



Guide

NBP Biosolids Management Program (BMP) Implementation Planning

For organizations participating in the National Biosolids Partnership Biosolids Management Program

Updated July 12, 2011

BMP Implementation Schedule at a Glance:

Class of 2011-12

July 15, 2011: NBP sends this Implementation Planning document and Implementation Schedule to each trainee organization.

Next step: Establish BMP Coordinator, mentor, and implementation team (Step 1 in “The telephone consultation and site visit,” below).

July 21: 1st Webinar (attended by BMP Coordinator and implementation team)

Next step: See “The telephone consultation and site visit,” below, and complete all steps, including initial answers to questions.

Next step: Review the template *BMP Manual* that you will adapt to your organization and other NBP documents. Your NBP representative will provide you with the documents.

by August 10: Conduct first telephone consultation call with NBP representative (and mentor); discuss pre-site-visit questions.

Next step: Complete answers to questions and other preparations for site visit (see details below). Begin developing your BMP Manual.

August - September: 1st site visit by your NBP representative and, if applicable, a representative of your mentor BMP agency. Attendance will include BMP Coordinator, implementation team, and, for a limited time, upper management. See below for details.

Next step: With NBP representative support, finalize implementation plan and begin implementing the plan on schedule.

Next step: Complete your draft BMP Manual.

October 4 & 5: First Workshop, Alexandria, VA – Participants come with completed draft Manual.

October, 2011 – March, 2012: Hone your BMP Manual. Ensure implementation and documentation of each Element and procedure, building a functioning system of interacting Elements, in accordance with your implementation plan.

Late winter/early spring 2012: Second Workshop, Alexandria, VA Training on BMP system function and internal auditing.

Late spring/early summer 2012: Second site visit by NBP representative; conduct first internal audit to test whether BMP is ready for 3rd-party audit.

Overview of the NBP BMP implementation telephone consultation and first site visit

This document has been developed to provide you with the necessary background information to prepare for your upcoming consultation with your NBP Biosolids Management Program (BMP) representative and implementation planning visit. Included in this package are the following:

1. **Purpose and Background** – A description of the purpose of telephone consultation, the site visit and background on the NBP BMP program and the implementation process
2. **Proposed Agenda** – What you can expect for the two-day visit
3. **Preparation and Applying the Results** – Suggestions on how to prepare in advance of the visit and what to do with the results. The more work done before the site visit, the greater the benefit.
4. **Questionnaire** – A list of discussion questions that should be answered and discussed with your NBP representative before the site visit.
5. **Additional Resources and Glossary of BMP Terms** – Documents to support the preparation of your NBP BMP.

Purpose of the BMP telephone consultation and implementation planning visit

Key objectives are listed below.

1. To provide advice and guidance for BMP development and implementation.
2. To develop your BMP implementation plan and prepare you to be able to have a first draft of your NBP BMP Manual for the October 4 & 5 workshop in Alexandria, VA.



Background

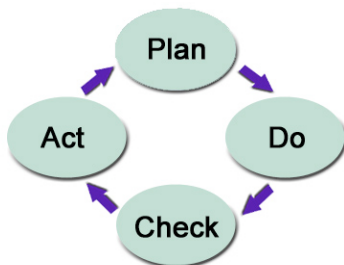
Your organization has committed to participate in the National Biosolids Partnership's (NBP) BMP Program. The NBP is a not-for-profit alliance formed in 1997 with the Association of Metropolitan Sewerage Agencies (AMSA) (now the National Association of Clean Water Agencies [NACWA]), Water Environment Federation (WEF), and U.S. Environmental Protection Organization (EPA). The NBP is committed to helping organizations to do a good job in managing their biosolids. The NBP promotes public participation in biosolids programs to enhance the credibility and public acceptance of beneficial reuse of biosolids.

Biosolids managers face tremendous challenges dealing with public awareness and concerns, managing contractors, complying with regulations, and enhancing program competitiveness. A Biosolids Management Program (BMP) provides a strategic and credible framework for addressing those challenges.

What is a National Biosolids Partnership Biosolids Management Program (BMP)? How does it foster public trust and confidence of your program?

A BMP is a management framework for reducing environmental impacts and improving organizational performance over time. The program is designed to manage potential environmental impacts that may not be regulated. Impacts such as odor can cause problems that result in significant public concern. Implementing a BMP is voluntary; therefore, the BMP framework can be adapted to support the needs, priorities, and circumstances of the implementing organization. The NBP BMP framework supports continual improvement in four key outcome areas that will help an organization foster public trust and confidence. These outcome areas are listed below.

- Quality management practices
- Regulatory compliance
- Better relations with interested parties
- Environmental performance



The BMP approach is based on the "plan-do-check-act" continual improvement cycle of total quality management (TQM) and involves a set of planning activities, procedures, performance monitoring and review to allow an organization to improve business processes over time.

How does an NBP BMP work?

The NBP developed a BMP framework that consists of 17 building blocks, or Elements, for developing and implementing a BMP. These are the requirements of the NBP BMP. Taken together, these Elements provide an interwoven system for helping your organization:

- Establish guiding policy and principles for your biosolids management program,
- Set goals for continual improvement,
- Implement procedures for ensuring consistent product and service quality,
- Engage stakeholders/interested parties to demonstrate that your program is committed to protecting the environment and carrying out your stated mission,
- Correct and prevent problems, and
- Measure and report performance improvements, and act on lessons learned and opportunities for additional improvements.

The 17 Elements, shown below, are grouped into five categories. The Elements are closely linked together into a complete **system**, and a strong Biosolids Management Program has strong connections between the Elements.

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| <ul style="list-style-type: none">• Overview and Policy<ul style="list-style-type: none">– Element 1 — BMP Manual– Element 2 — Biosolids Management Policy• Planning<ul style="list-style-type: none">– Element 3 — Critical Control Points– Element 4 — Legal and Other Requirements– Element 5 — Goals and Objectives– Element 6 — Public Participation in Planning | <ul style="list-style-type: none">• Implementation<ul style="list-style-type: none">– Element 7 — Roles and Responsibilities– Element 8 — Training– Element 9 — Communication– Element 10 — Operational Control of Critical Control Points– Element 11 — Emergency Preparedness and Response– Element 12 — BMP Documentation, Document Control, and Recordkeeping | <ul style="list-style-type: none">• Measurement and Corrective Action<ul style="list-style-type: none">– Element 13 — Monitoring and Measurement– Element 14 — Nonconformances: Preventive and Corrective Action– Element 15 — Biosolids Management Program Performance Report– Element 16 — Internal BMP Audit• Management Review<ul style="list-style-type: none">– Element 17 — Management Review |
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Ensuring Consistent Product and Service Quality

The success of a biosolids program depends primarily on the consistent production of a *quality* biosolids product intended for end use/disposal markets. The NBP uses the term “biosolids value chain” to describe the sequence of events from pretreatment through use/disposal of the biosolids – all of which affect the quality of the final product.

The biosolids value chain is different for each wastewater treatment plant. Focusing on the biosolids value chain helps an organization define exactly how it produces its biosolids product and what key processes it needs to manage to ensure quality

requirements are met. The focused evaluation of your biosolids quality and the supporting processes in your biosolids value chain are the foundation for building a practical and effective BMP. Part of evaluating the biosolids value chain is identifying “critical control points” (CCPs) – steps in the biosolids value chain that are most important in ensuring biosolids quality and protection of public health and the environment.

By “beginning with the end in mind” and identifying your biosolids quality and use/disposal requirements and goals, you can more easily define your critical control points and develop a BMP that focuses on the management and control of those processes and activities.

The Biosolids Value Chain



The foundation of a successful biosolids management program is accurate assessment and identification of your critical control points, around which you can build your BMP.

Agenda for the Implementation Planning Visit

You and your NBP representative will arrange a mutually satisfactory date to conduct your BMP implementation planning visit. The visit is an important step to developing your BMP, and it should be conducted before you attend the October 4 & 5, 2011 NBP training workshop. The BMP implementation planning visit takes place over one or two days. Ideally, it should begin no later than 9:00 a.m. each day, to make the visit as productive as possible.

The NBP representative will be working with you before the site visit to help you answer the questions, below, and prepare parts of the NBP BMP Manual. The Manual is a summary of your overall NBP BMP. The goal of the manual is to be no longer than 25-30 pages and written so that is very understandable to any reader. Detailed documents such as Federal/State regulations or Standard Operating Procedures will not be included in detail, but are referenced in the Manual. Please maximize the site visit benefits by having the questions answered and getting started on your draft NBP BMP manual before the site visit.

This visit is intended to be informational, interactive, and enjoyable. Following is the proposed agenda for the BMP implementation planning visit. This agenda can be adjusted as needed (see Step 5 of “Preparing for the telephone consultation and site visit”, below). Note that more information about selecting a BMP Coordinator and

implementation team is provided below. Your NBP representative will provide you, or you can download from the NBP website, in advance, a template for your BMP Manual and any other necessary documents.

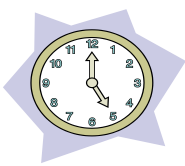
You and your NBP representative will agree, in advance, on the exact agenda for the site visit. For some, a one-day visit will be appropriate, for others, a two-day schedule may be best. The goal of the site visit is to complete an agreed-upon BMP implementation plan with a schedule and assigned roles and responsibilities for getting the BMP in place and operating over the next year.

Sample BMP Implementation Planning Visit Schedule

Activity / Attendees	Objectives	Time
<p>Segment 1 – Introduction Suggested attendees – BMP manager/coordinator, BMP implementation team</p>	<ul style="list-style-type: none"> Understand purpose and focus of visit Gain agreement on agenda and outcomes of visit 	½ hour
<p>Segment 2 – Overview of National Biosolids Partnership and BMP Program-build upon web casts and consultation with NBP representative Suggested attendees – BMP Manager/coordinator, BMP implementation team, top management representative(s)</p>	<ul style="list-style-type: none"> Understand NBP purpose and offerings Understand the NBP’s expectations and assistance available to help you Understand the main components of an BMP Discuss top management objectives for participating in the program 	~ 1 hour
<p>Segment 3 – BMP Interview and Group Discussion Suggested attendees – BMP manager/coordinator, BMP implementation team</p>	<ul style="list-style-type: none"> Discussion of your biosolids management program and the questions that you have submitted responses to Talk about challenges and opportunities for improvement Establish the “baseline” from which to determine biosolids BMP needs, this is assessment of how your existing biosolids management program meets NBP requirements 	~ 2 hours
<p>Segment 4 – BMP implementation process Suggested attendees – BMP manager/coordinator, BMP implementation team</p>	<ul style="list-style-type: none"> Go through BMP implementation plan, assign responsibilities for various elements, set target dates 	~2 hours
<p>Segment 5 – Overview of Organization’s Biosolids</p>	<ul style="list-style-type: none"> Tour the solids and biosolids operation and observe the critical control points that need 	

<p>Management Program</p> <p>Suggested attendees – BMP manager/coordinator</p>	<p>to be managed</p> <ul style="list-style-type: none"> • Discuss biosolids value chain and key activities and processes for maintaining quality “beginning with the end in mind” • Understand the organization’s current biosolids program – challenges and successes 	<p>~ 1 hour</p>
<p>Segment 6 – Working sessions on near term tasks</p> <p>Suggested attendees – BMP manager/ coordinator, BMP implementation team</p>	<ul style="list-style-type: none"> • Review implementation plan; finalize and endorse, if possible • Discuss policy • Finalize Critical Control Points and Operational Controls • Identify interested parties <p>Draft goals and objectives</p>	<p>optional</p> <p>~2 – 6 hours</p>

The telephone consultation and site visit



Getting Ready

Following are the steps you should take to prepare for the telephone consultation with your NBP representative and the implementation planning site visit. Preparing well will help everything go smoothly and make the most productive use of your organization’s valuable resources: staff, time, money, and motivation. Build upon the discussions from the NBP webinar and discussions with your NBP representative.

You probably already know who will be the Biosolids Manager/Coordinator for your BMP. Often, it is the existing manager of the biosolids program. But it could also be someone else with extensive experience and involvement in the biosolids program.

Whoever it is, the assigned Biosolids Manager / Coordinator will be the person pulling together all of the parts of the BMP and ensuring a smooth-running system. He or she will need solid organizational and communications skills, the ability to delegate, and the strong support of management. He or she will be the keeper of the BMP Manual and the lead contact with the NBP.

1 Your organization's Biosolids Manager/Coordinator should identify and assemble the staff team that will be preparing the NBP BMP

The Biosolids Manager/Coordinator, working with staff and management, should select a team of individuals representing all of your biosolids management activities, including representatives from your organization's industrial pretreatment program, your treatment plant for solids and biosolids treatment operations, and those responsible for storage, transportation and final use/disposal of biosolids, including any contractors. With smaller organizations, the staff team may only be 2-3 persons. To the extent possible, representatives covering each element of your organization's biosolids management activities should be included and attend the initial webinar, the initial telephone consultation, and parts of the implementation planning site visit. This implementation planning visit is a good opportunity to engage your team and top management in gaining a better understanding of the BMP process. Ideally, your team of individuals will be the same group that participates throughout the BMP development and implementation process over the next year

If applicable, during this preparation time, be in touch with your Certified Agency Mentor and determine if a person from that agency will be able to join the initial telephone consultation and the implementation planning site visit.

2 Distribute copies of this document

Team members should review this BMP Implementation Planning document and be prepared to discuss the questions below with your NBP representative prior to and at the BMP implementation planning visit. Your organization may not be able to answer every question. For example, it is acceptable if the answer is "No, we don't have a procedure for that yet," or "This is not in place." It all depends on how far along you are in developing your BMP. This helps define the implementation plan. A short one sentence response is all that is needed.

3 Identify and gather biosolids management and related program documents

documents

Your NBP representative will discuss your existing biosolids management program documents and materials during telephone consultation prior to the site visit and during the site visit. Examples include policies, procedures, organization charts, job descriptions for biosolids personnel, checklists, operating logs, annual reports, monitoring records, and other BMP documents/records that you have that are related to biosolids management activities and your current biosolids management program. In addition, a written summary of your overall biosolids management program, and available biosolids-related informational brochures, fact sheets, etc., should be gathered for review. Many of these documents will eventually be referenced in your BMP Manual.

4

Prepare for BMP implementation planning visit interview

Each staff member should come prepared to talk about his or her specific biosolids management activities. Participants should be prepared to provide a good summary of roles and responsibilities for the individuals in your organization or in your contractor organizations who are responsible for specific biosolids management activities (e.g., industrial pretreatment, wastewater treatment, dewatering, biosolids monitoring/measurement, biosolids storage, biosolids transportation, biosolids use/disposal). Written summaries of roles and responsibilities will eventually be included in, or referenced by, your BMP Manual.

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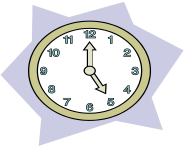
Finalize the BMP implementation planning visit agenda/itinerary

Your assistance is needed to arrange for a tour of your solids and biosolids operations, if applicable, and provide a projector for power point presentations, assemble your team, and line up meeting space for the visit by your NBP representative (and mentor). Circulate the proposed agenda to relevant staff ahead of time and confirm availability of implementation team members and top management to attend the meetings indicated in the draft schedule. If necessary, discuss changes in the schedule with your NBP representative to accommodate people's schedules.

6

Participate in the planning visit and review summary documents

Here, your organization actively participates in interviews and in finalizing your tailored BMP implementation plan.



Applying the Results

The results of the BMP implementation planning visit have two important purposes.

1 You and your BMP team – with help from your NBP representative (and, if applicable, your Certified Agency Mentor) – will use the BMP implementation planning visit results to finalize your BMP implementation plan. Your NBP representative will be your primary point of contact with the NBP throughout the BMP implementation process.

2 The BMP implementation plan will be helpful for monthly status reporting to your team and your NBP representative. This tool will help you track your BMP development and implementation progress.

Work Products from the Implementation Planning Visit

At the end of your implementation planning visit, your NBP representative will leave you with the documents listed below.

- **Summary Memo.** This document summarizes the results of discussions with your NBP representative (and mentor) about any particular challenges your organization faces, opportunities for improvement, and other topics covered during the site visit.
- **Implementation Plan Schedule.** This document outlines a series of steps, target dates, and responsible parties for developing and implementing your BMP. This plan should be followed and updated as needed, as you go through the process.
- **Critical Control Points Table.** Your NBP representative will leave you with a draft list of critical control points, these are the activities and processes that you need to manage effectively to improve in the four key outcome areas.

BMP Implementation Planning Questions

The questions below serve as guidance for discussing challenges your organization may be facing and opportunities for improvement. Your NBP representative will use these questions to guide discussions during the initial telephone consultation and the implementation planning site visit. The BMP Coordinator and implementation team should answer the questions as best you can and share the information with your NBP representative. Discussing the questions is an agenda item during the site visit.

A short sentence response to each question is all that is needed in most cases. If you don't have an answer or don't have something mentioned, just say so. No worry. These questions help identify possible areas of focus for your NBP BMP.

Background/Issues/Threats/Challenges/Opportunities

1. Why is your organization participating in the NBP program?
2. What are the key issues or threats that face your program?
3. How would you rate your overall public acceptance on a scale of 1-10? Explain.
4. What biosolids management challenges or issues seem to require the most amount of your time?
5. What key benefits would you like to see come out of your organization's effort to implement a BMP?
6. What are the main areas you would like to see it focus on?

Quality Management Practices

7. Describe your biosolids quality and characteristics. What key unit processes and activities affect these qualities?
8. How does your organization ensure consistent biosolids product quality from cradle to grave? Have there been any instances where the fact that procedures didn't exist or weren't followed properly resulted in a significant problem or incident?

9. Are there any specific areas where you don't have Standard Operating Procedures (SOPs) where they may be needed?
10. What types of training activities do you use to ensure relevant staff is competent in performing day-to-day tasks?
11. How are on-site problems (e.g., at your facilities) or process upsets reported and dealt with?
12. What activities are contractors responsible for?
13. Have there been any instances where contractor operations have caused a problem for you?
14. How are off-site problems (e.g., at land application sites) reported to you and dealt with? Do you find out in a timely manner when problems occur?
15. How much control are you able to exert on your contractor activities/operations through existing contracts or service agreements?

Regulatory Compliance

16. How are you doing on regulatory compliance? Have you had any specific instances recently that led to non-compliance? What caused these incidents?
17. Describe your key activities and who is responsible for:
 - Identifying and tracking legal requirements
 - Communicating them to management and staff
 - Responding to changes in regulatory requirements that affect operations, activities, and procedures
18. Do you have any non-regulatory commitments, agreements, or requirements that apply to biosolids management activities?

19. What happens when you have a compliance problem? Who is involved in figuring out what went wrong and correcting/addressing it so it doesn't happen again?

Relations with interested parties

20. Have there been any recent incidents that caused a public relations problem?

21. Who are some of your key interested parties?

22. What are their main issues and concerns?

23. What processes do you use to engage interested parties?

24. How can interested parties let you know if they have a comment or complaint? How are these handled and responded to after you receive them?

25. How many complaints do you receive? What are they about? What about compliments and other comments?

26. What biosolids-related materials and information do you make available to the public?

27. Who is responsible for these activities?

28. How does your contractor handle and respond to complaints? Do they forward this information to you?

29. How do you communicate information internally related to biosolids management activities?

Environmental Performance

30. Do you go beyond regulatory requirements? If so, how?

31. In general, how would you rate the level of "environmental awareness" of management and staff?

32. Describe any specific environmental impacts or issues that are important in the surrounding community, including in communities around land application or disposal sites.

33. What is the level of environmental awareness of the surrounding communities?

Documents/Records/Information Management

34. How does your organization manage and control documents? That is, how do you ensure that people have easy access to the documents they need, and that they access the correct, approved version?

35. How do you manage work orders and tasks related to biosolids management?

36. How secure/robust are these systems? If something went wrong (e.g., virus, computer meltdown), will people still be able to get the information and documents that they need?

37. How do you manage SOPs, approved procedures, and plans?

38. How do you manage documents and recordkeeping related to compliance?

39. How do you manage information and documents flowing between you and your contractor(s)?

40. Have you had any problems related to documentation, recordkeeping, and information management that you feel could be prevented or improved?

Mission/Vision/Policy/Strategic Planning

41. Do you have a mission and vision statement?

42. Do you have any policy statements that are relevant to biosolids management?

43. Describe your overall strategic planning process.

44. Describe your annual planning process for biosolids.
45. Do you set performance-related/measurable goals and objectives for biosolids? If so, what are they and how are you performing against those goals and objectives?

General BMP Questions

46. Have you formed a BMP team that represents all groups that play a role in biosolids management activities or have some supporting role to play in developing the BMP?
47. Have sufficient resources and time been allocated to allow the BMP Coordinator and BMP implementation team members to devote sufficient attention to developing the BMP and implementing it after it has been developed?

Key BMP Resources

The NBP has developed a set of resources to help you implement a BMP. These can be found on the NBP's website, www.biosolids.org, and include the following:

- *The Code of Good Practice*: Ten principles to which agencies commit that set forth a number of broad goals that govern the operation of sustainable biosolids management programs.
- *The Elements of a Biosolids Management Program for Biosolids* (BMP Elements) – A set of common management practices for use by facilities implementing a BMP. These Elements are the standards or benchmarks by which your BMP should be developed and by which your program will be evaluated.
- *The National Manual of Good Practice* (technical guidance on benchmark management practices) – A summary guidance manual that describes the full range of appropriate biosolids treatment and management practices routinely used.
- *The Biosolids Management Program Guidance Manual* (guidance on how to develop a BMP) – A detailed manual with useful step-by-step guidance on how to implement the BMP elements.
- *The Third Party Auditor Guidance* - This document is used by third-party auditors, but can provide some useful insights to the audit process as you prepare for it.

Glossary - Key BMP Definitions

Biosolids – Solid organic matter recovered from a wastewater treatment process

Biosolids Management Activities – A wide range of activities that impact the quality of wastewater solids and biosolids, including pretreatment activities, wastewater treatment processes, solids stabilization processes, conditioning and dewatering processes, transportation, storage, and beneficial use or disposal.

Biosolids Management Policy – Statement by an organization committing it to the principles set forth in the NBP *Code of Good Practice* with respect to biosolids management and any other overall environmental goals voluntarily adopted by the organization.

Biosolids Management Program (BMP) – A comprehensive program covering all aspects of the organization's biosolids activities throughout the biosolids value chain, from pretreatment to end use or disposal, including management processes for all critical control points in order to mitigate environmental impacts, meet legal and other requirements, and execute action plans to achieve biosolids program goals and objectives.

Biosolids Program Goal(s) – Environmental performance improvement goals that are consistent with an organization's biosolids management policy to ensure biosolids activities comply with applicable laws and regulations, meet quality and public acceptance requirements, and prevent other unregulated adverse environmental and public health impacts by effectively managing all critical control points. Biosolids program goals may include but are not limited to compliance with specific regulatory requirements, expanding beneficial use, improving biosolids quality, improving public acceptance, and reducing or eliminating direct/indirect negative environmental impacts.

Biosolids Program Objective(s) – A detailed environmental performance improvement requirement, quantified wherever possible, based on a biosolids program goal. One or more objectives usually must be met for the underlying goal to be achieved.

Biosolids Public Acceptance Requirements – Biosolids physical, chemical, biological, and aesthetic characteristics and management methods that must be met consistently and reliably to achieve public acceptance of the organization's selected biosolids management method(s).

Biosolids Quality Requirements – Biosolids physical, chemical, biological, and aesthetic characteristics that must be met consistently and reliably to apply the organization's selected biosolids management method(s).

Biosolids Value Chain – Sequence of activities from wastewater pretreatment, discharge, and collection through wastewater treatment, solids treatment, and handling, storage, transportation, and disposal or use of biosolids that impact the quality and stability of biosolids and their suitability for the selected management method.

Continual Improvement – A management system process for systematically improving the overall management of biosolids to achieve the organization’s biosolids program goals and objectives set forth in the organization’s biosolids management policy and the National Biosolids Partnership *Code of Good Practice*.

Corrective Action – Specific actions and steps taken to correct an organization’s nonconformance(s) to policies, procedures, and other legal, quality, and public-acceptance requirements, and to mitigate any resulting negative impacts on the environment.

Critical Control Points – Those locations, unit processes, events, and activities throughout the biosolids value chain under the organization’s direct control or influence that require effective policies, programs, procedures, practices, monitoring, and measurements to ensure the biosolids activities meet legal, quality, and public acceptance requirements and do not have undesirable environmental impacts. Critical control points include all biosolids management activities that are covered under applicable legal and other requirements.

Document Control – Procedures and practices to ensure that biosolids BMP documentation and documents are available and can be located easily, created following established document creation protocols, kept up to date through periodic reviews and revisions, properly marked with version number, effective date(s), and references to replaced or superseded versions; and approved by authorized personnel.

Emergency Preparedness – A structured emergency planning process to ensure that plausible emergency situations that can affect appropriate biosolids management have been identified, response plans and procedures have been developed, and trained emergency response personnel and equipment are available and in a state of readiness.

Emergency Response – Specific emergency plans and activities that are initiated to contain an emergency situation and bring it under control to minimize environmental impacts.

BMP Audit - A systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organization’s biosolids management program conforms to the biosolids management program audit criteria set by the organization, and for communicating the results of this process to management.

BMP Internal Audit – A systematic and documented internal audit process for objectively evaluating whether an organization’s biosolids management program conforms with the requirements of the NBP *Code of Good Practice*, the organization’s biosolids policy, and the 17 BMP Elements.

BMP Third-Party Verification Audit – A systematic, structured, and documented audit of the organization’s biosolids management program performed by a qualified independent third-party auditor using a standardized protocol to verify conformance with the requirements of the *Code of Good Practice*, the organization’s biosolids policy, and the 17 BMP Elements.

BMP Documents – Various documents that collectively compose the biosolids management program documentation, including the biosolids management policy, procedures, practices, operating instructions, and other supporting documents required by the biosolids management program and applicable biosolids laws and regulations.

BMP Guidance Manual – A detailed manual with useful step-by-step guidance on how to implement the BMP Elements.

BMP Records – Various records or reports of biosolids management activities required by the biosolids management program and applicable biosolids laws and regulations, including but not limited to records or reports of monitoring, measurement, laboratory testing, inspections, operating logs, emergency response incidents, outside party inquiries, public participation meetings, audits, corrective actions, management reviews, and periodic performance reports. Records describe the results of specific biosolids management activities for a prescribed event, activity, or period of time.

Environmental Impacts – Any change to the environment (positive or negative), including public health, public nuisances, and odor problems, that wholly or partially result directly or indirectly from the organization's activities, products, or services, including those activities associated with biosolids management, and those activities that alter (positively or negatively) the acceptable disposal or end use method or create public nuisance and public health risks.

NBP BMP – An organized management system that meets the requirements of the Biosolids Management Program of the National Biosolids Partnership for achieving the biosolids management policy requirements and for developing, implementing, reviewing, and maintaining effective biosolids management procedures and practices. An NBP BMP needs to manage all critical control points associated with biosolids activities where there is a potential to create significant negative environmental impacts.

Interested Parties – Individuals, groups, or other public or private organizations interested in, involved with, or otherwise affected by the organization's biosolids management activities, including customers, farmers, regulators, and other local or state governmental officials, community residents, the media, environmental and public interest groups, university professors, and the general public.

Knowledge – To recognize, be familiar with, or understand information, activities, and actions based on experience or association; acquaintance with a science, art, or technique.

Legal Requirements – The environmental federal, state, and local laws and regulations that are applicable to an organization's biosolids management program activities.

Measurement – A systematic method for estimating, testing, or otherwise evaluating key parameters and characteristics of an organization's biosolids management activities to determine compliance with a specific standard, regulatory, or other performance requirement, or to measure progress toward biosolids program goals and objectives.

Monitoring – A systematic process of watching, checking, observing, inspecting, keeping track of, regulating, or otherwise controlling key parameters and characteristics

of an organization's biosolids management activities to determine compliance with a specific standard, regulatory, or other performance requirement, or to measure progress toward biosolids program goals and objectives.

National Manual of Good Practice – A detailed set of documents that provide guidance on identifying critical control points and selecting appropriate management practices.

Noncompliance – A deviation from federal, state, or local laws, regulations or other compliance requirements applicable to the organization's biosolids management activities.

Nonconformance – A deviation from an organization's established biosolids management policy, written biosolids management program Manual, the NBP *Code of Good Practice* principles, or the requirements of the BMP Elements. Nonconformances include circumstances that have the potential to create a noncompliance situation or significant environmental impacts.

Objective Evidence – Policies, ordinances, procedures, manuals, inspection checklists, operating logs, annual reports, various other documents, and various records, such as monitoring, inspection, enforcement, training, records that objectively document conformance with the BMP Elements requirements

Operational Controls – Ordinances, regulations, standard operating procedures, practices, technology, instrumentation, and process controls, monitoring and other criteria developed, implemented, and maintained by an organization to ensure effective management of all critical control points associated with its biosolids management activities, including conformance with biosolids management policy requirements, and achievement of biosolids program goals and objectives.

Organization – Enterprise, authority, or institution, or part thereof, responsible for individual, or a combination of, biosolids management activities.

Other Requirements – Other binding biosolids management practices and environmental requirements to which an organization voluntarily subscribes as part of its biosolids management program. Examples include binding agreements with customers, suppliers, and public organizations and commitments to "beyond-compliance" performance.

Preventive Action – Specific actions and steps taken to identify, analyze, and eliminate the root causes of noncompliance(s) and nonconformance(s) and to put in place permanent solutions that will prevent a recurrence.

Preparer- An organization that treats solids or biosolids generated from domestic sewage in a treatment works, or an organization that derives a material from wastewater solids or biosolids. Examples of preparers would be a public wastewater treatment plant or a private company that manages a compost facility or drying facility that changes the quality of the solids or biosolids to produce a product that meets federal regulations (CFR part 503) for use or disposal.

Public (Interested Parties) – Same as the definition of interested parties.

Public Education – Systematic public communication program for educating interested parties and other stakeholders on an organization’s biosolids management activities.

Public Participation – Specific approach (es) and action(s) taken by an organization to involve interested parties and the general public in its biosolids management program, including establishing improvement goals and objectives.

Service Agreement(s) – Contractual or other legally-binding agreements that define the roles and responsibilities of contractors and other groups in supporting the organization’s BMP for biosolids.

Skills – The ability to use knowledge effectively and readily in execution or performance of tasks and activities; a developed aptitude or ability; the ability to do something competently.

Training – Teaching to make fit, qualified, or proficient; preparation for a test of skill or knowledge; instruction in disciplines and techniques.
