Monitoring and Research Goals and Objectives for 2016 – 2018

Goal: Oversee the composted biosolids production.

Objective
Provide technical support and oversight to the Metropolitan Water Reclamation District of Greater Chicago's biosolids co-composting with woodchips and/or yard waste operation to produce Class A compost.

Description
The Biosolids Utilization and Soil Science Section (Section 123) staff will test feedstock for solids content, monitor composting temperature, and test the final product for fecal coliform.

Measurability
Targeted fecal coliform is <1000 MPN/g dry solids and targeted temperature in the composting windrows is 55°C. The windrow temperature will be maintained at 55°C for at least 15 days and the windrow will be flipped for five times.

Effect on Biosolids Production
Testing of feedstock for solids content will ensure the feedstock mixture is prepared properly to achieve the targeted dry-weight basis mixing ratio. This will help meet the composting temperature requirement. Testing of the final product will ensure composted biosolids also meet the Class A requirement for the pathogen standard.

Relevant Environmental Management System Outcomes
Improve public acceptance of biosolids under the Controlled Solids Distribution Program.

Action Plan
The Section 123 staff will analyze biosolids and woodchips for solids content and calculate the ratio of biosolids to bulking materials on the volume basis for the M&O Department to prepare the desired blend for constructing windrows. The Section 123 staff will also monitor the time and temperature of composting windrows and make recommendations for turning as required to produce Class A compost. The final product will be analyzed for fecal coliform.

Tracking Progress
Each compost batch will be tracked for the measurability parameters. Dates of each turning will be recorded. Data will be reported to the M&O Department as needed. A summary of the measurability goals will be included in quarterly reports.

Funds/Resources
Funds are included in the annual budget.

Responsible Person(s)
Senior Environmental Soil Scientist and Supervising Environmental Soil Scientist

Target Date
December 2016-2018