NATIONAL BIOSOLIDS PARTNERSHIP
REVERIFICATION AUDIT REPORT

Village Creek Wastewater Treatment Plant
Fort Worth, Texas

Audit conducted by

NSF-International Strategic Registrations

William R. Hancuff, Lead Auditor

References:
National Biosolids Partnership (NBP) – *EMS Elements*
NBP – *Third Party Verification Auditor Guidance – August 2007*
NBP – *Code of Good Practice*
Village Creek Wastewater Treatment Plant
Environmental Management System for Biosolids Manual
(Latest Revisions – September 23, 2010)

Final Report – December 1, 2010

INTRODUCTION

The purpose of the Biosolids Environmental Management System (EMS) re-verification audit is to verify the Village Creek Wastewater Treatment Plant (VCWWTP) Environmental Management System (EMS) for Biosolids, Fort Worth, Texas, conforms to EMS requirements of the National Biosolids Partnership (NBP).

The goal of the Third Party re-verification audit is to collect and evaluate objective evidence that determines whether the VCWWTP biosolids EMS is functioning as intended, that practices and procedures are conducted as documented, and that the EMS as implemented conforms to the NBP's EMS Elements, the Code of Good Practice and the EMS program objectives.

RECOMMENDATION

The results of the Village Creek Wastewater Treatment Plant's Re-verification audit are positive and it is the recommendation of NSF that the VCWWTP's Biosolids EMS continue its "Verification" status.

AUDIT SCOPE

The NSF- International Strategic Registrations, Ltd. (NSF-ISR) conducted a third party re-verification audit of the Village Creek Wastewater Treatment Plant's Environmental Management System for Biosolids from September 28, through October 1, 2010. The on-site re-verification audit team consisted of Dr. William R. Hancuff, Lead Auditor.

In general terms, the scope of the Third Party Re-verification audit encompassed the entire biosolids value chain (pretreatment, collection and treatment, through final end use) with special attention on those practices and management activities that directly support biosolids-related operations, processes, and activities within the biosolids value chain.

The physical biosolids facilities visited during the re-verification audit included the VCWWTP administrative offices, two sets of headworks, two sets of bar screens, grit chamber and classifier building, primary settling tanks, septic truck unloading facilities, woodchip biofilter odor scrubbers, aeration tanks, secondary clarifiers, dual media filter with traveling bridge backwash, deep media filters, backwash clarifiers, dissolved air floatation thickeners, anaerobic digesters, digester gas compressors for generators, biosolids holding tanks, biosolids belt presses, cationic polymer feed system, lime silos, lime mixing augers, lime treated biosolids collection pads, truck scales, truck maintenance facilities, chlorination/dechlorination facilities, high rate clarifiers for storm flow treatment, wastewater outfall, new wet weather biosolids storage pad in Parker County, and biosolids land application site in Johnson County.

The following individuals were interviewed as part of the re-verification audit process:

Sebastian "Buster" Fichera – Assistant Water Director of Wastewater Treatment
Steven Nutter – Biosolids Manager/EMS Manager
Jerry Pressley – Water System Superintendent
Ben Davis – REI – Biosolids Manager
Richard Talley – City of Fort Worth Environmental Regulation (E/R) Coordinator
Ron Carlson – Plant Engineer, VCWWTP
Gary LaGassy – Assistant Water System Superintendent, VCWWTP
Ginger Laird – Training Specialist
Tony Bianchini – Safety Coordinator
Shane Isbell – Environmental Investigator Water Programs – TCEQ Region IV
Eric Valdez – REI – dewatering operator
Douglas Gomez – REI – land application site truck driver
Jose Valdez – REI – land application supervisor
Eric Evans – REI – land application site truck driver

RE-VERIFICATION AUDIT FINDINGS

The re-verification audit found 1 major non-conformances (which was corrected before recommendation for verification), 8 minor non-conformance, 15 opportunity for improvement and 4 positive commendations.

The following is a review of the positive observations made during the re-verification audit. The major non-conformances, minor non-conformances and opportunities for improvement follow and are listed by requirement number in the sequence of the Third Party Verification Auditor Guidance.

Positive Observations

Renda Environmental, Inc. (REI) maintains exemplary biosolids controls and standard operating procedures.

Ft. Worth is to be commended for pursuing creative financing that allows the plant to establish capital intensive biosolids goals and objectives, which would otherwise not be able to be implemented in the current economy.

The Village Creek Wastewater Treatment Plant personnel maintain an excellent working relationship with the state regulators at TCEQ, and have overcome past compliance issues by maintaining an exceptional performance record.

There is outstanding cooperation and coordination between the VCWWTP and their biosolids contractor REI, resulting in a seamless operation.

Major Nonconformance

Requirement 5 – There was a systemic breakdown associated with identification of new goals and a stagnation of progress on existing goals and objectives.

Requirement 5.2 – The standard requires goals and objectives to be established to improve performance of biosolids management activities. The first goal of attaining 100% beneficial reuse of Class A biosolids has been a goal from 2005 through 2010 and has been attained every year. Since it has been accomplished for five straight years, this goal no longer represents "improved" performance of biosolids management activities. Several objectives were not accomplished in 2009 and removed, while a few objectives which were completed in 2009 were carried over as objectives into 2010. This also did not represent continual improvement.

Requirement 5.3 – It was not possible to demonstrate that input from interested parties developed through proactive public participation was considered in developing program goals and objectives.

Requirement 5.5 – Goals and objectives must meet the Specific, Measurable, Achievable, Relevant and Time-bound (SMART) criteria. While there has been improvement in this area over the past couple years, some of the goals and objectives still did not meet these criteria. For example the objective of Biosolids Master Plan development was not able to be time-bound and may not be achievable. The objective of biosolids contract renewal was not measurable, and perhaps not relevant in terms of improved performance. The goal of increased public awareness and participation did not include a measurable parameter. The objective of digester cleaning was time-bound but the bounds were moved from year to year without progress.

Requirement 5.6 – Program goals and objectives must be updated on a regular basis, however there were no significant new goals and objectives established moving from 2009 to 2010. Also within the procedure section of the Village Creek EMS Manual Element 5.0 the method used for the removal of goals in not addressed.

Requirement 5.7 – The Review section of the Village Creek EMS Manual Element 5.0 does not reflect that progress towards the biosolids goals and objectives are reviewed and updated quarterly. Additionally there is no record of scheduled progress meetings demonstrating progress or summarizing adjustments needed in action plans, other than the goals and objectives controlled by REI.

Minor Nonconformances

Requirement 1.2 – Within the Management Support section of the Village Creek EMS Manual Element 1.0 it states that the Assistant City Manager, Water Director, and Assistant Water Director of Wastewater Treatment all approve the biosolids EMS

manual. There is no record of all of these individuals approving the manual, and the manual is signed only by the Assistant Water Director of Wastewater.

Requirement 6.5 – Over the years, limited input from interested parties has been used in developing and updating EMS goals and objectives.

Requirement 8.1 – The current EMS training program does not address how each employee's assigned roles and responsibilities relate to the entire biosolids value chain.

Requirement 11.1 – No specific Emergency Preparedness and Response Plans and Procedures have been developed to assure effective responses to accidents and emergency situations associated with biosolids management activities, other than in vehicle transportation of biosolids. (Note: other chemical spill plans have been developed.)

Requirement 13.1 – The Goals and Objectives (G&O) section of the Village Creek EMS Manual Element 13.0 does not adequately describe the frequency needed to monitor progress on the biosolids EMS goals and objectives. Additionally the tracking of G&O progress itself has not been sufficient.

Requirement 14.6 – The corrective action notices (CANs) associated with Biosolids EMS audits were not implemented in a timely manner.

Requirement 15.2 – The Biosolids Management Program Report for 2008 was due to be made available by November 15 of that year. The report was not completed until June 2010.

Requirement 16.1 – The Village Creek EMS Manual Element 16.0 indicates that the internal audit of the Biosolids EMS will be conducted annually and the EMS Planning Schedule indicates this would be performed within the June-July timeframe. The internal audit for 2010 had not yet been performed.

Opportunities for Improvement

Requirement 1 – Throughout various element procedures found in the EMS manual it indicates that the Director of the Water Department has specific responsibilities, however very few of these are actually carried out by the Director. Consider more clearly defining the Village Creek Wastewater Treatment Plant positions which have the true responsibilities for each element activity.

Requirement 1 – Within the EMS Manual Review section of the Village Creek EMS Manual Element 1.0 it indicates the City annually reviews and evaluates the biosolids EMS and EMS Manual during EMS Management Reviews, Internal Audits, third party interim audits, and full third party verification audits. This is not an accurate description of the City's annual EMS manual review.

Requirement 1 – Review each of the Village Creek Manual EMS elements to ensure the references are current, appropriate, relevant and comprehensive, and consider including a reference to the EMS Planning Schedule (By Calendar Year) in each one of the elements to which this schedule applies.

Requirement 1.7 – Various parts of the EMS manual refer to biosolids management responsibilities of Halff and Associates, however, this contractor no longer has any EMS responsibilities.

Requirement 4.1 – Within the procedure section of the Village Creek EMS Manual Element 4.0 it references the use of the New Hampshire Pretreatment Coordinator Group publications; the usefulness of this reference is not clear and it has never been used.

Requirement 6.1 – Review each of the public participation methods identified in the Village Creek EMS Manual Element 6.0 to determine each one's effectiveness as a proactive mechanism and consider specifically identifying and implementing only those that are most appropriate for the Village Creek Biosolids program.

Requirement 7.1 – Review Table 1 of the Village Creek EMS Manual Element 7.0 to determine its relevance and usefulness in defining or describing the biosolids EMS activities.

Requirement 7.2 – Consider preparing a formal Biosolids EMS manager appointment letter signed by the Assistant Water Director of Wastewater Treatment indicating that this individual has the responsibility for ensuring that the biosolids management program is implemented and maintained.

Requirement 8.1 – Consider conducting periodic biosoids EMS refresher training.

Requirement 9.2 – Clarify the responsibilities of the City and the contractor in Item 2 of Appendix 9a of the Village Creek EMS Manual Element 9.0.

Requirement 10.1 – Many of the critical control point SOPs have not been reviewed or revised since 2005. Consider scheduling a regular review of these procedures so that they can be updated as operational or other changes occur.

Requirement 12.2 – Ensure that all copies of the EMS manual and SOPs are current and no outdated versions are available. (Note: the discussion on EMS Manual Locations presented in Element 1.0 does not ensure that the manuals are properly controlled.)

Requirement 14.1 – Consider referencing the City's "SOP Creation/Revision/Updates" procedure in the EMS Manual Element 14.0.

Requirement 14.4 – Consider preparing a corrective action notice (CAN) for the berm failure at the new wet weather biosolids storage pad, to include restoration of the failed

section which will prevent future failures and installation of a drain valve to discharge uncontaminated water and minimize collection of excess water.

Requirement 17.1 – The annual "Public Forum" does not appear to have the effectiveness that was originally anticipated. Consider revisiting this approach.

When a major nonconformance has been identified during an audit the organization must resolve the nonconformance and have the auditor verify that the nonconformance has been corrected before the verification recommendation can be forwarded to the NBP. In other words, the correction of the major nonconformance must be verified before the process may continue. There is no specified time required for the correction to be completed, however 90 days is established as a reasonable outside limit. Based on an agreement between the VCWWTP personnel and the auditor, the major nonconformance corrective action documentation was prepared and the corrective action plan implemented within 60 days. In the opinion of the auditor the corrective action was sufficiently implemented to permit the recommendation for re-verification.

The corrective actions for minor non-conformances were also be prepared, submitted and reviewed by the auditor within 30 days. The corrective action approaches and schedules for closure were approved. Verification of closure of these minor findings will be submitted to the auditor as they are accomplished and the field verification of their implementation will be completed during the next third party interim audit.

VILLAGE CREEK WASTEWATER TREATMENT PLANT COMMENTS

The Fort Worth Water Department is fully committed to its NBP certified Environmental Management System (EMS). We recognize the opportunity to improve our program as a result of the issues identified during the third party audit. Fort Worth will fully implement the needed changes and will strive to continually improve its EMS program.

OUTCOMES MATTER

The City of Fort Worth Environmental Management System for Biosolids established four major EMS biosolids goals for 2009 and 2010. They were (1) 100% Beneficial Reuse of Class A Biosolids, (2) Comply with all Federal, State and Local Regulatory Requirements, (3) Increase Public Awareness and Participation, and (4) Improve Biosolids Quality. These were the same goals as were established from 2006 through 2010, with some changes or modifications of the objectives contained within each of the goals. There were 13 objectives within those goals for 2009 and 9 objectives for 2010. Some of the objectives were the same, some were dropped and others were added. These goals and objectives were developed by the EMS management team cognizant of the concerns of the general public and input from the facility's staff. However, the results of a proactive public participation program were not used to develop any specific objectives. The goals were established to ensure accomplishments within each of the four outcome focal points of the NBP program as identified below:

1. Environmental Performance,
2. Regulatory Compliance,
3. Relations with Interested Parties, and
4. Quality Biosolids Management Practices.

While it is not a requirement to attain all objectives established, a critical part of the system is to make progress towards the overall goals. Because of several factors, not the least of which was the retirement of the biosolids EMS manager, many of the goals and objectives were not accomplished. Some objectives were found to be technically or financially infeasible while others experienced considerable delays because of budget constraints and others were dropped after determining they did not meet SMART criteria. The City of Fort Worth's performance relative to each of the above groups is addressed below.

In the Environmental Performance area, the City of Fort Worth's Biosolids program established a goal of "100% beneficial reuse of class A biosolids" in 2005, and has maintained this goal through the present year. There were four objectives in 2009 within this overarching goal; three of these were carried forward in their entirety as objectives for 2010:

The following are the objectives and the degree of accomplishment of each in 2009 and 2010.

- The first objective was to collect data and other information on the cost of land application and other beneficial reuse methods so that a comparison of alternative options could be made. This objective was completed in July 2009, but was carried over as an objective into 2010.

- The second objective was to evaluate options for alternative contracts to process and dispose of biosolids. The evaluations were completed in September 2009. It was determined to continue for five years with the existing contractor using the current biosolids processing and disposal methods. This objective was carried over into 2010 with the ultimate accomplishment being attained in May 2010 when the existing contract was renewed.

- The third objective was to develop a marketing and distribution plan for land application of the Ft. Worth biosolids. After a preliminary evaluation it was determined that a marketing program was not necessary because of the extensive demand for the current product, so the objective was dropped from the 2009 list of objectives and not completed.

- The fourth objective was to develop a biosolids program master plan. This project was to be completed by a consultant and included preparation of a master plan to address the long term beneficial biosolids reuse options. This project was not funded and was carried forward as an objective for 2010, but was again not funded. No progress has been made on this objective.

The overall goal of maintaining 100% beneficial reuse of class A biosolids was attained for 2009 and 2010 through the present, but not all of the objectives were met.

In addition to the environmental performance outcome area the above objectives and targets have secondary impacts on the outcome areas associated with relations with interested parties and quality biosolids management practices.

In the Relations with Interested Parties area, the City of Fort Worth's Biosolids program established a goal to "increase public awareness and participation" in 2005 and has maintained it through the present. In 2009 within this goal there were three objectives, none of which were accomplished and were dropped as objectives. In 2010 two new objectives were established within this goal and little progress has been made to date. The following are the first three objectives for 2009:

- The first objective was carried over from 2006-2008 and was to expand relationships with extension agents. The plan was intended to promote biosolids product information through the agents and obtain information from agents regarding potential concerns associated with biosolids use. This objective was not accomplished, but reformulated into a new objective for 2010.

- The second objective for 2009 was to establish a marketing strategy for local county opportunities for land application through setting up a booth at the local county fair. This was a similar objective to the third objective identified in the environmental performance outcome area and it was also concluded that since the wastewater plant already has more than enough participants in the land application program this was not accomplished but reformulated into a new objective for 2010.

- The third objective for 2009 was to establish a relationship with the local Future Farmers of America (FFA). This objective was to meet with local FFA leaders in order to participate in FFA group meetings to share biosolids information. This objective was not accomplished, but reformulated into a new objective for 2010.

The two objectives for 2010 are discussed below:

- The first objective represents the reformulation of the three objectives from 2009. This new objective is to modify the EMS to formalize relationships with Extension agencies, FFA groups, County fair contacts, etc. The intension was to expand relationships with agricultural interested parties. The plan was intended to provide biosolids product information through these forums and obtain information from regarding potential concerns associated with biosolids use. There has been no progress to date on this objective.

- The second objective for 2010 was to update outreach techniques to the general public (i.e. non-land owners). Little progress has been made on this objective.

The City of Fort Worth's Biosolids program generally did not attained its objectives in this outcome area.

In the Regulatory Compliance area, the City of Fort Worth's Biosolids program established a goal to "comply with all federal, state, and local regulatory requirements" in 2005 and has maintained this goal through the present.

There were three objectives established in 2009, and two of these were carried over into 2010 as objectives.

- The first objective was to monitor legislation (federal and state) for new sludge rules related to phosphorus in land application. Because this activity is one of the standard procedures required by the biosolids EMS this was dropped as an objective.

- The second objective was to construct modifications to the concrete storage pad at the dewatering facilities to better facilitate holding all biosolids 24 hours before transport as required by TCEQ 312 rules for vector attraction reduction. The construction of the new pad was completed in July 2009 and this objective was accomplished. Although this objective was attained in 2009 it was carried over as an objective in 2010.

- The third objective was to modify the dewatering facilities through addition of a belt filter press, piping and equipment to provide adequate back up to consistently meet regulatory requirements. This project was partially completed in 2009 and carried over as an objective in 2010. The objective was attained in August 2010.

The goal of compliance with federal and state regulatory requirement was generally attained.

In the Quality Biosolids Management Practices area, the City of Fort Worth's Biosolids program established a goal to "improve biosolids quality" in 2005 and has maintained that goal through the present. Within this goal three objectives were established for 2009 and two of these were carried over in their entirety to 2010. The following are the objectives and the degree of accomplishment of each:

- The first objective has been carried over year after year since 2005. It is to establish a digester cleaning program to remove rags, plastics and other inorganics that have accumulated prior to fine screening implementation. The following four sub-objectives that have a secondary impact on the environmental performance outcomes were established within this objective:
    - Develop digester cleaning schedule. This sub-objective was accomplished in 2005.
    - Prepare contract documents to clean two digesters per year. This sub-objective was carried over into 2006-2007 and 2007-2008.

- Execute contract. This sub-objective was carried over into 2006-2007 and 2007-2008

Because of funding constraints this objective had been delayed for several years and carried over to the 2010 objectives. However, through an innovatively financed contract this project will finally commence in early 2011.

- The second objective was to clean out the equalization basins. This was completed by July 2009 but was inappropriately carried over as an objective in 2010.

- The third objective was carried over from 2006 through 2009. It was to evaluate odor controlling enzymes used in landfills for potential application at the biosolids processing facilities and land application sites. On completion of the study this option was determined to be cost prohibitive and therefore not implemented.

The City of Fort Worth's Biosolids program has accomplished some of its goal to "improve biosolids quality," and is re-establishing its efforts in the four major outcome areas late in 2010. It is the plan to revitalize the goals and objectives program through a completely new approach.

CONCLUSIONS AND RECOMMENDATIONS

After confirmation of the closure of the major finding, the results of the re-verification audit were positive. The review and approval of the corrective action plans for the minor non-conformance identified during the re-verification audit were completed, and it based on those approvals the recommendation of the audit team that the Village Creek Wastewater Treatment Plant's EMS for biosolids will be to maintain its "Verification" status.

Discussions between the VCWWTP Biosolids EMS manager and the third party auditor resulted in agreement to the following proposed interim audit approach. Each interim audit will include a review of: the organization's progress toward goals and objectives; EMS outcomes (environmental performance; regulatory compliance; interested party relations; quality practices); actions taken to correct minor non-conformances; the management review process; corrective action requests and responses; and preventive actions. In addition to the above, the following elements will be audited according to the following tentative schedule:

Year 6 (third party) – Elements 5, 6, 9, 14, 16

Year 7 (third party) – Elements 1, 10, 12, 13

Year 8 (third party) – Elements 3, 8, 15, 17

Year 9 (third party) – Elements 2, 4, 7, 11

Year 10 (third party) Re-verification

The results of the current and future audits will provide value added to the system and should be viewed as an overall opportunity to improve. Every audit is a snapshot in time, and does not, or cannot identify each and every area for improvement. And yet, while no single audit identifies all of the areas for improvement the results of each audit provide an additional incremental step in the overall system's improvement.

Attachment 1

Documents and Other Object Evidence Reviewed During the Re-verification Audit

Element 1. Documentation of EMS for Biosolids

- Fort Worth Water – Environmental Management System (EMS) – Guidance Manual for Biosolids Beneficial Reuse/Recycling – 5/15/08
- Documentation of EMS for Biosolids – EMS Procedure 1.0 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter, Jerry Pressley and Ben Davis
- National Biosolids Partnership – Letter of Understanding on NBP EMS Demonstration Project – August 30, 2000
- EMS for Biosolids – EMS Procedures 2, 3 (including Table 3.0), 6, 9, and 11.
- EMS Planning Schedule (By Calendar Year) – May 15, 2008

Element 2. Biosolids Management Policy

- Biosolids Policy – EMS Procedure 2.0 – Rev 3 – June 29,2007
- Interview with Sebastian "Buster" Fichera
- Interviews with Steven Nutter, Jerry Pressley and Ben Davis
- Website - City of Fort Worth Wastewater Biosolids EMS

Element 3. Critical Control Points

- Critical Control Points – EMS Procedure 3.0 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter, Ben Davis, and Jerry Pressley
- Ft Worth Village Creek Wastewater Treatment Plant process flow diagram – November 29, 2004
- EMS Master Table – EMS Element 3.0 (Biosolids Value Chain, Critical Control Points, Roles and Responsibilities, Environmental Impacts, Operational Controls, Operational Control Procedures, Location of Procedure, Monitoring Activity, Frequency, Department, and Governing Document – May 15, 2008.

Element 4. Legal and Other Requirements

- Legal and Other Requiements – EMS Procedure 4.0 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter, Ben Davis, Richard Talley, and Shane Isbell (Water –TCEQ)
- Table entitled Regulations Applicable to the Village Creek Wastewater Treatment Plant Biosolids Value Chain – EMS Element 4.0 (Regulation, Description, Location (web site), governing agency, and areas of influence within biosolids value chain) – June 29, 2007.

- City of Fort Worth TPDES Permit to Dispose of Waste – Permit No. WQ 001049013 Issue date Nov 28, 2006, Expiration date Sept 1, 2011 – "Sludge Provisions".
- Annual Sludge Report – September 1, 2010.
- Analytical Reports and Supporting Documentation for Annual Sludge Report.
- SOPs for Land Application and Digester Operation

Element 5. Goals and Objectives for Continual Improvement

- Biosolids Goals and Objectives – EMS Procedure 5.0 – Rev 9 – September 23, 2010.
- Interview with Sebastian "Buster" Fichera
- Interviews with Steven Nutter, Ben Davis and Jerry Pressley
- Biosolids Goals and Objectives Summary – EMS Element 5.0 Appendix 5a (Biosolids year 2010) – September 23, 2010.
- Biosolids Goals and Objectives Summary – EMS Element 5.0 Appendix 5a (Biosolids year 2009) – July 21, 2009
- Biosolids Goals and Objectives Summary – EMS Element 5.0 Appendix 5a (Biosolids year 2007 – 2008) – December 18, 2007
- Biosolids Goals and Objectives Summary – EMS Element 5.0 for 2006 – May 10, 2006
- Internet posting of Goals and Objectives
- Biosolids Management Program and EMS Performance Report – FY 2008 – 2009.
- Biosolids Management Program and EMS Performance Report – FY 2009 – 2010.

Element 6. Public Participation in Planning

- Public Participation in Planning – EMS Procedure 6.0 – Rev 4 – May 15, 2008.
- Interviews with Steven Nutter, Ben Davis and Ginger Laird
- City of Fort Worth Website – Public invitation to observe audit of biosolids EMS audit Tuesday, September 28 through Friday, October 1, 2010.

Element 7. Roles and Responsibilities

- Roles and Responsibilities – EMS Procedure 7.0 – Rev 5 – September 23, 2010
- Interviews with Steven Nutter and Ben Davis
- Table 1: Roles and Responsibilities – EMS Element 7.0 – September 23, 2010
- Appendix 7a: City of Fort Worth Biosolids Organization Chart – September 23, 2010
- Appendix 7a: City of Fort Worth Pollution Control Division Organization Chart – September 23, 2010.
- REI Contract Renewal # 20283-R3 dated April 6, 2010.

Element 8. Training

- Training - EMS Procedure 8 – Rev 4 – May 15, 2008

- Interviews with Steven Nutter, Ben Davis, Jerry Pressley, Ginger Laird, Eric Valdez, Douglas Gomez, Jose Valdez, and Eric Evans
- VHS video training "Biosolids Program Beneficial Recycling"
- Biosolids power point training presentation
- New Employee training records for 2009 and 2010
- Safety training records – general overview.

Element 9. Communications

- Communications & Public Outreach – EMS Procedure 9.0 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter, Ben Davis, Jerry Pressley, Ginger Laird.
- Biosolids Management Program and EMS Performance Report – FY 2008 – 2009.
- Biosolids Management Program and EMS Performance Report – FY 2009 – 2010.
- City of Fort Worth Website – section related to wastewater biosolids.
- EMS Element 9.0 – Appendix 9a – Procedure for Addressing Biosolids Complaints and Requests for Information – May 15, 2008
- Biosolids Complaint Form – RENDA Environmental Inc.
- Biosolids Program Inquiry form – RENDA Environmental
- Biosolids Complaint Log Listing form
- Biosolids Complaint Log Listings from 2003 through 2010.
- Village Creek Wastewater Treatment Plant 8 page brochure – May 2006

Element 10. Operational Control of Critical Control Points

- Operational Control of Critical Control Points – EMS Procedure 10.0 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter, Ben Davis, Jerry Pressley, Eric Valdez, Douglas Gomez, Jose Valdez, and Eric Evans
- Field visit to land application site at one of William Mitchell's farms in Johnson County
- Review REI Field Book containing land application site directions and all relevant SOPs for land application
- Field visit to wet weather storage site at Parker County on the property of David Simpson (site PCDS)
- SOP for Digester Cleaning – undated
- SOP Master Files
- SOP binders for wastewater treatment plant
- RENDA SOP binder – Land Application EMS SOPs; Dewatering Facility EMS SOPs; and Administration EMS SOPs.
- Wastewater Operator Licenses

Element 11. Emergency Preparedness and Response

- Emergency Preparedness & Response – EMS Procedure 11.0 – Rev 5 – May 15, 2008

- Emergency Preparedness and Response table listing docuements, emergency response descriptions, department/division responsibilities, and areas of influence within the biosolids value chain
- Interviews with Steven Nutter, Ben Davis, Tony Bianchini, Eric Valdez, and Eric Evans
- VCWWTP Risk Management Program Binder
- VCWWTP Accidental Release Prevention Program – June 2009
- VCWWTP Emergency Procedures
- VCWWTP Chemical Spill Response Plans
- VCWWTP Water Emergency Response Plan – September 1999
- REI Environmental Field Manual
- REI Incident Report Form (undated and uncontrolled)
- REI Biosolids Spill Response EMS-SOP-TRN-12-Rev5, June 3, 2008
- REI Hazardous Spill Response EMS-SOP-TRN-13 Rev5, June 3, 2008

Element 12. EMS Documentation and Document Control

- EMS Documentation and Document Control - EMS Procedure 12.0 – Rev 4 – September 23, 2010
- Interviews with Steven Nutter and Ben Davis
- TPDES Permit – Required Report Summary listing the reports required for each of the critical control points of the biosolids value chain and the frequency required.
- Level 4 Document Master List – September 23, 2010.
- EMS Element Procedure change history logs for each element

Element 13. Monitoring and Measurement

- Monitoring and Measurement – EMS Element 13.0 – Rev 5 – May 15, 2008
- Interviews with Steven Nutter, Ben Davis, Jerry Pressley, Eric Valdez, Douglas Gomez, Jose Valdez, and Eric Evans
- Procedure 12 – Appendix 13a – Field Observation Report (for land application sites) – May 15, 2008
- Procedure 12 – Appendix 13b – Daily Process Control Worksheets (identifying 82 Biosolids value chain process worksheets and logs)
- Land Application Detailed Time Sheet
- Field visit to land application site at one of William Mitchell's farms in Johnson County
- Review REI Field Book containing land application site directions and all relevant SOPs for land application
- Field visit to wet weather storage site at Parker County on the property of David Simpson (site PCDS)
- Reviewed TELETRACK vehicle data position on-line monitoring equipment system

Element 14. Nonconformances: Preventive and Corrective Action

- Nonconformances: Preventive and Corrective Action – EMS Procedure 14.0 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter and Ben Davis
- Corrective Action Notice (CAN) Form – May 15, 2008
- Corrective Action Notice (CAN) – Master List for non-conformance issues identified in 2009 internal interim biosolids EMS audit.
- Completed CAN forms for 2009 internal interim biosolids EMS audit including close out signatures.
- Reviewed of third party interim audit corrective actions from 2008 external interim biosolids EMS audit.
- Reviewed status of 2008 interim audit close outs.

Element 15. Periodic Biosolids Program and EMS Performance Report

- Biosolids Program and EMS Performance Report – EMS Procedure 15 – Rev 4 – May 15, 2008
- Interviews with Steven Nutter and Ben Davis
- Biosolids Management Program and EMS Performance Report – FY 2008 – 2009.
- Biosolids Management Program and EMS Performance Report – FY 2009 – 2010.

Element 16. Internal EMS Audit

- Internal EMS Audit – EMS Procedure 16.0 – Rev 6 - May 15, 2008
- Interviews with Steven Nutter and Ben Davis
- Table 1: Audit Schedule for Interim Audits – Village Creek (five year) – May 15, 2008
- National Biosolids Partnership EMS Interim Internal Audit – July 15, 2009.

Element 17. Periodic Management Review of Performance

- Periodic Management Review of Performance - EMS Procedure 17.0 – May 15, 2008.
- EMS Planning Schedule (By Calendar Year) – May 15, 2008.
- Interview with Sebastian "Buster" Fichera
- Interviews with Steven Nutter and Ben Davis
- Biosolids Management Program and EMS Performance Report – FY 2008 – 2009.
- Biosolids Management Program and EMS Performance Report – FY 2009 – 2010.
- Biosolids Management Review of EMS Performance – January 29, 2008
- Biosolids Management Review of EMS Performance – March 30, 2009
- Biosolids Management Review of EMS Performance – April 5, 2010

Attachment 2

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 30 days of 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 requirements 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 30 days of 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

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

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.