

INTERNAL AUDIT REPORT

2021-07

Chemicals Inventory: Asplund Wastewater
Treatment Facility Follow-Up

Anchorage Water and Wastewater Utility

October 13, 2021

MUNICIPALITY OF ANCHORAGE
Internal Audit Department
632 W 6th Avenue, Suite 710
P.O. Box 196650
Anchorage, Alaska 99519-6650
www.muni.org/departments/internal_audit



INTERNAL AUDIT DEPARTMENT
Michael Chadwick, CIA, CICA
Director
Phone: (907) 343-4438

E-Mail: michael.chadwick@anchorageak.gov



MUNICIPALITY OF ANCHORAGE
MAYOR DAVE BRONSON

INTERNAL AUDIT DEPARTMENT

October 13, 2021

Honorable Mayor and Members of the Assembly:

I am pleased to present for your review **Internal Audit Report 2021-07, Chemicals Inventory: Asplund Wastewater Treatment Facility Follow-Up, Anchorage Water and Wastewater Utility**. A brief summary of the report is presented below.

In accordance with the 2021 Audit Plan, we have completed a chemical inventory follow-up audit at the Asplund Wastewater Treatment Facility. The objective of this audit was to conduct a follow-up audit to determine the effectiveness of corrective actions taken by Anchorage Water and Wastewater Utility on the deficiencies contained in Internal Audit Report 2019-04 and Internal Audit Report 2020-04. Specifically, on July 29, 2021, we inventoried all chemicals stored at Anchorage Water and Wastewater Utility's Asplund Wastewater Treatment Facility.

Based on our review, we found that management action was partially effective in correcting the issues identified in Internal Audit Report 2019-04 and Internal Audit Report 2020-04. Although our follow-up audit revealed that our physical inventory counts matched Anchorage Water and Wastewater's Maximo Work Management System records, recent receipts and usage of sodium hypochlorite, commonly called liquid bleach, were not recorded in the Municipality of Anchorage's SAP financial system and Anchorage Water and Wastewater's Maximo Work Management System.

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

Michael Chadwick, CIA, CICA
Director, Internal Audit



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Internal Audit Report 2021-07

**Chemicals Inventory: Asplund Wastewater Treatment Facility Follow-Up
Anchorage Water and Wastewater Utility**

Introduction. The Anchorage Water and Wastewater Utility (AWWU) maintains an inventory of chemicals. Chemicals are recorded in the inventory records using AWWU's Maximo Work Management System (Maximo) which interfaces with the Municipality of Anchorage's SAP financial system. When inventory is used, the usage is recorded in Maximo, and inventory receipts are recorded in SAP. According to AWWU staff, chemicals at AWWU's treatment facilities are counted monthly, and AWWU's Finance Division reconciles inventory to the SAP general ledger.

Objective and Scope. The objective of this audit was to conduct a follow-up audit to determine the effectiveness of corrective actions taken by AWWU on the deficiencies contained in Internal Audit Report 2019-04 and Internal Audit Report 2020-04. Specifically, on July 29, 2021, we inventoried all chemicals stored at AWWU's Asplund Wastewater Treatment Facility (AWWTF).

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. This inventory count of AWWU's chemicals at AWWTF is normally performed at the end of the calendar year. However, due to the COVID-19 pandemic it was delayed until July 2021.

Overall Evaluation. Management action was partially effective in correcting the issues identified in Internal Audit Report 2019-04 and Internal Audit Report 2020-04. Although our follow-up audit revealed that our physical inventory counts matched Maximo records, recent receipts and usage of sodium hypochlorite, commonly called liquid bleach, were not recorded in SAP and Maximo.

1. **Prior Audit Finding: Chemical Variances Existed at Asplund Wastewater Treatment Facility.** Chemicals inventoried at AWWTF had discrepancies between the book balance and the inventory count.

- a. **Corrective Action.** Although our physical chemical inventory counts matched Maximo inventory records, recent receipts and usage of sodium hypochlorite, commonly called liquid bleach, were not recorded in SAP and Maximo. AWWU staff should record the receipt of sodium hypochlorite in SAP and the usage in Maximo. In addition, AWWTF staff should record the receipt and usage of chemicals on a manual chemical usage sheet. The July 2021 chemical usage sheet for the sodium hypochlorite showed three entries for deliveries and three entries for usage. However, only one of these deliveries was entered into SAP and the corresponding usage was entered into Maximo. These entries were later reversed as explained below.

Sodium hypochlorite is used as a disinfecting agent in AWWTF's treatment processes. Due to equipment failures, AWWTF was unable to reliably produce enough sodium hypochlorite on-site. In addition, because of supply-chain disruptions there was a shortage of sodium hypochlorite. As a result, AWWU staff needed to find a way to secure a supply of sodium hypochlorite as quickly as possible.

Because of the shortage, it appeared that AWWU's existing vendor would be unable to deliver any sodium hypochlorite. Therefore, the Purchasing Department (Purchasing) instructed AWWU staff to provide vendor and pricing information to complete an emergency procurement request, if a vendor was found who could provide sodium hypochlorite. However, the existing vendor eventually supplied AWWU with sodium hypochlorite on July 20, 27, and 29.

- *July 20 and 27 Deliveries* – The pricing for the deliveries received on July 20 and 27 did not match the existing purchase order (PO). Therefore, the receipt of these purchases could not be entered into SAP. Despite the price difference, on July 29

AWWU staff entered the receipt of the July 27 delivery into SAP and AWWTF entered the usage into Maximo. These entries were later reversed because of the price difference.

- *July 29 Delivery* – According to AWWU staff, the delivery received on July 29 could not be entered into SAP because staff were unsure if the price matched the existing PO since different prices had been used for the previous two deliveries. AWWU staff eventually found that the pricing did match the existing PO.

On July 29, the day we conducted our physical chemical inventory counts, AWWU staff submitted a draft memorandum to Purchasing requesting an emergency procurement of sodium hypochlorite, which had already been delivered. Purchasing then instructed AWWU staff to use the current PO since the vendor had not changed. However, to use the existing PO AWWU staff needed to submit change orders for the July 20 and 27 deliveries because of the price differences.

- b. **Evaluation of Corrective Action.** Partially Effective.
- c. **Recommendation.** The AWWU General Manager should ensure that change orders are obtained as soon as possible so that the process of receiving, issuing, adjusting, and moving inventory in SAP and Maximo can be promptly completed.
- d. **Management Comments.** Management concurred and stated, “Management understands the recommendation and has updated the Chemical Inventory Procedure Guide effective September 21, 2021.”
- e. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

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Discussion With Responsible Officials. The results of this audit were discussed with appropriate Municipal officials on August 18, 2021.

Audit Staff:
Scott Lee