060,908, or approximately 17 percent, of the \$6,145,573 total supply expenditures at the Central facility
- \$2,963,534, or approximately 34 percent, of the \$8,624,762 total supply expenditures at the Southside facility

**Source**: City of Dallas Office of Financial Services Reports, *Budget versus Actual Reports FY 2012-2013* 

<sup>&</sup>lt;sup>1</sup> The audit objective was to assess the adequacy of internal controls over inventories of equipment and supplies. The DWU equipment was included in the annual independent financial audit, and analysis showed purchases of chemical supplies were significant when compared to total supply expenditures. As a result, the audit focused on internal controls over chemical supplies. This performance audit was conducted under the authority of the City Charter, Chapter IX, Section 3 and in accordance with the Fiscal Year 2013 Audit Plan approved by the City Council. This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We reviewed applicable federal laws/regulations and DWU Wastewater policies/procedures, interviewed DWU personnel, and performed tests of chemical purchases and the associated shipments for the month of April 2013. Audit Scope Limitation: Due to Federal and State safety requirements, the Office of the City Auditor (Office) was not able to observe and or test the receipt and use of these chemical supplies. Interviews with personnel at the Central and Southside facilities; however, indicate the written policies and procedures align with current practices.

- Amounts paid for all chemical supply shipments agreed to the amounts established in the price agreements
- Required documents (invoice, bill of lading, certified weight ticket, and certification of chemical purity) for all tanker truck shipments of chemical supplies were available
- Amounts received, as shown on the required documents for all tanker truck shipments of chemical supplies, agreed to the amounts shown on the applicable shipment receipt logs

Central and Southside facilities personnel, however, do not have a formal receiving process to independently determine the reasonableness of the amount of chemical supplies received. As a result, DWU cannot readily determine that the City only pays for amounts received. According to DWU, the facilities rely on the experience of personnel who monitor daily chemical supply use to note if chemical supplies do not last as long as expected which would prompt DWU to perform additional research to determine the cause.

In addition, inconsistent record keeping practices at the Central facility were noted as follows:

- Required documents for the railcar shipment of chemical supplies were not available at the time of testing (Note: These documents were, however, provided at a later date.)
- Amounts received, as shown on the required documents for railcar shipments, did not consistently agree with the amounts recorded in the railcar shipment receipt log book
- Amounts shown on the bill of lading for railcar shipments were not consistently recorded in the shipment receipt log book

According to DWU personnel, these inconsistent recordkeeping practices have now been corrected.

Adequate controls over the purchase of chemical supplies require: (1) wastewater facilities maintain consistent records; (2) receiving personnel verify the quantity of chemical supplies received by weight, or other form of measurement; and, (3) receiving personnel document variances between the quantity ordered versus the quantity received before invoices are paid or as soon as practical thereafter.

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Due to Federal and State safety requirements, the Office of the City Auditor (Office) was not able to observe and or test the receipt and use of these chemical supplies. Interviews with personnel at the Central and Southside facilities, however, indicate the written policies and procedures align with current practices.

# **Recommendation I**

We recommend the Director of DWU require facility personnel to independently determine the reasonableness of the amount of chemical supplies received to ensure that the City pays only for amounts actually received.

# **Recommendation II**

We recommend the Director of DWU ensure the Central facility consistently follow record keeping practices.

Please see Attachment I for Background and Attachment II for Management's Response to the recommendations.

Security related issues and the associated recommendation omitted from this report have been communicated to the appropriate DWU personnel in the *Confidential Limited Use Report: Audit of the Department of Dallas Water Utilities' Wastewater Collection and Treatment Operations – Internal Controls over Chemical Supplies.* Our decision to exclude this information is based on Government Auditing Standards, December 2011 Revision, Sections 7.39 – 7.43, *Reporting Confidential or Sensitive Information*.

We would like to acknowledge City management's and staff cooperation during this audit. If you have any questions or need additional information, please contact me at 214-670-3222 or Carol Smith, First Assistant City Auditor, at 214-670-4517.

Sincerely,

Ciais D. Kinton

Craig D. Kinton City Auditor

Attachments

Honorable Mayor and Members of the City Council April 11, 2014 Page 4 of 4

C: A.C. Gonzalez, City Manager Forest Turner, Assistant City Manager Jo M. (Jody) Puckett, P.E., Director – DWU Zachary Peoples, Assistant Director – DWU

# Attachment I

# Background

The Department of Dallas Water Utilities (DWU) is owned and operated by the City of Dallas (City) as a self-supporting enterprise fund. The DWU receives no tax dollars and earns revenues through the sale of water and wastewater services to the following five customer classes: (1) Residential; (2) General Service; (3) Municipal; (4) Optional General Service; and, (5) Wholesale. The Wholesale customer class is comprised of 23 communities outside the City which receive water service, and 11 communities, which receive wastewater service. Rates for each class are determined by a cost of service study that assigns costs to each class based on DWU's cost to provide these services. The DWU system consists of both water and wastewater operations.

# Water Operations

Water Operations is responsible for raw water impoundment, watershed management, and the purification, pumping and distribution of potable water, as well as operating and maintaining the system. There are three water treatment facilities (East Side, Elm Fork, and Bachman) that have approximately 4,900 miles of pipeline and can treat approximately 900 million gallons of water per day. During Fiscal Year (FY) 2013, the three facilities together treated approximately 143 billion gallons of water.

## Wastewater Operations

Wastewater operations is responsible for collecting, transporting, controlling the discharge of, and treating domestic and industrial wastes, as well as maintaining treatment facilities and pipelines in the wastewater system. There are two wastewater treatment facilities: Central and Southside. The Central Wastewater facility began operations in 1915 and the Southside Wastewater facility began operations in 1964. These wastewater treatment facilities have approximately 4,000 miles of pipelines and can treat approximately 260 million gallons of wastewater per day. During FY 2013, the two wastewater facilities together treated approximately 52 billion gallons of wastewater.

In FY 2013, Budget versus Actual Reports showed expenditures for chemical supplies totaled \$4,024,442, or 27 percent, of the \$14,770,335 total supply expenditures (object code series 2000) at the two wastewater facilities:

 Central facility – \$1,060,908, or approximately 17 percent, of the \$6,145,573 total supply expenditures • Southside facility – \$2,963,534, or approximately 34 percent, of the \$8,624,762 total supply expenditures

### Attachment II

### Management's Response

#### Memorandum

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#### **City Auditor's Office**



- DATE: March 25, 2014
  - TO: Craig D. Kinton, City Auditor

SUBJECT: Response to Audit Report:

Audit of the Department of Dallas Water Utilities' Wastewater Collection and Treatment Operations – Internal Controls over Chemical Supplies

Our responses to the audit report recommendations are as follows:

#### Recommendation I

We recommend the Director of DWU require facility personnel to independently determine the reasonableness of the amount of chemical supplies received to ensure that the City pays only for amounts actually received.

### Management Response / Corrective Action Plan

Agree 🛛 Disagree 🗌

DWU concurs with the recommendation and has already developed and implemented a "Reasonableness Chemical Usage Assessment" form that will be completed for all chemical deliveries to provide reasonable assurance that the City has paid only for the amounts actually received. This document will be signed by plant staff and comply with the record keeping practices.

#### Implementation Date

Retroactively implemented beginning with records from October 2013

#### Responsible Manager

Senior Program Manager Central Wastewater Treatment Plant

### Recommendation II

We recommend the Director of DWU ensure the Central facility consistently follow record keeping practices.

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#### Audit of the Department of Dallas Water Utilities' Wastewater Collection and Treatment Operations – Internal Controls over Chemical Supplies

Management Response / Corrective Action Plan

Agree 🛛 🛛 Disagree 🗌

DWU concurs with the recommendation. The Central facility has already modified its procedures and is currently complying with the recommended record keeping practices.

Implementation Date April 2013

Responsible Manager Senior Program Manager Central Wastewater Treatment Plant

3 125 o M. (Jody) Puckett/P.E. Department

Forest E. Turner Assistant City Manager

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