2006

BIOSOLIDS PROGRAM
AND
ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)
PERFORMANCE REPORT

Butler County Department of Environmental Services
Butler County, Ohio

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## CONTENTS

<table>
<thead>
<tr>
<th>Sections</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>3</td>
</tr>
<tr>
<td>Biosolids Policy Statement</td>
<td>4</td>
</tr>
<tr>
<td><strong>Section 1: Biosolids Management Program Performance</strong></td>
<td>4</td>
</tr>
<tr>
<td>A. Service Overview</td>
<td>4</td>
</tr>
<tr>
<td>B. Biosolids Production</td>
<td>4</td>
</tr>
<tr>
<td>C. Beneficial Reuse Options &amp; Management Practices</td>
<td>5</td>
</tr>
<tr>
<td>D. Goals &amp; Outcomes</td>
<td>5</td>
</tr>
<tr>
<td>E. Monitoring &amp; Measurement Results</td>
<td>8</td>
</tr>
<tr>
<td>F. Abnormal or Emergency Instances</td>
<td>9</td>
</tr>
<tr>
<td>G. Emergency “Tabletop” Exercise</td>
<td>10</td>
</tr>
<tr>
<td><strong>Section 2: Environmental Management System Performance</strong></td>
<td>10</td>
</tr>
<tr>
<td>A. EMS Overview</td>
<td>10</td>
</tr>
<tr>
<td>B. Interim Audit Results</td>
<td>11</td>
</tr>
<tr>
<td>C. Potential EMS Nonconformances</td>
<td>13</td>
</tr>
<tr>
<td>D. EMS Changes</td>
<td>13</td>
</tr>
<tr>
<td>E. Employee Training</td>
<td>14</td>
</tr>
<tr>
<td>F. Contractor Training</td>
<td>14</td>
</tr>
<tr>
<td><strong>Section 3: Public Participation Program</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Section 4: Future Plans</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Section 5: Contact Information</strong></td>
<td>16</td>
</tr>
</tbody>
</table>
Summary

Since 2001, the Butler County Department of Environmental Services (BCDES) has been developing and implementing a new management program for the biosolids it produces through wastewater treatment. This program, developed according to the standards and requirements of the National Biosolids Partnership (NBP), is the Biosolids Environmental Management System (Biosolids EMS). One requirement of the program is to create and make available to interested parties an annual biosolids management and EMS performance report. This report summarizes the performance of the Department’s biosolids program and EMS for 2006. (There are details that are more specific on biosolids management activities for 2006 captured in the Annual Water Reclamation Report – available through BCDES.)

This report summarizes the biosolids management program, biosolids production, reuse and disposition, goals and objectives, monitoring and measurement activities, EMS activities, public outreach efforts, and the Department’s commitment toward continual improvement. The report also summarizes the results of any audits performed in 2006. The report is available to interested parties through BCDES’ Biosolids EMS website; the report will be available at biosolids-related public meetings and presentations. In addition, you may request copies of the report through the EMS Coordinator.

BCDES fully implemented its Biosolids EMS in 2004 and then conducted a thorough internal audit to gauge its effectiveness. The next step was to have an independent third party audit company examine the EMS to determine if it met the requirements of the NBP. Agencies that successfully meet all requirements receive NBP’s “Seal of Approval”.

BCDES successfully demonstrated adherence to NBP requirements through successful completion of the third party audit in March 2005. At that time, the BCDES Biosolids EMS program was the 1st in Ohio and only the 6th program nationally to achieve NBP certification.

BCDES has maintained its high level of compliance with its own EMS regulations and with the NBP Code of Good Practice throughout 2005 and 2006. The Department maintained NBP certification of its EMS program through another successful third party independent audit in July 2006. In October 2006, BCDES reached the highest level of achievement in biosolids management and environmental stewardship by receiving NBP’s EMS Platinum Level Status which is a tiered recognition program to track agency progress in developing and implementing an environmental management system that has been audited by an independent third party auditor.
Biosolids Policy Statement

In 2003, the Butler County Department of Environmental Services formulated a policy statement for its biosolids program based on public input, departmental knowledge, program history, and industry standards. The policy statement is a required component of the National Biosolids Partnership’s (NBP) Environmental Management System (EMS) demonstration program. The Board of County Commissioners formally adopted the policy statement on August 5, 2003. The biosolids policy statement for the Butler County Department of Environmental Services is:

The Butler County Department of Environmental Services is committed to “QUALITY CARE” of biosolids, which includes:

- Beneficially reusing biosolids whenever possible
- Subscribing to, and following, the NBP ‘Code of Good Practice’
- Continuously improving biosolids management practices that are:
  - Environmentally sound
  - Technically feasible
  - Cost effective
  - Socially acceptable

Section 1: Biosolids Management Program Performance

Service Overview
The Butler County Department of Environmental Services provides safe, reliable environmental services to Butler County – one of the fastest growing counties in Ohio. Under the direction of the Board of County Commissioners, BCDES provides water and wastewater services to a growing population of over 100,000 in West Chester, Liberty, Fairfield, Lemon, Hanover and Ross Townships. BCDES operates two (2) regional wastewater treatment facilities and four (4) satellite treatment plants in Butler County, with a combined permitted discharge flow of 29 million gallons per day (MGD). BCDES is a member of both the Water Environment Federation (WEF) and the National Association of Clean Water Agencies (NACWA) and strives to be one of the best utilities in Ohio.

Biosolids Production
The Butler County Department of Environmental Services produces biosolids at its LeSourdsville (LES) Water Reclamation Facility and its Upper Mill Creek (UMC) Water Reclamation Facilities. We produce minimal quantities of biosolids at BCDES’ four (4) package plants. BCDES transports all package plant biosolids to the LES facility and mixes it with LES wastewater where the package plant solids are further processed. There is no differentiation between LES and package plant biosolids.
In 2006, LES produced approximately 1625 dry tons of biosolids while UMC produced 1700 dry tons of biosolids. Thus, BCDES produced 3325 total dry tons of biosolids. Average daily tonnage (from both facilities) was just over nine dry tons. Both facilities produce high quality Class B biosolids through an aerobic digestion process. BCDES upgraded solids processing operations at both water reclamation facilities via the installation of Alfa-Laval centrifuges (centrifuge installed at UMC in September 2006; centrifuge installed at LES in May 2005). Because of the centrifuges, biosolids solids content at both plants has increased from an average of about 14% to over 20%, increasing our ability to store and transport more material. Prior to end use, we stockpile biosolids in covered storage buildings.

**Beneficial Reuse Options and Management Practices**

The Butler County Department of Environmental Services strives for beneficial reuse of biosolids through an aggressive, Ohio EPA-approved land application program. This program is carried out with the cooperation of local farmers, local County Agricultural Extension Service agents, the Ohio Environmental Protection Agency (OEPA) and local County Health Districts. Experienced and supervised BCDES employees apply biosolids with consultation from agencies such as the OEPA and the Ohio State University Cooperative Extension Service.

In 2006, BCDES continued to focus on biosolids land application as a strategic business priority and the preferred biosolids management option. As a result, of all the biosolids managed in 2006, 33% was land-applied (versus just 12% in 2004). BCDES managed 2,984 dry tons of biosolids in 2006, of which we beneficially reused 989 dry tons by land applying it as a soil amendment to permitted farm fields in Butler and Warren Counties. BCDES utilized three (3) permitted land application sites for biosolids recycling in 2006: the Harris farmstead in St. Clair Township (Butler County, OH), the Baker farmstead in Madison Township (Butler County, OH), and the Lebanon Correctional Institute farmstead in Turtle Creek Township (Warren County, OH). The remaining biosolids were either land filled (1,671 dry tons or 56%) at Rumpke Landfill in Hamilton County, OH, or incinerated (324 dry tons or 11%) at facilities operated by the Metropolitan Sewer District of Greater Cincinnati.

**Goals and Outcomes**

The Butler County Department of Environmental Services has established goals for biosolids management and the EMS. Each goal is associated with a desired outcome, or anticipated benefit, which we will accomplish through goal completion. BCDES management developed the following goals for 2006 and presented them for approval by a public stakeholders group. The goals were then tracked and monitored by the Regulatory Compliance Team (Reg Team) and the EMS Coordinator.
Program Goal: Desired Outcome(s):

<table>
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<tr>
<th>Program Goal:</th>
<th>Desired Outcome(s):</th>
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</thead>
<tbody>
<tr>
<td>Increase land application of biosolids to 35% in 2006</td>
<td>Environmental Performance (quality practices &amp; product; public participation &amp; acceptance)</td>
</tr>
<tr>
<td>Maintain National Biosolids Partnership (NBP) EMS Certification</td>
<td>Public participation &amp; acceptance (environmental performance; regulatory compliance; quality practices &amp; product)</td>
</tr>
<tr>
<td>Continue to explore long term biosolids disposal and reuse options</td>
<td>Regulatory Compliance (environmental performance; quality practices &amp; product)</td>
</tr>
<tr>
<td>Continue research partnership with WERF</td>
<td>Quality practices &amp; quality product (environmental performance)</td>
</tr>
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**Goal: Increase Land Application of Biosolids to 35% in 2006**

An important goal for BCDES in 2006 was to increase land application of biosolids to 35% of total production. By meeting this goal, the department could make positive use of their production; avoid the unnecessary use of landfill space, and save a significant amount of money due to the lower cost of land application vs. landfill disposal.

BCDES did have a dramatic increase in land application from 12% in 2004 to 32.8% in 2005 and about 33% in 2006. Although we failed to reach the 35% land application goal in 2006, we feel that our program was successful in beneficially reusing biosolids. While inclement weather, limited fields, and the timing of field availability for application limit increases beyond this level, the Department has positioned itself to take advantage of the limited opportunities. By maximizing land application efforts in 2006, BCDES was able to avoid over $132,000.00 in landfill tipping fees. BCDES installed a centrifuge at LeSourdsville in March 2005, and has regularly achieved 22% solids. In September 2006, BCDES installed two centrifuges at UMC and has regularly achieved about 20% solids. This improved solids content of the LeSourdsville and UMC product resulted in a decrease in total biosolids (wet ton) production – and thus a corresponding decrease in biosolids handling requirements.

In 2006, BCDES also worked extensively with Steve Bartels, Ohio State University Agricultural Extension Agent to:

1. Improve its land application program through improved communications with farmers,
2. Improve its understanding of crop nutrient needs, and
3. Identify suitable farm and pasture land for future application.

The land application goal for 2007 is 35%.

Goal: Maintain National Biosolids Partnership (NBP) EMS Certification

As required by the National Biosolids Partnership (NBP), BCDES completed an interim third party audit of the Department’s EMS in July 2006 by NSF and achieved recertification of its EMS program. In October 2006, NBP awarded BCDES with Platinum Level Status, which represents the highest achievement of biosolids management and environmental stewardship. Corrective Action Plans (CAPs) were complete by the December 2006.

Goal: Continue to explore long-term biosolids disposal and reuse options

During 2006, BCDES continued to evaluate non-Class B disposal options such as incineration, drying, Class A production, etc. Further study will determine whether any of these options provide viable alternatives that would be acceptable to BCDES.

In the second half of 2006, BCDES collaborated with the Metropolitan Sewer District (MSD) of Greater Cincinnati to evaluate the feasibility of incinerating BCDES’ biosolids at MSD facilities. In total, BCDES delivered 85 truckloads (324 dry tons) of biosolids to MSD for disposal by fluidized bed incineration. While both parties continue to review the data from this feasibility study, initial results suggest that biosolids incineration at MSD facilities may be a viable management option for BCDES in the future.

BCDES is planning an expansion for the LeSourdsville Wastewater Treatment Plant projected for 2010. The expansion will most likely include plant upgrades for solids handling, improved solids content, odor control, and increased solids storage. The expansion will also identify Class A biosolids generation options.

Goal: Continue research partnership with WERF

In 2005, BCDES pledged $5,000 to support the Water Environment Research Foundation’s (WERF’s) Biosolids Research Summit Targeted Collaborative Research (TCR) initiative, and agreed to contribute funding for the next four years. BCDES also met with WERF’s technical services director to discuss opportunities for further research.

The TCR initiative is a response by WERF and wastewater utilities to a challenge highlighted in a July 2002 report by the National Academy of Sciences (NAS). The report stated that there is "no documented, scientific evidence that the Part 503 rule has failed to protect public health regarding land application of biosolids." The report noted, however that "additional scientific work is needed to reduce persistent uncertainty about the potential for adverse health effects from exposure to biosolids."
Some of the projects of interest that WERF is coordinating include:
• Development of protocol to evaluate the potential of land application sites for groundwater contamination, focusing primarily on chemicals
• Studying the fate of emerging compounds in sludge and biosolids
• Development of a phosphorus index that limits agronomic rate of biosolids application and could increase land needed by 50%

Monitoring and Measurement Results
BCDES’ laboratory, located at the LeSourdsville Regional Water Reclamation Facility, monitors and measures the biosolids and liquid sludge produced at the Department’s wastewater treatment facilities. If the BCDES lab cannot analyze the biosolids at any time, for any reason, then a contract laboratory that meets the quality control demands of the project will analyze the biosolids.

BCDES collects samples of biosolids at regularly designated process areas and analyze them for metals and pathogens. Samples require monthly analysis or per the frequency established by the federal, state, and/or local legal reporting requirements. Sludge metals – the ten (10) metals regulated by the U.S. EPA –require monthly analysis at a minimum. BCDES’ LeSourdsville lab and BCDES’ contract laboratories utilize an advanced digestion method that allows for quicker turn-around times on metals analysis. This ensures analysis for all biosolids for metals content prior to land-application. In 2006, all average metals concentrations were below ceiling concentration limits (“Table 1”) and pollutant concentrations (“Table 3”) as specified by the U.S. EPA Part 503 Federal Regulations for the use or disposal of sewage sludge (Figure 1 below).

Figure 1:
2006 Average Sludge Metals Concentrations by POTW and Part 503 Limits (mg/kg)

<table>
<thead>
<tr>
<th>Metal</th>
<th>LES</th>
<th>UMC</th>
<th>Table 1, Part 503 Limit</th>
<th>Table 3, Part 503 Limit</th>
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<tbody>
<tr>
<td>Arsenic</td>
<td>5.57</td>
<td>8.57</td>
<td>75</td>
<td>41</td>
</tr>
<tr>
<td>Cadmium</td>
<td>1.17</td>
<td>0.77</td>
<td>85</td>
<td>39</td>
</tr>
<tr>
<td>Chromium</td>
<td>---</td>
<td>30.08</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Copper</td>
<td>386.67</td>
<td>197.92</td>
<td>4300</td>
<td>1500</td>
</tr>
<tr>
<td>Lead</td>
<td>21.67</td>
<td>10.33</td>
<td>840</td>
<td>300</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.61</td>
<td>0.35</td>
<td>57</td>
<td>17</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>9.11</td>
<td>13.36</td>
<td>75</td>
<td>***</td>
</tr>
<tr>
<td>Nickel</td>
<td>13.83</td>
<td>33.31</td>
<td>420</td>
<td>420</td>
</tr>
<tr>
<td>Selenium</td>
<td>7.03</td>
<td>8.23</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Zinc</td>
<td>555.83</td>
<td>418.58</td>
<td>7500</td>
<td>2800</td>
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</table>

*** No limit established per federal regulations
BCDES analyzes the pathogen content of biosolids by fecal coliform density determination (Standard Methods 9222D and/or 9221B). In 2006, BCDES met the pathogen reduction requirements by (Class B) Alternative #1. The fecal coliform geometric mean of all collected samples were less than 2,000,000 CFU/g (Colony Forming Unit per gram) or less than 2,000,000 MPN (Most Probable Number) per gram, as required by Part 503 Federal Regulations and described in Ohio Administrative Code Rule 3745-40-05(O)(1) (Figure 2 below). As with metals analysis, BCDES does not land-apply biosolids until after fecal content is determined.

Figure 2: 2006 Pathogen Density/Fecal Coliform Data (CFU/g)

<table>
<thead>
<tr>
<th>Month</th>
<th>Geometric Mean</th>
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<tbody>
<tr>
<td>February</td>
<td>4,059 fecal MPN</td>
</tr>
<tr>
<td>March</td>
<td>52,986 fecal MPN</td>
</tr>
<tr>
<td></td>
<td>35,172 fecal MPN</td>
</tr>
<tr>
<td>May</td>
<td>57,067 fecal MPN</td>
</tr>
<tr>
<td>July</td>
<td>16,119 fecal MPN</td>
</tr>
<tr>
<td>September</td>
<td>180 fecal MPN</td>
</tr>
<tr>
<td>October</td>
<td>20,916 fecal MPN</td>
</tr>
<tr>
<td>November</td>
<td>1,487,610 fecal MPN</td>
</tr>
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</table>

In 2006, BCDES met vector attraction reduction (VAR) by option #10, which is immediate incorporation of sludge into soil as described in Ohio Administrative Code Rule 3745-40-05(Q)(10).

Abnormal or Emergency Instances
BCDES reports no emergency instances in 2006. Challenges related to the UMC Expansion Project tested the abilities of BCDES staff to operate the facility under stressed circumstances, such as limited tank volumes and reduced dewatering capabilities. An example of this at the plant is in the process of putting a new truck loading area on line, the belt conveyor needed rotating and extending which took ten construction days. During that time, we had to hold the sludge in our tanks and could not run the belt presses. BCDES looked into temporary mobile belt presses in case it became an issue.
Emergency “Tabletop” Exercise
BCDES did not perform an emergency “tabletop” exercise in 2006. We evaluated our response to real emergencies related to the UMC construction project in lieu of a “tabletop” exercise.

Section 2: Environmental Management System (EMS) Performance

EMS Overview
BCDES’ implemented its Biosolids EMS in 2004. The program became operational in 2005, and procedures followed according to plan. The Department also achieved National Biosolids Partnership (NBP) EMS program certification in 2005 – becoming just the sixth utility in the United States and the first from Ohio to achieve this recognition.

In July 2006, BCDES met the Interim Audit requirements to maintain our certification for the NBP EMS Program. This recertification also gave us Platinum Level designation that represents the highest achievement of biosolids management and environmental stewardship.

In general, BCDES used 2004 and 2005 to finalize its EMS manual, standardize procedures, test emergency protocol, implement an electronic document management system, improve public relations, conduct internal and external (third-party) audits of the EMS, and train staff. The Department also used this time to improve the efficiency of its biosolids management operation, through improved dewatering capabilities and a renewed focus on land application objectives. We used 2006 to improve our EMS manual, expand the goals and objectives, acquire more acreage for land application, improve public relations, correct non-conformances from Interim Audit, and increase staff training efforts.

Some specific benefits of EMS implementation are:
• Development of well-defined program goals and objectives, and a formal mechanism for tracking progress
• Identification of ‘critical control points’ within the biosolids chain, including dewatering concerns and storage issues
• Review and update of operational controls (such as standard operating procedures)
• Increased knowledge of regulatory requirements
• Improved land application program resulting in reduced biosolids handling/landfill disposal costs
• Improved stakeholder relations
• Improved internal and external communication related to biosolids management
• Improved document control
Interim Audit Results

The Butler County Department of Environmental Services had its first Interim Audit of its Biosolids Environmental Management System in July 2006. The purpose of the audit is to verify that through regular reviews the system’s health and effectiveness and determine if BCDES’ Biosolids EMS met all the necessary requirements as established by the National Biosolids Partnership (NBP). NSF performed the Interim Audit and it focused on progress towards goals and objectives, EMS outcomes, actions to correct minor nonconformances, the management review process, and corrective and preventive action requests and responses.

The overall conclusion of the audit was that the results of BCDES’ Biosolids Environmental Management System (EMS) are positive and it is the decision of NSF that Butler County maintains its “Certification” status. The audit found one major non-conformance, 30 minor non-conformances, and 6 opportunities for improvement. The minor non-conformances fell under five areas:

1. Roles and responsibilities
2. Documentation
3. References and attachments
4. Management review
5. Definitions

A summary of audit findings as associated with the National Biosolids Partnership’s (NBP’s) four “key outcome areas” are:

Environmental Performance:
It is BCDES’ policy to beneficially reuse biosolids whenever possible. BCDES maintains substantial permitted farm fields on which to spread biosolids, and has a good working relationship with the owners of those fields. In 2006, BCDES maintained its rate of biosolids land application to over 30% as done in 2005. The land application program is limited by timing and storage considerations, but the goal for 2007 is to continue to improve and increase this rate to 35%.

BCDES has had no biosolids regulatory violations since the implementation of the EMS. During 2006, there were non-conformance issues that BCDES properly noted at the time and took corrective actions in a timely manner. There were no fish kills or other negative environmental consequences but we did receive several odor complaints, which resulted in the loss of one site for land application. Here is a summary of one of those complaints:

SUMMARY OF NUISANCE COMPLAINT RELATED TO BCDES’ BIOSOLIDS MANAGEMENT PROGRAM AND CORRECTIVE ACTIONS TAKEN

YEAR 2006

Complaint:
A local resident complained of odors associated with BCDES land application activities at a permitted field adjacent to his home. On August 16, 2006, the resident indicated that he lived at that residence for eight years and this was the first year he experienced an extremely strong odor.
It is also the first year he witnessed the nearby farm spread sludge on the field. He mentioned that he lost several weeks usage of his patio and swimming pool because the smell was so bad. The resident was also concerned about the potential for adverse health effects from land application of biosolids. The resident felt a better application for this sludge might be to fold it into the land immediately upon application.

**BCDES Response:**
On August 17, 2006, BCDES, responded to the resident with a phone call. We attempted to explain that BCDES does indeed fully incorporate a solid biosolids product into the soil within six hours of spreading (and that BCDES does NOT spread liquid sludge). We also explained that BCDES analyzes for bacteria and heavy metals prior to each biosolids application. BCDES apologized for the odor problems originating from the 3-day land application event, and informed the resident that he would make his concerns known to BCDES’ upper management group and would be in touch. BCDES also mailed the resident information on our Environmental Management System and invited him to the Department’s annual stakeholders meeting in September 2006.

After internal discussions with BCDES’ upper management group and with the Local City Manager, BCDES informed the resident that we would cease land applying biosolids to farm fields in his area and remove it from our list of active parcels available for land application based on the unique circumstances of the property and the odor-health related concerns of nearby residents.

BCDES also indicated to the resident that while as a Department we remain committed to the beneficial reuse of biosolids as a safe, reliable, environmentally sound, and economically viable option for biosolids management, we are not able to ignore citizen concerns and will refocus our land application efforts in more rural areas with larger buffer zones.

**Regulatory Compliance:**
BCDES has had no biosolids regulatory violations since the implementation of the EMS. The EMS performed as expected in that staff were able to avoid any regulatory violations by using the non-conformance form and finding working solutions to any problems that arose.

BCDES has good processes in place to track regulatory requirements. It maintains an electronic notification system and receives electronic (e-mailed) notifications of new or revised regulatory requirements from industry and regulatory agencies. It has in place a Regulatory Team (Reg Team) that meets monthly to evaluate compliance issues related to wastewater, drinking water, air, and solid waste. Compliance issues are discussed in various other team meetings including sectional meetings.

**Public Participation:**
Although BCDES’ biosolids program currently experiences little public attention, the Department has a proactive public participation program in place.

Mechanisms for public input into the biosolids program include customer phone calls, BCDES’ annual Focus Group meetings, and BCDES’ annual Biosolids Stakeholders meetings.
Sources of information about the Department’s EMS include various publications and paid advertisements, public meetings and the Internet. BCDES provides general information about biosolids and its Biosolids EMS program on its Departmental web page, at www.butlercountydes.org

**Quality Biosolids Management Practices:**
The EMS manual and associated documents are now fully complete, and BCDES has a fully implemented EMS in operation. Employees receive training and are aware of how their jobs relate to the EMS. BCDES notes non-conformances as they occur, and take corrective actions as required.

**Potential EMS Nonconformances**
Through day-to-day activities and the Interim Audit that occurred in July 2006, BCDES corrected and closed out approximately forty-six (46) minor nonconformances, one major nonconformance and reviewed about six (6) opportunities for improvement. Most of the nonconformances involved incomplete or inadequate documentation of Departmental policies, procedures, plans, training, etc.

By the end of 2006, BCDES had developed corrective action plans for every identified nonconformance and “fixed” most outstanding issues. None of the nonconformances identified in 2006 required or resulted in major system changes.

BCDES defines a major nonconformance as one or more of the elements that have not been addressed or has not been adequately addressed. They can occur if a number of minor nonconformances point toward a systematic failure or if an element has been disregarded to the point where regulatory noncompliance, environmental impacts, or the quality of the biosolids material being produced are negatively impacted, then a major nonconformance should be cited. Our one major nonconformance resulted from multiple minor nonconformances in element 14 related to corrective action processes. BCDES corrected this major nonconformance by implementing Corrective Action Plans (CAPS) for the minor nonconformances in this area.

BCDES defines a minor nonconformance as a single lapse in an organization’s conformance with applicable requirements. A minor nonconformance, by itself, does not indicate a systemic problem with the quality management system (EMS). It is typically an isolated or random incident. Correction of minor nonconformances is generally simple and quick, but some require a more comprehensive response.

**EMS Changes**
The role of the EMS Coordinator changed from the Regulatory Compliance Manager to the Environmental Specialist position in 2006.
**Employee Training**

BCDES maintained a special emphasis on employee training in 2006. In early spring, we distributed a PowerPoint training presentation and quiz to all employees of BCDES. By July 2006, all active BCDES employees had reviewed the presentation and passed the quiz. Also during December, BCDES supervisors were in the process of reviewing with all of their employees the SOPs that apply to their sections.

**Contractor Training**

BCDES improved contractor training by providing a PowerPoint training presentation specifically for BCDES contractors whose work could affect the EMS. BCDES distributed this presentation and a letter about training of their employees to these contractors in January 2006.

For more information about the nonconformances identified in 2006, please call 513-785-5408.

**Section 3: Public Participation Program**

A main requirement of BCDES’ biosolids EMS is the development and implementation of a proactive public participation program. This requirement, as specified by the National Biosolids Partnership (NBP), focuses on outreach efforts that:

1. Provide correct, reliable information to the public about the Department’s biosolids management program, and
2. Solicit feedback from interested parties and stakeholders.

The Butler County Department of Environmental Services has identified the following groups, in addition to the public, as the “target audience” to keep informed about biosolids management activities:

- Local customers
- Application site owners (farmers) and neighbors
- Landfill owners (Rumpke)
- Local industries
- Regulatory agencies (such as Ohio Environmental Protection Agency)
- Agricultural groups (such as Ohio State University Cooperative Extension)
- Academia
- Health district officials
- Community groups
- Representatives from regional municipalities including Cincinnati MSD, and other utilities with residuals management programs
- Resource conservation organizations (such as Butler County Soil and Water Conservation District, and Hamilton to New Baltimore Groundwater Consortium)
- Key BCDES employees
As part of the Biosolids EMS, BCDES continued its public outreach program in 2006. As it had in the past, the Department used a variety of methods to educate the public and solicit important insight about its operations and the EMS. For example, to gain public input in the planning and reviewing phases of the EMS, the Department hosted a fifth annual “Stakeholders Meeting” where interested and/or affected parties (see “target audience” above) were invited to voice opinions about BCDES’ Biosolids Management Program and the Environmental Management System. The event, which took place in September at Butler County’s LeSourdsville Conference Center, resulted in valuable ideas for program improvement. Attendees at the event were especially enthusiastic and supportive of BCDES’ stated goal for 2007 to continue to increase land application of biosolids through better coordination with farmers and more focus on land application as the desired management option.

BCDES continued to distribute its two (2) informational brochures/pamphlets (published in 2004) related to biosolids management and the Biosolids EMS. We distributed these publications at various public events, including the Butler County Fair. One brochure contains general information about the EMS, including benefits of the system, while the other contains answers to frequently asked questions about biosolids. Both publications provide contact information for people that want to know more about the topics. In 2006 BCDES also “spread the word” about biosolids management and the EMS to customers by including relevant information on the BCDES Website.

Another way BCDES informs interested parties about its Biosolids Management Program and Biosolids EMS is through plant tours. Upon request, BCDES offers tours of both of its regional water reclamation facilities. In 2006, there were about four tours of the Upper Mill Creek WWTP and about twelve tours of the LeSourdsville WWTP. Approximately 300 individuals toured one or both of these facilities.

In 2006, BCDES updated its website devoted entirely to its Biosolids Environmental Management System and its biosolids program. The site serves to increase communications between the Department and interested parties. Browsers of the site are able to access information, download documents such as EMS manual elements, and email relevant questions to BCDES’ EMS Coordinator. In addition to tracking and responding to all inquiries related to the EMS, the Coordinator is responsible for keeping the website updated. The site, which is linked to BCDES’ general homepage but accessible directly, is located at www.butlercountydes.org

**Section 4: Future Plans**

In 2007, BCDES will undergo its second internal audit of the EMS performed by BCDES’ Internal Audit Team. Internal audits are a scheduled as part of the five year verification cycle. The audit will include a document review and an onsite audit of the system focusing on staff interviews and operations observation. This audit will determine how well BCDES has continued to maintain its status as a ‘Certified EMS
Agency’ through the National Biosolids Partnership (NBP). BCDES is confident that it will successfully meet all requirements.

As part of the continual improvement cycle that is the basis of the EMS, BCDES will continue modifying and improving its biosolids program based on legal requirements, environmental impact, and public input. BCDES will continue to review operating procedures and continue to investigate leading-edge treatment technologies in an effort to improve and optimize treatment plant processes. Through the Lesourdsville Wastewater Treatment Plant master planning expansion project, BCDES hopes to select a long-term biosolids management strategy that is both socially and economically viable into the future. The Department will continue to train employees on issues relevant to the EMS, including job-specific monitoring and measurement requirements and standard operating procedures.

As always, BCDES will continue to involve interested parties in the EMS planning process and request their input when major program changes are considered. Website utilization and updates in 2007 will allow for enhanced two-way communication between the Department and the public. By ensuring that interested parties are aware of the EMS and involved in its continual improvement, BCDES hopes to maintain a successful and publicly accepted biosolids management program.

**Section 5: Contact Information**

If you have questions or comments about this report or biosolids related materials, or if you want more information, call the EMS Coordinator at 513-785-5408 or email to yorkka@butlercountyohio.org. You can also email questions and comments to the Biosolids Manager at sackenheima@butlercountyohio.org.

If you would like to be involved in the planning and reviewing processes of BCDES’ Biosolids EMS, you can request to be added to the list of interested parties by calling the number above or by submitting your request via email. All are welcome to participate.

To find more information about the Department’s biosolids management operation and EMS, please visit our website at www.butlercountydes.org.