



City of St. Cloud Minnesota Wastewater Treatment Facility
BIOSOLIDS MANAGEMENT PROGRAM
Environmental Management System

INTERNAL AUDIT REPORT SUMMARY 2018

To: William R. Hancuff, NSF – International Strategic Registrations
Patrick Shea, Public Services Director
Tracy Hodel, Assistant Public Utilities Director

From: Sam Lobby, Environmental Compliance Specialist (EMS Coordinator)

C: Emma Larson, Utilities Water Quality Coordinator
Brian Schoenecker, Wastewater Services Manager
Noah Czech, Stormwater Compliance Specialist

Audit Date: 2/27/18

Audit Report Date: 3/26/18

Summary Report Date: 4/12/18

Auditors:

Brian Schoenecker, Wastewater Services Manager *
Noah Czech, Stormwater Compliance Specialist *
Patrick Shea, Public Services Director
Dave Coulter, Utilities Aide
Emma Larson, Utilities Water Quality Coordinator
Don Evans, Heavy Equipment Operator I

*Lead Auditor

Also present: Sam Lobby, Environmental Compliance Specialist

Tracy Hodel, Assistant Public Utilities Director
Chris Plautz, Wastewater Services Supervisor
Wayne Ethen, Heavy Equipment Operator II
David Wallen, Treatment Plant Operator
Jill Pauls, Water Services Specialist
Chris Webber, Treatment Plant Operator

Year 5 Platinum, Internal Audit included elements as listed in the current manual

Strengths of the Current Program:

“The result of the 2018 internal audit shows the WWTF EMS is continually looking for opportunities for improvement to meet and exceed goals and objectives. Actions taken in the last year and the implementation of opportunities for improvement displays dedication to the EMS program and meeting NBP outcomes. The WWTF staff take pride in the EMS program and producing a high quality product while protecting the environment. Recent staff and facility changes, and the use of ER Portal have prompted updates to the EMS Manual and several related documents that staff clearly had plans already in place to update. The internal audit remains a great tool to help improve and review the Program. The St. Cloud Biosolids Management Program continues to be second to none.”

Major Non-Conformance:

- None Identified.

Minor Non-Conformances:

- None Identified.

Opportunities for Improvement:

28 Opportunities for Improvement were identified throughout 11 elements (Corrective Action Plan, Attachment 2.)

Element 1: Biosolids Management Program Manual:

- 1) Update master calendar link under attachment 1.2. (COMPLETE)
- 2) Review the manual, policy statement and the goals and objectives to include updates related to the NR2 Project. (COMPLETE)

Element 3: Process Control Points:

- 3) Add Solids Stabilization Conditioning and Handling to Process Controls. (COMPLETE)
- 4) Add ER Portal references where appropriate into table 3.1. (COMPLETE)
- 5) Review process control points for additions from recently completed projects. (COMPLETE)
- 6) Clearly show in the manual potential and environmental impacts for each process control point. (COMPLETE)

Element 4: Legal and Other Requirements:

- 7) Update procedure 1.c in the Manual to properly identify when NPDES/SDS permit requirements are reviewed (e.g. master calendar reference). (COMPLETE)

Element 6: Public Participation in Planning:

- 8) Update attachment 6.2 (Interested Parties and 3rd Party Certification Audits) to reflect changes to staffing and other relevant changes. (COMPLETE)

Element 7: Roles and Responsibilities:

- 9) Update attachment 7.1 to reflect recent staff changes. (COMPLETE)
- 10) Add Wastewater Services Specialist position to tables 7.1 and 7.2. (COMPLETE)
- 11) Update the new employee orientation guide with one standard section about employee roles and responsibilities related to the Biosolids EMS. (COMPLETE)

Element 8: Training:

- 12) Include EMS related topics and goals into annual reviews for Public Utilities employees, where applicable.
- 13) At least twice a year add training schedule to the EBB and update training log and license log as reminders to staff on Master Calendar. (COMPLETE)
- 14) Include capability record in new hire orientation guideline packet. (COMPLETE)
- 15) Add Wastewater Services Specialist to table 8.2. (COMPLETE)

Element 10: Operational Controls:

- 16) Review and update SOPs on a regular basis – add annual review to Master Calendar. (COMPLETE)
- 17) Include EOS master index in EMS manual/F Drive Location. (COMPLETE)
- 18) Add Department of Transportation inspection checkbox to load slips. (COMPLETE)
- 19) Update Attachment 10.1 “Mission Statement”. (COMPLETE)
- 20) Review SOPs to ensure updated copies are located in necessary locations throughout the facility matching the master index.

Element 11: Emergency Response Plan:

- 21) Update attachment 11.2 Emergency Numbers Cards for Vehicles and review to ensure updated cards are in all trucks. (COMPLETE)
- 22) Update element to reflect the completion of the NR2 project.

Element 13: Monitoring and Measurement:

- 23) Review how controlled SOP/EOS storage can be improved to make them easier to locate.
- 24) Create a flow meter maintenance/calibration SOP for the biosolids tractors.

- 25) Add a reference to the weekly operator meetings in the element procedure. (COMPLETE)

Element 14: Non-Conformances, Corrective and Preventative Actions:

- 26) Update the reference numbers on page 2.c of the element. (COMPLETE)
- 27) Review and clarify which process control assets in ER Portal are considered EMS or could impact biosolids (e.g. trucks, fields, equipment).
- 28) Create a process to ensure routine operation non-conformances/opportunities for improvement are highlighted and reviewed in ER Portal then documented.

Other Corrective Action Documentation, Not Related to March 2017 Internal Audit

- 1) Update Checklist, implement requirement for ALL soil results to be returned prior to application. Notification to MPCA and EPA. (COMPLETE)

Goals and Objectives Review 2018 – Action Items

- 1) Goal #2: Suggest updating the action plan for objective 2.9 (COMPLETE)
- 2) Goal #4: Add a new objective related to the NR2 project. (COMPLETE)
- 3) Goal #6: Add a new objective to address optimization and High Strength Waste. (COMPLETE)

**Elements not listed continue to meet all audit and program related requirements.*

Actions taken on Previous Non-Conformances (Previous Audits: Year 4, Internal)

The internal audit team reviewed the corrective actions taken on the 6 opportunities for improvement identified during the 2017 internal audit.

Progress towards Goals and Objectives

It was determined that all 2017 goals and their associated objectives have been completed on time. Goals discussed at the 2018 meeting included goals 2,4, and 6 which have all been completed since the goals meeting review.

Performance of EMS as it Relates to 4 Key Outcomes

Environmental Performance: Staff continues to strive for meeting and exceeding regulatory compliance. The program also strives towards greater environmental sustainability through the NR2 project with the completion of construction and optimization in 2019 (Biosolids upgrades plan). Additionally, the E2B Biofuel project, which included the installation of a 633 kW biogas generator and storage membrane, were completed in 2017.

Regulatory Compliance: One potential regulatory violation occurred within the Biosolids program in 2017. The potential is related to an over application of biosolids on field H-2. The over application occurred because of MANA rate considerations due to soil organic matter. The over application of 7,341 gallons per acre on 115.3 acres was immediately reported to the MPCA with corrective actions being taken. See Appendix 3 for documentation submitted to the MPCA and EPA with Annual Report for Cropping Year 2017. At the time of this audit the MPCA has indicated that no action is being taken. No response has been received from the US EPA.

Interested Parties Relations: The 2017 Biofuel and Recovery Project was the recipient of the ACEC/MN Engineering Excellence – Grand Award. In October 2017 the City of St. Cloud received a certificate of recognition as a “Water Resources Utility of the Future Today.”

Additionally, several opportunities to engage and inform the public about the Biosolids Management Program were taken, including the Annual Touch-A-Truck event, several tours and site visits of the facility, and multiple presentations at professional conferences.

Quality Practices: Implementation of the EMS program continues to lead St. Cloud’s Biosolids Management Program to maintain a high quality, efficient agricultural product.

Evaluation of Management Review Process

Management Review process meets the requirements of the System.

Troublesome Areas of the System

None Listed.

Note: A Corrective Action plan is required for all major non-conformances with a completion date of 60 days from this report: No major non-conformances were identified in this audit.

ATTACHMENTS:

1. Internal Audit Report, 2018.
2. Internal Audit; Corrective Action Plan 2018.
3. EMS Management Review 2017 (Completed in 2018).