

SUMMARY OF NATIONAL BIOSOLIDS PARTNERSHIP AUDIT REPORT For King County Wastewater Treatment Division

Conclusions and Recommendation

The results of the verification audit are positive. The review and approval of the corrective action plans for each of the non-conformances has been satisfied, and it is the recommendation of the audit team that the County receive "Verification" status. Verification is not the end, but rather the beginning of a continuously improving biosolids management system.

Summary of Scope and Findings

The purpose of the Biosolids Environmental Management System (EMS) Third Party Verification audit is to verify King County's (KC) conformance to EMS requirements of the National Biosolids Partnership (NBP). The goal of the Third Party Verification audit is to collect and evaluate objective evidence that determines whether KC's biosolids EMS is 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 NSF-International Strategic Registrations, Ltd. (NSF-ISR) conducted the third party verification audit of the King County Wastewater Treatment Division's Biosolids Environmental Management System. The verification began with a desk audit substantially completed in November 2003 and presented to King County on 2 March 2004. The process continued with an on-site readiness review from 22 March to 24 March 2004 and an on-site verification audit from 19 May to 25 May 2004.

The physical biosolids facilities included in the audit and visited during the verification audit period included the King Street Center, West Point Treatment Plant, South Treatment Plant, Industrial Waste Pretreatment Offices, Boulder Park Soil Improvement Project, Green Valley Soil Enhancement Project, Hancock Snoqualmie Forest, Great Western Soil Conditioners, and the GroCo Compost Project. During each of these visits various documents were reviewed and staff and contractors were interviewed to verify conformance with the NBP EMS program auditor guidance.

There have been significant improvements in the King County Biosolids EMS over the past few months as reflected in the number of findings identified in the desk top audit and operational readiness review, when compared to the number of findings of the verification audit. While no single audit identifies all of the areas for improvement, the results of each audit provide an additional incremental step in the system's improvement. The combination of the desktop audit and the operational readiness review had 6 major non-conformances, 10 minor non-conformances along with 28 opportunities for improvement, for a total of 44 findings.

The verification audit covered all elements of the standard in considerably greater detail than the previous audits, being performed by two auditors over a period of five days. The results demonstrate a considerable improvement in the system. The verification audit found no major

non-conformances, 7 minor non-conformances and 4 opportunities for improvement for a total of 11 findings. For a system that is considerably more complex than the ISO 14001 standard, that is impressive.

“Outcomes Matter” Requirements Fulfilled

- King County (KC) has established goals and objectives for improving **environmental performance** of biosolids management activities based on critical control points, identified or potential environmental impacts, regulatory requirements, best management practices; as well as input from interested parties. These goals and objectives include:
 - Dewatering process improvements at the South Plant
 - Change to high solids centrifuges at the South Plant
 - Improvements at treatment plants (screening and maceration) for the elimination/reduction of plastics and debris at the West Point plant.
- KC has addressed many **regulatory compliance** items through tracking compliance obligations, and incorporating legal and other requirements into the monitoring and measurement procedures. Examples include:
 - No NPDES permit violations at the treatment plants in 2002
 - Adoption and enforcement of new ordinance to require installation of amalgam separators at dental offices
- KC has established two-way communication flows with **interested parties** through brochures, advisory groups, an Internet Web site, tours, and other public educational tools. Interested parties are provided with information about biosolids activities and invited to express their views on the KC programs. Reactions by KC to interested parties inquiries and comments include key activities such as:
 - A web site which includes links to several informational areas such as State and local agencies, as well as links for comments and emailing KC directly to provide a Q & A format, with timely responses.
 - Regular surveys for public opinion
 - Timely responses to complaints, with positive results pertaining to the complaints.
- KC has verified the Critical Control Points and associated Operational Controls, which are consistent with the National Code of Good Practice in order to monitor **quality practices for biosolids management**. Examples include:
 - Maintaining 150% capacity for recycling the biosolids, which is also part of the Division-wide “Balanced Scorecard” goals.
 - A commitment to long-term research on biosolids odors at end use sites
 - Using a “Prediction Model for Biosolids Quality” which predicts biosolids quality prior to distribution, based on influent information.

Attachment 1

National Biosolids Partnership Appeals Process

Biosolids organizations that participate in the National Biosolids Partnership (NBP) Environmental Management System (EMS) Program are required to undergo an EMS verification audit by an independent, third party auditor assigned by the NBP and yearly interim audits. The purpose of the EMS audit is to determine whether or not the organization's EMS conforms with -- that is, meets the requirements of -- the NBP program, as defined in the *EMS Elements*¹. The spirit of these requirements includes a well-documented program and meaningful opportunities for interested party involvement.

The NBP provides an appeals process for biosolids organizations and interested parties that disagree with the findings of a third party EMS audit. The verification appeals process involves an Appeals Board; representing a balance of biosolids management interested parties, including an environmental advocacy group, and wastewater industry professionals. *An appeal must be submitted within 60 days of the public release of the audit report containing the audit company's official verification decision or interim audit decision.*

To submit an appeal before the Appeals Board, the petitioner must set forth the specific EMS element(s) and requirement(s) that are believed to have not been evaluated and/or implemented consistent with NBP requirements as reflected in the *EMS Elements*, along with the objective evidence to support that claim. For example, a petitioner may believe that a major nonconformance exists but was not found by the auditor. In this case, the petitioner would need to identify in the petition the specific EMS element believed to be out of conformance and why.

To submit an appeal, petitioners must fill out and submit the standardized appeals petition form that is available on the NBP website at <http://www.biosolids.org>. A formal appeal must be submitted within 60 days of the public release of the audit report containing the verification decision or interim audit decision by the audit company.

The Board's Administrative Officer receives all appeals petitions on behalf of the Board and conducts a basic completeness check. Upon completion of this check, the petition is either forwarded to Appeals Board members or back to the petitioner with incomplete areas documented. Petitions should be sent via certified, return receipt requested mail to:

The NBP EMS Appeals Board, Attention: Board Administrative Officer, c/o Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314

The Appeals Board will examine the facts, interview parties involved, deliberate the case, and then make a determination as to whether a major nonconformance does or does not exist. Appeals cases vary in complexity. As a result, the time required for the Board to evaluate a case and make a decision might vary. However, the overall Board target for processing an appeal is approximately four months.

¹ The *EMS Elements* and other program materials are available on the NBP website at <http://www.biosolids.org>.