

# INTERNAL AUDIT REPORT

2020-04

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2019 Parts, Fuel, and Chemicals Inventory

Anchorage Water and Wastewater Utility

April 3, 2020

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# Municipality of Anchorage

Ethan Berkowitz, Mayor

Internal Audit Department

April 3, 2020

Honorable Mayor and Members of the Assembly:

I am pleased to present for your review **Internal Audit Report 2020-04, 2019 Parts, Fuel, and Chemicals Inventory, Anchorage Water and Wastewater Utility**. A brief summary of the report is presented below.

In accordance with the 2019 Audit Plan, we have completed an audit of the 2019 Parts, Fuel, and Chemicals Inventory. The objective of this audit was to determine the accuracy of Anchorage Water and Wastewater Utility's inventory records for parts, fuel, and chemicals. To accomplish our objective, we performed inventory counts based on randomly and judgmentally selected samples at the King Street Operations and Maintenance Warehouse. We also inventoried all chemicals at Anchorage Water and Wastewater Utility's Eklutna and Ship Creek Water Treatment Plants and Anchorage Water and Wastewater Utility's Asplund and Eagle River Wastewater Treatment Plants. In addition, we inventoried fuel stored at Anchorage Water and Wastewater Utility's Arctic Boulevard, King Street, and Eklutna locations.

Based on our test counts, our audit revealed that the parts inventory records for the King Street Operations and Maintenance Warehouse were reasonably accurate. Likewise, inventory records for chemicals at Anchorage Water and Wastewater Utility's Eklutna, Ship Creek, and Eagle River facilities were reasonably accurate. Similarly, fuel inventories at various facilities were reasonably accurate. Regarding chemical inventories at the Asplund Wastewater Treatment Facility, the number of chemicals that had discrepancies between the book balance and the inventory count dropped from four in 2018 to one in 2019. Further management action is still required to ensure that chemicals at the Asplund Wastewater Treatment Facility are properly accounted for.

There was one finding in connection with this audit. Management was responsive to the finding and recommendation.

Michael Chadwick, CIA, CICA  
Director, Internal Audit



# Municipality of Anchorage

Ethan Berkowitz, Mayor

Internal Audit Department

April 3, 2020

## **Internal Audit Report 2020-04 2019 Parts, Fuel, and Chemicals Inventory Anchorage Water and Wastewater Utility**

**Introduction.** The Anchorage Water and Wastewater Utility (AWWU) maintains an inventory of parts, fuel, and chemicals. Parts, fuel, and chemicals are recorded in the inventory records using the Maximo Work Management System (Maximo), which interfaces with the SAP financial system. When the inventory is used, the expenses are recorded in Maximo, and inventory receipts are recorded in SAP. According to AWWU staff, cycle counts are performed for the parts stored in the King Street Operations and Maintenance Warehouse (Warehouse), fuel is measured on a monthly basis, chemicals at AWWU's treatment facilities are counted at the end of the year, and AWWU's Finance Division reconciles inventory to the SAP general ledger. AWWU maintains their own gasoline and diesel fuel tanks at the Arctic Boulevard, King Street, and Eklutna Water Treatment Plant locations.

**Objective and Scope.** The objective of this audit was to determine the accuracy of AWWU's inventory records for parts, fuel, and chemicals. To accomplish our objective, we performed inventory counts based on randomly and judgmentally selected samples at the Warehouse. We also inventoried all chemicals at AWWU's Eklutna and Ship Creek Water Treatment Plants and AWWU's Asplund and Eagle River Wastewater Treatment Plants. In addition, we inventoried fuel stored at AWWU's Arctic Boulevard, King Street, and Eklutna locations.

We conducted this performance audit in accordance with generally accepted government auditing standards, except for the requirement of an external quality control review. 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit was performed during the period of December 2019 through January 2020.

**Overall Evaluation.** Based on our test counts, the parts inventory records for the Warehouse were reasonably accurate. Likewise, inventory records for chemicals at AWWU's Eklutna, Ship Creek, and Eagle River facilities were reasonably accurate. Similarly, fuel inventories at various facilities were reasonably accurate. Regarding chemical inventories at the Asplund Wastewater Treatment Facility (AWWTF), the number of chemicals that had discrepancies between the book balance and the inventory count dropped from four in 2018 to one in 2019. Further management action is still required to ensure that chemicals at AWWTF are properly accounted for.

## FINDING AND RECOMMENDATION

### 1. **Chemical Variance Existed at Asplund Wastewater Treatment Facility.**

- a. **Finding.** The number of chemicals that had discrepancies between the book balance and the inventory count dropped from four in 2018 to one in 2019. During our inventory count, we identified an overage of 6,000 gallons of sodium hypochlorite (aka liquid bleach) at AWWTF. As a result, an adjustment of \$21,120 was made to increase Maximo and SAP records to the physical count. According to AWWU staff, the discrepancy is being investigated. They suspected that an issuance of sodium hypochlorite was entered twice or a vendor receipt was not entered.
- b. **Recommendation.** The AWWU General Manager should reinforce the business process of receiving, issuing, adjusting, and moving inventory in Maximo to ensure that inventory is properly recorded. In addition, the AWWU General Manager should

consider providing additional training regarding these business processes and emphasize the importance of timely documentation.

- c. **Management Comments.** Management stated, “AWWU Management concurs with the Audit Report Finding that there was a sodium hypochlorite chemical variance at Asplund Wastewater Treatment Facility (AWWTF). The variance was caused by two situations not specifically covered in the utility’s procedure guide.

“First, an activity needed for maintaining accuracy of this inventory item is timely receipt/input of the chemicals. The procedure was/is to receive the goods from the bill of lading (BOL), which may not arrive for days or even months after goods are received and happened multiple times throughout the year allowing the inventory balance to go negative.

“AWWU has implemented a procedure verifying receipt of the BOL at time of delivery by having the Foremen or Superintendent sign the BOL and forward the BOL to the expeditor for timely input into Maximo to prevent the negative balance in the future. Deliveries shall no longer be received at the facility unless a BOL is provided at the time of delivery. AWWU will also implement a software change to restrict balance in Maximo from going negative.

“The negative balance masked the impact of a second situation of a double issuance that occurred mid-year. This duplication should have been corrected with subsequent cycle (inventory) counts conducted by AWWTF staff. The Chemical Procedure Guide, requires inventory be counted by AWWTF staff monthly but the recorded counts were inaccurate and therefore no reconciliation occurred. AWWU has revised the chemical issuance log to include a signature block signifying the issuance has been input to Maximo ensuring that not only has the issuance been captured, but also it’s been processed in Maximo added this into the Chemical Procedure guide.

“Additionally, the AWWU Finance team will do periodic inventory counts to see if additional measures are needed to ensure inventory counts are accurate.”

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

**Discussion With Responsible Officials.** The results of this audit were discussed with appropriate Municipal officials on February 20, 2020.

Audit Staff:  
Scott Lee