

NACWA Biosolids Committee Meeting

August 1, 2013



NACWA Biosolids Committee

Dave Taylor

Chair

Director of Special Projects

Madison Metropolitan Sewerage District



Update on EPA Activities

Rick Stevens

Biosolids Program Manager

U.S. Environmental Protection Agency



EPA Biosolids Update

Current Activities / Next Steps

What EPA has been doing with limited budget and resources...

- ♦ **Finalizing a subset of refined risk assessments on TNSSS pollutants**
- ♦ **Ten pollutants (i.e., barium, beryllium, manganese, molybdenum, silver, 4-chloroaniline, fluoranthene, pyrene, nitrate, nitrite) are undergoing management review, to be followed by peer review**

EPA Biosolids Update

Current Activities / Next Steps

- ◆ Develop / refine scientific tools available for screening risks for pollutants found in biosolids
- ◆ Reevaluate dioxins utilizing a new IRIS human health benchmark (RfD) and arsenic using a new cancer slope (when finalized)
- ◆ Comply with statutory requirements of CWA via biennial reviews

Revising Biosolids Action Plan and Research Strategy

Focus on recognizing biosolids as a renewable resource that is valuable in the context of growing needs for renewable energy and sustainability

- Committing appropriate resources
- Supporting the development of regulations and standards that promote the renewable resource value of biosolids, while ensuring the protection of human health and the environment
- Promoting public awareness
- Partnering with regulatory agencies, municipal agencies, and professional organizations to promote research and development

Sewage Sludge Incineration

- Update on NACWA Legal Challenge
 - Oral Arguments – May 3
 - Awaiting decision
- Rule Compliance and Technical Issues
 - Members working to evaluate what upgrades are necessary to comply
 - Delays in FIP and SIP development leading to uncertainty
 - Technical, other issues (e.g., operator certification) raising questions among SSIs

FDA Food Safety Regulations

- Proposed “produce rule” appears to include reasonable, science-based standards for biosolids use in the production of produce
- Recognizes and relies on the safety of current biosolids regulations and practices, such as the federal EPA 40 CFR Part 503 rule
- Comments Due – September 16



FEDERAL REGISTER

Vol. 78 Wednesday,
No. 11 January 16, 2013

Part II

Department of Health and Human Services

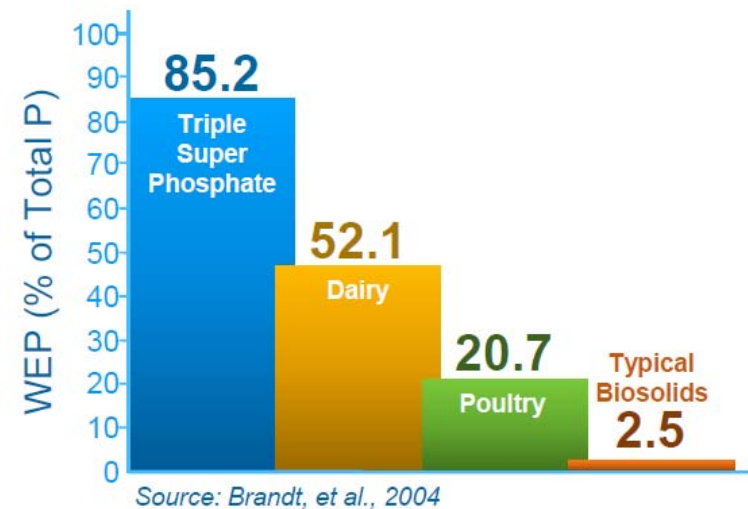
Food and Drug Administration

21 CFR Parts 1, 16, 106, Et al.
Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption; Current Good Manufacturing Practice and Hazard Analysis and Risk-Based Preventive Controls for Human Food; Draft Qualitative Risk Assessment of Risk of Activity/Food Combinations for Activities (Outside the Farm Definition) Conducted in a Facility Co-Located on a Farm; Availability; Proposed Rules

Nutrient Management

NRCS 590 Management Standard

- Voluntary guide for participants in NRCS farm programs
- Revision issued in 2012
- States were to tailor their programs accordingly by 2013
- Has become a de facto regulation in some parts of the country
 - Biosolids permits requiring NRCS conservation plans based on 590...which includes phosphorus management (P Index) requirements
- All phosphorus is not the same



Nutrient Management

USDA Nutrient Tracking Tool

- Currently does not include biosolids
- Potential alternative to NRCS 590?

Update on Kern County Developments

Jimmy Slaughter

Principal

Beveridge & Diamond, P.C.

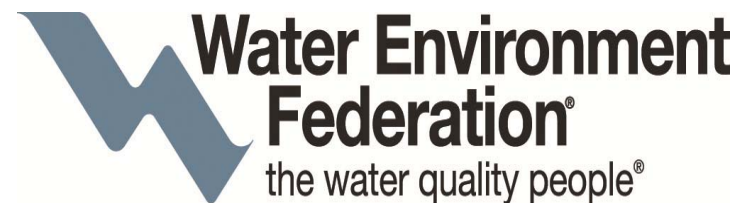


NBP Update and Discussion

Lisa McFadden

Senior Program Manager – Water
Science & Engineering Center
Water Environment Federation





NBP Program Update

Lisa McFadden
Water Environment Federation

Fostering Partnerships Continuing to Collaborate



Broadening awareness of the
Biosolids Management Program (BMP)

Successfully transitioned to WEF's Water, Science & Engineering Center, the NBP continues to:



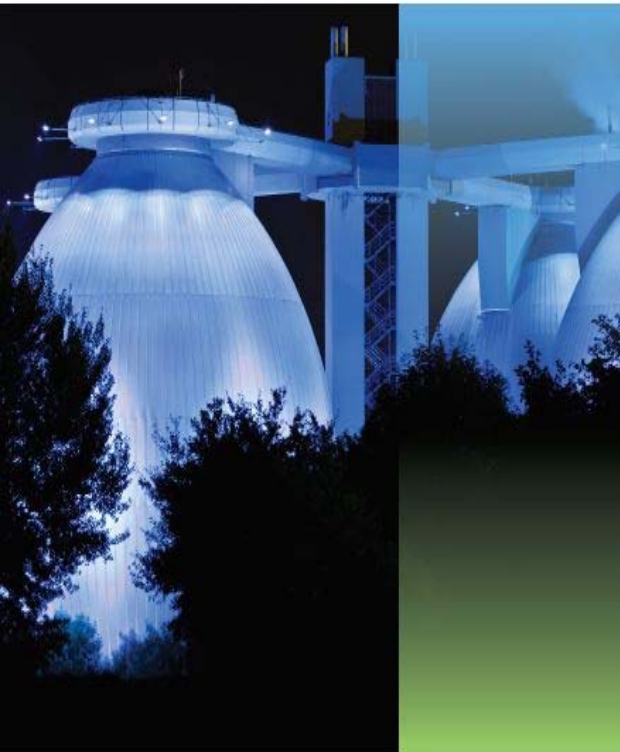
- Advance best practices
- Advance information exchange, education, & training
- Develop management systems that go beyond regulations & manage environmental impacts
- Help WRRFs do “better than promised,” “set the bar high,” and “continually improve”
- Assist biosolids agencies in gaining public confidence

Communication is key to successful outcomes

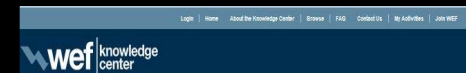
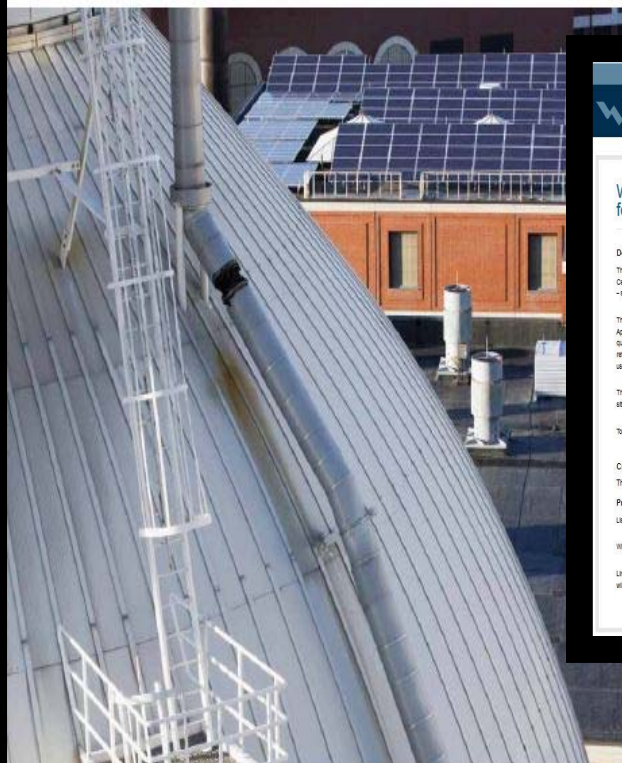


ENABLING THE FUTURE

Advancing Resource Recovery from Biosolids



Biogas Production and Use at Water Resource Recovery Facilities in the United States



WEF/ABC Biosolids Land Appliers' Online Guide to Preparing for the Class I Certification Examination

Description

This interactive activity is adapted from the best-selling 2012 "WEF/ABC Biosolids Land Appliers' Guide to Preparing for the Certification Examination." The online versions are broken down such that Class I review and Class I review are separate activities -- so that you can focus on your skill level. This product is for the Class I skill level.

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The two online activities accompany the Association of Boards of Certification's (ABC's) recently established Biosolids Land Appliers Certification Program as a means to assist individuals as they prepare for their certification exam. It includes sample questions for the seven core competencies of the Biosolids Land Appliers Class I and Class I skill levels. Each sample question references specific technical resources recommended by ABC. It also includes requirements for certification, as well as formulas commonly used for land appliers including conversion factors and a detailed list of abbreviations and acronyms.

This online activity includes two formats of quizzes for each competency. One is a timed practice quiz with scoring at the end, so that you can replicate an actual exam situation. The other is an interactive quiz, which immediately lets you know if you got the question wrong, and allows you to retry immediately.

To learn more about the "WEF/ABC Biosolids Land Appliers Online Guide to Preparing for the Class I Certification Examination" please click here.

Credits

This product is a study guide to be completed at your own pace. CEUs/POHs are not available for this product.

Pricing

List Price: \$48



WEF/ABC Biosolids Land Appliers' Online Guide to Preparing for the Class II Certification Examination

Description

This interactive activity is adapted from the best-selling 2012 "WEF/ABC Biosolids Land Appliers' Guide to Preparing for the Certification Examination." The online versions are broken down such that Class I review and Class I review are separate activities -- so that you can focus on your skill level. This product is for the Class I skill level.

You have not purchased this course.

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Credits

This product is a study guide to be completed at your own pace. CEUs/POHs are not available for this product.


Pricing

List Price: \$48

WEF Member Price \$38

Limit: Time Offer: You purchase the print version of the "WEF/ABC Biosolids Land Appliers' Guide to Preparing for the Certification Examination" by August 21st, you will receive an email with a unique code allowing you to purchase the online version at a 50% discount. To purchase the print version, click here.

NBP Biosolids Management Program Training:



Biosolids Management 101

Start here: Watch this brief [video overview](#) (Quicktime video, 10mb, 00:00:00) on how to complete this module successfully.

Module Completion Checklist: Print out a copy of this [Completion Checklist](#) (Microsoft Word doc, 12kb).

- Keep the Completion Checklist with you, marking off each completed item as you work through the module.
- As noted in the Completion Checklist, be sure to "introduce yourself" to your fellow trainees in the "Online Discussion Forum", at some point during your first week in the class.

On completion of this module, you should be able to:

- Describe good biosolids management
- Identify the benefits of good biosolids management
- Identify the four environmental outcomes of good biosolids management
- Identify challenges in developing and implementing an environmentally focused management program
- Describe critical control points
- Describe operational controls
- Describe the relationship of Plan, Do, Check, Act and the 17 elements of a BMP
- State their expectations for a BMP implementation plan
- Describe the steps in preparing their agency staff for the implementation plan visit

Related Readings/Files:

- [Code of Good Practice](#)
- [BMP Elements](#)
- [BMP Manual - Appendix B: Elements of a BMP BMP](#)
- [BMP BMP Certified Agencies Web Links and Related Documents](#)
- [National Manual of Good Practice](#)

As a final deliverable for this training, you will create a BMP manual for your own organization. Please review the example BMP manual below and start thinking about how you might create a document like this that would support a BMP in your workplace. We will revisit the creation of a manual in the 301 module.

Institutions for Example BMP Manual

- [Example - BMP Manual](#)
- [Revised BMP Manual](#)

Ongoing training resources:

- Take some time to find out more about [NBP member organizations](#).
- You can always access [BMP Core Document](#) here.
- Here you will find [example supporting files](#) from other agencies who have implemented BMPs and additional resources for this module.

Online Discussion Forum:

This online discussion forum is a place for you to talk through the challenges you see in implementing a Biosolids Management Program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Discussion: [Join the online discussion](#)

Use the questions located in [101 Worksheet Packet](#) to share your conversation and focus in on the critical points from this module. Make use of this discussion forum

All materials contained within this training are the property of NBP and permission must be obtained prior to distribution of any kind. To recommend training to a colleague, contact: [info@nbp.org](#)

Biosolids Management 201

Completion of the 201 Completion

Watch the following four video segments. Take frequent breaks using the pause button and make sure to complete the 201 Worksheet Packets you go through the presentation.

Biosolids Management 201 - Part 1 of 4
(Flash video, 9.5mb, 21 mins.)

Biosolids Management 201 - Part 2 of 4
(Flash video, 3.5mb, 9 mins.)

Biosolids Management 201 - Part 3 of 4
(Flash video, 5.5mb, 18 mins.)

Biosolids Management 201 - Part 4 of 4
(Flash video, 11.5mb, 27 mins.)

Before viewing the presentations, please be sure to download and print out the corresponding worksheet and note taking packets below.

These videos require the adobe flash plugin, which if needed, can be downloaded [here](#).

Worksheet Packets and Activities:

- [201 - Worksheet Packet](#)
- [201 - Slides for Note-taking](#)

Once you have completed viewing the presentations and readings, begin work on your [Site Implementation Plan](#), covering Elements 1 through 6. Use the example plan provided as a guide.

- [Site Implementation Plan Template](#) (excel, 441kb)
- [Example Plan](#) (excel, 441kb)

Guidance Manual:

[Management Program](#)

Member organizations:

[BMP](#)

Join other agencies who are working on this module.

Final Exam - 201: When you have completed viewing the above presentation and readings, take the quiz to check your knowledge of the essential topics covered. You will need to achieve a 70% pass rate to move on to the next module. The quiz will take between 10 - 15 minutes to complete.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Click this window and click on the "Post Test" link in the Knowledge Center to begin the Final Exam.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Click this window and click on the "Post Test" link in the Knowledge Center to begin the Final Exam.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

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Biosolids Management 301

Completion of the 301 Completion

Watch the following four video segments. Take frequent breaks using the pause button and make sure to complete the 301 Worksheet Packets you go through the presentation.

Biosolids Management 301 - Part 1 of 4
(Flash video, 13.7mb, 27 mins.)

Biosolids Management 301 - Part 2 of 4
(Flash video, 10.1mb, 29 mins.)

Biosolids Management 301 - Part 3 of 4
(Flash video, 8.3mb, 22 mins.)

Biosolids Management 301 - Part 4 of 4
(Flash video, 9.1mb, 21 mins.)

These videos require the adobe flash plugin, which if needed, can be downloaded [here](#).

Worksheet Packets and Activities:

- [301 - Worksheet Packet](#)
- [301 - Slides for Note-taking](#)

Once you have completed viewing the presentations and readings, begin work on your [Site Implementation Plan](#), covering Elements 7 through 12. Use the example plan provided as a guide.

- [Site Implementation Plan Template](#) (excel, 441kb)
- [Example Plan](#) (excel, 441kb)

Guidance Manual:

[Biosolids Management Program](#)

Member organizations:

[BMP](#)

Join other agencies who are working on this module.

Final Exam - 301: When you have completed viewing the above presentation and readings, take the quiz to check your knowledge of the essential topics covered. You will need to achieve a 70% pass rate to move on to the next module. The quiz will take between 10 - 15 minutes to complete.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Click this window and click on the "Post Test" link in the Knowledge Center to begin the Final Exam.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Click this window and click on the "Post Test" link in the Knowledge Center to begin the Final Exam.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Click this window and click on the "Post Test" link in the Knowledge Center to begin the Final Exam.

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Biosolids Management 401

Completion of the 401 Completion

Watch the following four video segments. Take frequent breaks using the pause button and make sure to complete the 401 Worksheet Packets you go through the presentation.

Biosolids Management 401 - Part 1 of 4
(Flash video, 13.3mb, 41 mins.)

Biosolids Management 401 - Part 2 of 4
(Flash video, 17.4mb, 48 mins.)

Biosolids Management 401 - Part 3 of 4
(Flash video, 3.5mb, 9 mins.)

Biosolids Management 401 - Part 4 of 4
(Flash video, 9.1mb, 23 mins.)

These videos require the adobe flash plugin, which if needed, can be downloaded [here](#).

Worksheet Packets and Activities:

- [401 - Worksheet Packet](#)
- [401 - Slides for Note-taking](#)

Once you have completed viewing the presentations and readings, begin work on your [Site Implementation Plan](#), covering Elements 13 through 17. Use the example plan provided as a guide.

- [Site Implementation Plan Template](#) (excel, 441kb)
- [Example Plan](#) (excel, 441kb)

Guidance Manual:

[Biosolids Management Program](#)

Member organizations:

[BMP](#)

Join other agencies who are working on this module.

Final Exam - 401: When you have completed viewing the above presentation and readings, take the quiz to check your knowledge of the essential topics covered. You will need to achieve a 70% pass rate to move on to the next module. The quiz will take between 10 - 15 minutes to complete.

Click through the challenges program with your fellow trainees. Post your observations and questions about this module's content here. Students are encouraged to begin weekly and be generous and kind in support of their classmates' learning and goal of implementing a BMP.

Click this window and click on the "Post Test" link in the Knowledge Center to begin the Final Exam.

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The NBP Biosolids Management Program (BMP/EMS) Continual Improvement Cycle





BMP Recognition Program

■ Tier 1: Bronze-Level Recognition

- Commitment to the NBP Code of Good Practice
- Acknowledged goal of implementing the 17 NBP BMP Elements
- Obtaining independent verification of the organization's BMP.

■ Tier 2: Silver-Level Recognition

- Organization has implemented the 17 BMP Elements
- Organization has completed an NBP approved audit, recognizing the BMP as ready for a third party verification audit.

■ Tier 3: Gold-Level Recognition

- Organization has completed an independent, third party BMP verification audit
- Organization has committed to conducting annual internal audits.

■ Tier 4: Platinum-Level Certification

- Organization has completed third party BMP verification audit and at least one third-party interim audit
- Organization commits to a regular schedule of third party interim audits and internal audits.



Supporting an organic solids information hub

Filling the gaps





Continued efforts in NBP information management

- Create easy and timely access to organic solids management information
- Act as a referral for sources of both knowledge and “response” information
- Identify primary sources of biosolids and other organic solids information and create linkages to them.
- Establish proactive “push” capability for regular dissemination of organic solids information, and examining options for creating additional mechanisms for dissemination of information



Determining Sustainability Metrics

Among those identified in "Enabling the Future:"

- The national biosolids recycling rate (calculated in the same ways as MSW recycling rates)
- The amount of energy generated (thermal, electrical, and kinetic combined into a common unit)
- The number of certified land appliers (or other measures of biosolids-specific training)

Program Goals

- Promoting organic solids management as renewable resource operations
- Fostering partnerships
- Supporting BMP
- Supporting an organic solids information hub
- Addressing the regulatory and policy framework

State of the Science Symposia

- The last biosolids state of the science symposium was held in 2004
- Moving forward with plans to hold the next symposium in conjunction with WEFTEC 2015 in Chicago
 - WEF has offered space at no cost
 - NACWA will be engaged and may provide TAF to support speaker travel
- Lakhwinder Hundal with MWRD of Greater Chicago is leading up the effort to put the symposium program together

Local/Regional Issues Roundtable

- Improving Communication among Local, State, Regional and National Biosolids Organizations
 - ABBA Group
 - National level coordination
- Developments/updates from around the country...

Texas

- TCEQ has opened a rule-making process (including four public meetings across the state) on proposed rule changes following numerous complaints from residents surrounding a Class A application site. Meetings begin in August.

Local/Regional Issues Roundtable

Washington State

- Dept. of Ecology appeal of Wakiakum County ban (upheld once already by the courts) on land application of Class B biosolids
 - Ordinance is in conflict with state law, which defines biosolids as a valuable organic soil amendment
 - Still in briefing stage; municipalities/NBMA considering filing as Amicus
- Citing of biosolids composting facility in Kittitas County
 - Primarily yard waste/food waste composting, but fears about biosolids (don't know what's in it, inadequate regulations, etc.) are being used by opponents

Local/Regional Issues Roundtable

- Update on Gilbert Nuisance Suit
- Other Updates?

Other Business

- Committee Co-Chair – Incineration Focus
- Next Committee Meeting
- Other?