

# **SUMMARY OF MADISON METROPOLITAN SEWERAGE DISTRICT'S EMS THIRD PARTY VERIFICATION REPORT**

## **Introduction**

The NSF- International Strategic Registrations, Ltd. (NSF-ISR) conducted an independent third party verification audit of the Madison Metropolitan Sewerage District's Metrogro Biosolids Environmental Management System. The purpose of the Biosolids Environmental Management System (EMS) Third Party Verification audit was to verify that the District was conforming to EMS requirements established by the National Biosolids Partnership (NBP).

## **Recommendation**

The results of the MMSD verification audit were positive and the audit team recommended that the MMSD Metrogro Biosolids EMS receive "Verification" status.

## **Audit Scope**

The goal of the Third Party Verification audit was to collect and evaluate objective evidence that determined whether MMSD's biosolids EMS was functioning as intended, that practices and procedures are conducted as documented, and that the EMS as implemented conforms with the NBP's Code of Good Practice and EMS program objectives. The verification began with a documentation review (desk audit) substantially completed in late July and presented to MMSD on July 30, 2004. The process continued with an on-site verification audit from 7 September to 10 September 2004.

The physical biosolids facilities included in the audit and visited during the verification audit period included the MMSD Administrative Offices, MMSD Wastewater Treatment Plant, Metrogro Processing and Transportation Facilities, and various farm application sites. The audit team selected four different ultimate use application sites to visit. These were selected based on the fact that each one represented a different geographical area (county): Rock County, Green County, Columbia County and Dane County.

## **Audit Results**

### **A) Positive Observations**

The MMSD Metrogro personnel involved in biosolids management should be recognized for their outstanding achievements, and the exceptional features of their Biosolids Management System. The following is a summary of those positive items observed during the audit.

- The District has a long history of excellence in biosolids management, as evidenced by the public acceptance of its fertilizer and soil conditioner product.
- The operational engineering staff has done an excellent job at providing the necessary expertise at the treatment plant to facilitate implementation of the new EMS program.

- The laboratory provides outstanding support. The chemists and lab technicians are dedicated to rapid turn around of key laboratory analyses during the most critical times for land application.
- The District has an innovative and especially effective approach to its pro-active public participation program, through the use of an external advisory committee.
- Additionally, there is an uncharacteristically high involvement of MMSD in community projects such as plant tours, school/community presentations and participation in University research.
- MMSD must be recognized for going beyond the regulatory requirements through implementation of its water well sampling program, and nutrient management efforts through its three-year site application rotation.
- The agricultural expertise of the Metrogro management is impressive. The burden of meeting the vagaries of a diverse group of farmers is a constant challenge. The management's dedication to doing the best job possible is unparalleled.
- Both employees and contractors who drive biosolids trucks and operate land application equipment demonstrate an enthusiastic support of the biosolids-recycling concept.
- The public image associated with Metrogro trucks is truly inspiring, from the choice of paint colors and logo, to the polished appearance of the tankers.
- The hard work, dedication and undying persistence of the EMS manager must be acknowledged. This aggressive leadership has made the EMS verification a reality. While the attainment of the goal is obviously a team effort the effectiveness of guidance provided by the management assured accomplishment.

### **B) Documentation Review (Desk Audit) Audit Findings**

The documentation review identified 45 findings. Many of the findings were based on unavailability of information and/or the lack of objective evidence needed to confirm conformance with the standard at this stage of the audit. Much of this missing information was subsequently made available to the auditor during the on-site verification audit. All but one of the major nonconformances identified during the desk audit were closed during the subsequent verification audit, with the remaining major nonconformance being reclassified as a minor nonconformance. All but four of the minor nonconformances identified during the desk audit were closed during the subsequent verification audit. In addition, all opportunities for improvement identified during the desk audit were addressed.

### **C) Verification Audit Findings**

The verification audit covered all elements of the standard in considerably greater detail than the desk audit, being performed by two auditors over a period of four days. The

verification audit found no major non-conformances, 5 minor non-conformances and 7 opportunities for improvement for a total of 12 findings. For a system which is more complex than the ISO 14001 standard, that is an impressive accomplishment.

#### **Additional Audit Information**

The complete audit report is available upon request. Additional information about the National Biosolids Partnership can be found at <http://www.biosolids.org>.