



ISO 14001 Internal Audit Report

Camden County Municipal Utilities Authority
Camden, New Jersey

Solids Handling Storage and Transportation

Audit Report Date: May 18, 2017

Audit Conducted by:

Douglas Burns, Chief Accountant
Scott Schreiber, Chief of Administration

DESCRIPTION

The CCMUA conducted an internal audit of Solids Handling Storage and Transportation starting on April 7, 2017. The focus of the audit was the Authority's Standard Operating Procedures (SOPs). The purpose was to determine if the Authority has appropriate documentation in the SOP format for this section of the Authority's Wastewater Treatment System.

SUMMARY OF AUDIT FINDINGS

The Authority SOP Manual should be current and reflect the actual procedures as conducted by the Authority. The Solids Handling Storage and Transportation SOPs should be revised to include current procedures and equipment used. The format of the SOPs should also be updated and separate from equipment operating instructions. A Corrective Action Plan (CAP) will be prepared to have the SOPs updated by 12/1/2017.

AUDIT DETAILS

The Executive Director, Andrew Kricun, selected two individuals as Internal Auditors who are not directly involved in the day-to-day operation of the plant. These Authority staff members are qualified to conduct the audit since they are managers who are familiar with the facility and were approved by the Executive Director.

This internal audit consisted of both interviews and the review of records. CCMUA Operational Managers were interviewed for this audit. The following is the list of the individuals interviewed:

Bob Cornforth, Director of Operations and Maintenance - Interceptors
Len Gipson, Director of Operations and Maintenance - Wastewater

The SOP's reviewed included:

- GBT Operations — Aquabelt Gravity Belt Thickening Operation
- Pressroom Job Assignments
- BFP Operation — Winklepress Dewatering Process
- BFP Loadings
- Operators Log
- Mass Balance; Wasting Rates; Optimization of Primary and Secondary
- Ratio; Maintaining Appropriate Sludge Levels
- Stranco Flow Processor Input Values
- Driver's Vehicle Inspection Report
- Trailer Loading — Dewatering Truck Station
- Rules for Unloading Tank Trucks
- CCMUA Rules and Regulations for Trucked/Hauled Waste

Authority SOPs

The CCMUA Standard Operating Policies and Procedures were reviewed. The section “Wastewater Treatment and Solids Generation” has been examined and each of the twelve SOPs listed above were discussed during the audit. The majority of the SOPs were dated June, 2010.

It was determined that several of the existing SOPs could be logically combined into a new SOP. Many had a section of the SOP which contained equipment operating instructions. Several of the existing SOPs dated before June, 2010 were found to consist of operating instructions only. These instructions can be referred to in the SOP, but should be a separate document, not the SOP Manual.

The SOPs have been circulated in hard copy printed form, only among management. The SOPs are not currently available to the system operators. These documents should be available in hard copy and on the Authority’s computer network for use by the system operators.

Updated SOPs:

The SOPs listed will be updated and consolidated as described below. The original list of 12 from the EMS audit will be rewritten to the 8 SOPs:

Solids Handling: There will now be 3 SOPs instead of 6.

- GBT operations
- BFP operations
- Operators Log

Sludge Storage and Transportation: The 4 SOP’s will be consolidated into 2 SOP’s.

- Sludge Storage
- Trucked Waste Rules