**Biosolids Internal Audit Report**

**Central Davis Sewer District**

Audit Conducted By:

Jace Woodrow, Biosolids Coordinator, Operator, Internal Auditor, Central Davis Sewer District

Aimee Matthies, Lab Technical Director, Biosolids/Pretreatment POI, Internal Auditor, Central Davis Sewer District

Jeff Canada, Pretreatment Inspector, Operator, Central Davis Sewer District

Torrey Hansen, Operator Trainee, Central Davis Sewer District

Dan Griffin, Environmental Engineer, Biosolids, DEQ, State of Utah

References:

National Biosolids Partnership (NBP) *Third Party Verification Auditor Guidance*

NBP *National Manual of Good Practice*

Central Davis Sewer District *Biosolids EMS Manual*

September 7, 2022

**Introduction:**

The purpose of the Central Davis Sewer District’s internal audit process is to identify areas of improvement within the Biosolids Environmental Management Systems (EMS) prior to and/ or between third-party audits. The audit was conducted against the standards presented by the National Biosolids Partnership (NBP) through the EMS program. The goal was to collect and review objective evidence that the District’s EMS is performing as intended, that the procedures are being performed as documented and that the EMS conforms to the NBP’s EMS Elements, the Code of Good Practice, the EMS program objectives, and internal program requirements.

**Audit Schedule and Scope:**

The internal audit team consisted of Jace Woodrow, Aimee Matthies, Jeff Canada, Torrey Hansen, and Dan Griffin. All titles and professional associations may be referred to on the cover sheet of this report.

The selected documents were reviewed for conformance to the District’s Biosolids EMS Manual. Listed below are documents reviewed:

* CDSD EMS Manual and associated appendices
* NBP EMS Report on Goals and Objectives- reporting year 2022

The audit team conducted document review on Elements 1, 2, 3, 5, 11, and 13 and SOP’s 1, 8, 10, and 14 from the EMS.

**Findings:**

Opportunities For Improvement

* Element 1- Add the odor control flow chart
* Element 11- Add emergency response plan to the manual or reference the SOP that has the plan. (SOP 15)
* Element 13- Digester records are kept in 3 places instead of 2 (outside the laboratory as well as in the Digester room)
* Element 13- Biosolids reports will be kept in Aimee’s office rather than the Engineer’s office.
* SOP 1- Include belt press as a sampling location
* SOP 1- Change the attached bench sheet and wording
* SOP 8- Change increment dosing from 0.5 gallons to 1 gallon per ability of instrument
* SOP 10- Add water hose as a source of dust control for grinder
* SOP 14- Change minimum digester level to 13.5 instead of 15.5 ft
* SOP 14- Notify Assistant Manager (Manjot) rather than the Engineer
* Add signs for “Authorized Personnel Only” and “Biosolids land application” signs at the following locations:
	+ The southeast gate
	+ The new gate for the West Davis Corridor
	+ Along the new chain link fence on the west side of the property
	+ On the east fence closest to the houses
	+ On the main entrance road fence
* Add “Critical Control Point” labels and/or signs at the following locations:
	+ On the odor blower shed
	+ The new and old dewatering buildings
	+ The digester
	+ The Alum for both the Trickling Filter and the Oxidation Ditch
	+ The hypochlorite
	+ The chlorine
	+ The utility water

**Conclusions:**

Central Davis Sewer District has committed to a tremendous use of time, energy, and manpower towards certification through the National Biosolids Partnership (NBP). The commitment to the EMS by the team at CDSD should be recognized for their dedication. Auditors for this year determined that most of the findings they had were grammatical and/ or wording changes due to changes in staff responsibilities and titles. The only actionable changes for the plant were those that included the need for more signs to be posted around the plant at appropriate areas for “Authorized Personnel” and “Biosolids Land Application Site” signage and “Critical Control Point” labels. These findings are minimal and the documents were reviewed and discussed to ensure details were clearly understood by the team and any needed corrections submitted before adjournment.