



Implementing

*A Model Biosolids
EMS Program for the
Water Quality Profession*



Working to Ensure Environmental Stewardship in Local Communities



Dear Colleague:

I am pleased to present the National Biosolids Partnership's (NBP) 2005-2006 Annual Report on behalf of the many volunteers who have participated with the NBP by providing an important environmental service to their community. The Partnership is an alliance of the National Association of Clean Water Agencies (NACWA) and Water Environment Federation (WEF), with advisory support from the U.S. Environmental Protection Agency (EPA). It is committed to developing and advancing environmentally sound and sustainable biosolids management practices that address issues that augment mandatory regulatory compliance and promote public participation. The NBP environmental management system (EMS) program is designed to enhance the credibility of local agency biosolids programs and improved communications that lead to public acceptance.

Thanks to continued congressional funding, 84 agencies in 32 states are now participating in the Partnership's EMS program in 2005. These agencies produce, generate, and beneficially reuse a considerable quantity of biosolids in the US each year. In 2005, we were proud to double the number of certified agencies from 2004 by recognizing six additional agencies that successfully achieved verification of their EMS programs by independent, third-party auditors - Butler County Department of Environmental Services, Hamilton, OH; Fort Worth, TX; Denver Water Reclamation District, Denver, CO; Encina Water Authority, Carlsbad, CA; Lawrence Department of Water Utilities, Lawrence, KS; and, Kent County Regional Wastewater Treatment Facility, Milford, DE. In 2006, an additional 20-25 agencies are scheduled to undergo verification of their EMS programs, including each of the 11 currently NBP certified agencies that will undergo "interim audits" to maintain their EMS certification.

With continued federal support, the NBP intends to expand outreach and training, provide funding support for up to 105 agencies by the end of 2006, and expand its communications effort to ensure that the EMS is introduced to a broader audience, including the general public and media. The NBP web site - www.biosolids.org - continues as the premier clearinghouse for timely and credible biosolids information, including all of the EMS Blueprint documents, profiles of each EMS agency, information to assist agencies and educate the public, and a weekly electronic biosolids newsletter. We also have instituted a tiered recognition program for agencies at various stages of their EMS program implementation progress.

Over the past eight years, the NBP EMS program has transformed from a progressive and dynamic demonstration program to a "model" that has benefited all participating wastewater agencies. The journey will continue in 2006 to bring more agencies into the program. It has been a privilege and an honor to serve as Chair of the NBP since its inception and to work with the scores of volunteers from NACWA, WEF, EPA, and the wastewater profession who have developed and implemented this innovative model national program for the benefit of the wastewater treatment profession and the communities it serves.

Sincerely,

A handwritten signature in blue ink that reads "Robert W. Hite".

Robert W. Hite
Chair, National Biosolids Partnership

UPDATE

ON THE NBP ENVIRONMENTAL MANAGEMENT SYSTEM PROGRAM

The National Biosolids Partnership (NBP) focuses on providing objective, technically accurate and environmentally sound biosolids management information. The Partnership is encouraging wastewater treatment agencies to implement an environmental management system (EMS) that helps the public understand and accept local biosolids management practices. The EMS not only addresses regulatory requirements but also the entire biosolids value chain (pretreatment, solids treatment, and end use or disposal) where unit processes can be optimized to reduce odors and improve product quality. With an emphasis on “product quality,” the EMS can provide best management tools to help wastewater treatment agencies meet the requirements of intended biosolids markets. In this way, agencies can achieve public acceptance of their biosolids programs by optimizing product quality throughout the wastewater treatment process and ensuring that biosolids continue to be properly managed once they leave the site. In 2005, thanks to continued congressional funding, 11 additional public agencies and a partnership in the Pacific Northwest made the commitment to join the Code of Good Practice Club and participate as EMS candidates. To date, 84 agencies are participating and have begun to see many benefits, including better internal staff coordination, public participation, and community relations (see a complete listing of participating agencies on pages 4-6).



ACTION PLAN FOR 2006

In 2006, in addition to providing ongoing training workshops for EMS program participants, more NBP outreach is planned to groups outside the wastewater profession to establish “better brand recognition” among key interested parties. The information provided to these outside sources will focus not only on why the NBP has chosen to implement its EMS program, but more importantly on the benefits that its wastewater agencies are experiencing as they develop their EMSs and achieve the NBP “Seal of Approval.” The features of the NBP EMS program that will be promoted will include robust public participation, complete openness of agency programs, a focus on environmental results, and ongoing communication with the public.

The past six years of EMS development served as the framework for the creation of an operational NBP EMS Blueprint model for the wastewater profession in 2006. Success stories, lessons learned, and data from templates to measure EMS benefits will continue to be posted on the NBP web page. There will be an ongoing promotion of the EMS program within the wastewater profession, with a focus on using the experiences and benefits generated by demonstration agencies as a learning tool to encourage more agencies to participate.

The NBP expects that national and local interested parties will ultimately view the biosolids EMS program as a progressive, credible effort clearly demonstrating an organization’s commitment and capacity to deliver consistent regulatory compliance, effective and meaningful communication, and continual environmental improvement.

NBP’s funding support can allow for up to 105 agencies to participate in its program in 2006 with 20-25 agencies expected to undergo independent third-party verification and interim audits of their EMS for biosolids program. The Partnership developed a “tiered recognition pro-

gram” to acknowledge levels of progress by EMS program participants and will list these agencies on the NBP web page. In addition, NBP added a new staff position to support EMS agencies and will conduct joint EMS training workshops in conjunction with WEF member associations to bring the training into other states. NBP will also be offering an additional training workshop (EMS Workshop 501) in early 2006 for certified agencies to assist in continual improvement efforts to maintain certification status.

The NBP web site – www.biosolids.org – currently has more than 4,000 registered users who receive regular email blasts on timely biosolids-related information. The site also receives a monthly average of over 20,000 visitors and serves as an invaluable communications resource for biosolids information for water quality professionals, public, media and trade press. In 2006, the NBP’s weekly electronic biosolids update will continue to profile demonstration agencies and highlight their progress and benefits of implementing an EMS. Such profiles also will be posted in a “success stories” section of the Web site, along with other general information such as frequently asked questions intended to help the public and trade press better understand biosolids-related issues.

The NBP has also laid out suggestions for wastewater agencies on how to develop an effective communications plan in the *National Manual of Good Practice* and *EMS Elements*. During 2006, additional tools developed in 2005 will be used to assist EMS program participants with public education and public participation activities. Additionally, as more agencies successfully achieve verification of their EMS programs, sample documents from these agencies will continue to be posted on the NBP enhanced web site.

THE EMS BLUEPRINT MODEL



The NBP EMS Blueprint model was developed and tested over a seven-year period. The EMS Model is composed of five components:

- **Code of Good Practice**
- **Elements of an EMS**
- **EMS Guidance Manual**
- **National Manual of Good Practice**
- **Third Party Independent Audit Guidance**

These documents are located on the NBP Web Site at www.biosolids.org in the **NBP EMS Program** section. The documents have been assembled to be self-explanatory and “self-implementing.” The NBP also has developed and posted on its web page an EMS “self-help” training program that further facilitates the use of the Blueprint tools and educates other interested parties of the value of this progressive environmental improvement program. The NBP staff is also available to help agencies use the Blueprint.

What Is an EMS?

An EMS is a modern management approach based on continual improvement and is used to develop, implement, and monitor environmentally sustainable practices. EMSs help wastewater facilities to be efficient, responsive, and protective of the environment. The EMS also depends on public input from interested parties and external oversight from independent auditors who verify that the agency is effectively managing their environmental and community health impacts. Implementing an EMS is voluntary; therefore, the EMS approach can be adapted to support the needs, priorities, and circumstances of the implementing organization. Typically, an EMS is used to support continual improvement of activities relevant to environmental performance by helping an organization identify and act on opportunities for improvements in the following areas:

- **Product and service quality**
- **Regulatory compliance**
- **Risk management and preparedness**
- **Credibility with stakeholders**
- **Record-keeping, documentation and information management**

The EMS 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. There are internationally recognized standards for EMS such as ISO 14001. The NBP has taken these standard approaches and tailored them to create an EMS that is well-suited to the priorities and needs of wastewater utilities and biosolids programs.

What are Biosolids?

Biosolids are the nutrient-rich organic materials resulting from the treatment of domestic sewage at a wastewater treatment facility. Through biosolids management, solid residue from wastewater treatment is processed to reduce or eliminate pathogens and minimize odors, forming a safe, beneficial agricultural product. Farmers and gardeners have been recycling biosolids for ages. Biosolids can be applied as fertilizer to improve and maintain productive soils and stimulate plant growth. They also are used to fertilize gardens and parks and reclaim mining sites. Biosolids are carefully monitored and must be used in accordance with regulatory requirements.





NBP 2005 ACCOMPLISHMENTS

- *Butler County, OH; Fort Worth, TX; Denver, CO; Encina Wastewater Authority, Carlsbad, CA; Lawrence, KS; and Kent County, DE successfully achieved verification of their EMS for biosolids program by independent, third-party auditors*
- *Increased program participation by an additional 11 demonstration agencies. Eighty-four wastewater agencies participated in 2005. NBP's funding support can allow for up to 105 agencies to participate in its EMS program in 2006.*
- *The NBP 2004-2005 Annual Report was broadly distributed to water quality professionals and other interested parties and was prominently displayed on the Partnership web page – www.biosolids.org.*
- *Created and broadly distributed NBP Biosolids EMS Success Stories Brochure that documented program benefits and lessons learned from the initial six NBP certified agencies*
- *Created an EMS Communications Brochure as an additional marketing tool to encourage new agencies to participate in the NBP EMS program*
- *The NBP web page – www.biosolids.org – continues to be the #1 premier search engine site for biosolids on the Internet and has over 4,000 registered users and attracts an average of 20,000 visitors per month. A weekly electronic newsletter, EMS documents, agency profiles, media & general public resources and other biosolids resources and links are posted on the NBP web site.*
- *Created a quarterly report template for agencies to track public acceptance and EMS benefits of implementing a biosolids EMS program*
- *Completed transition from a demonstration program to an operational “model Biosolids EMS program” for the water quality profession*
- *Developed recommendations to address issues associated with “interim audit” scheduling for agencies to maintain their third-party audit verification and NBP certification*
- *Created an Advisory Committee representing various stakeholder groups to provide ongoing constructive input to the NBP EMS program*
- *Conducted an auditor workshop to evaluate lessons learned from EMS demonstration agency audits conducted during 2003-2005. The purpose of the meeting is to assure that auditors are auditing the EMS Elements consistent with the Auditor Guidance and the audits between auditors are “standardized”*
- *Completed a study to develop a “tiered recognition program” to acknowledge levels of progress and recognition by EMS program participants*
- *Conducted three EMS training workshops for new demonstration agencies and a final workshop for agencies that are in the final stages of EMS implementation*
- *Held regional EMS orientation workshops in Michigan, Southern California, and Pacific Northwest*
- *Created a partnership between NBP, Evergreen Rural Water of Washington, Northwest Biosolids Management Association, Oregon Association of Clean Water Agencies and Pacific Northwest Clean Water Association (Northwest Associations). The Northwest Associations and the NBP will work together on a Demonstration Project in 2006 to employ the EMS blueprint for biosolids management developed by the NBP in the Pacific Northwest*
- *Held two NBP recognition breakfasts for program participants at the WEF Residuals & Biosolids Specialty Conference in Nashville, TN and WEFTEC 2005 in Washington, DC*
- *Provided an update and increased awareness of the NBP EMS program to EPA state biosolids regulators*
- *Made numerous NBP EMS presentations to various water quality organizations and co-sponsored Animal Residuals Conference and Innovative Uses of Biosolids Symposium*
- *Conducted meeting of the NBP EMS Appeals Board to discuss issues related to the Partnership's audit process. Developed monthly newsletter to update the Board on the activities and status of the Partnership's EMS program*

84 PUBLIC AGENCIES IN 32 STATES

PARTICIPATING IN NBP BIOSOLIDS EMS PROGRAM (JANUARY 2006)

The following organizations have pledged to implement an environmental management system (EMS) for biosolids in conformance with the NBP's EMS Program requirements and to complete, in the future, an independent third party EMS verification audit. The NBP commends these agencies that have taken the progressive steps to participate in an environmentally sound program that demonstrates their commitment to address management issues to augment mandatory regulatory requirements and become better environmental stewards in their local community. Agencies that have received NBP certification of their EMS program are shown with the Partnership's Seal of Approval.

AGENCY	EMS CONTACTS
ALABAMA (1)	
*MONTGOMERY WATER WORKS AND SANITARY SEWER BOARD - MONTGOMERY, AL	JODY THOMPSON
ARIZONA (2)	
CITY OF PHOENIX - PHOENIX, AZ	FORREST "WOODY" WOODWICK
PIMA COUNTY WASTEWATER MANAGEMENT DEPARTMENT	HOUSSAM ELJERDI
CALIFORNIA (8)	
EAST BAY MUNICIPAL UTILITIES DISTRICT - OAKLAND, CA	JENNIFER LEE
*ENCINA WASTEWATER AUTHORITY - CARLSBAD, CA	DEBBIE BIGGS
*ORANGE COUNTY SANITATION DISTRICT - FOUNTAIN VALLEY, CA	DEIRDRE HUNTER BINGMAN
*CITY OF LOS ANGELES DEPT OF PUBLIC WORKS - LOS ANGELES, CA	DERRICK K. LEE
*CITY OF SAN DIEGO METROPOLITAN WASTEWATER - SAN DIEGO, CA	LORI VEREKER
SAN FRANCISCO PUBLIC UTILITIES COMMISSION, WPCD - SAN FRANCISCO, CA	NATALIE SIERRA
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY - SAN JUAN CAPISTRANO, CA	TOM ROSALES
CITY OF SANTA ROSA PUBLIC UTILITIES - SANTA ROSA, CA	DELL TREDINNICK
COLORADO (2)	
*METRO WASTEWATER RECLAMATION DISTRICT - DENVER, CO	ANGEL FOSTER
CITY OF GREELEY WATER AND SEWER DEPARTMENT - GREELEY, CO	DENNIS SCHUMP
DELAWARE (1)	
KENT COUNTY REGIONAL WASTEWATER TREATMENT FACILITY - MILFORD, DE	JAMES NEWTON
DISTRICT OF COLUMBIA (1)	
*DISTRICT OF COLUMBIA WATER & SEWER AUTHORITY - WASHINGTON, DC	CHRIS PEOT
FLORIDA (4)	
CITY OF CHIEFLAND - CHIEFLAND, FL	RANDY WILKERSON
GAINESVILLE REGIONAL UTILITIES - GAINESVILLE, FL	JAMIE HOPE
COLLIER COUNTY WASTEWATER DEPARTMENT - NAPLES, FL	MARISA GARCIA
ORANGE COUNTY UTILITIES - ORLANDO, FL	TIM MADHANAGOPAL
GEORGIA (1)	
*COLUMBUS WATER WORKS - COLUMBUS, GA	MIKE TAYLOR
INDIANA (2)	
CITY OF ELKHART WASTEWATER TREATMENT FACILITY - ELKHART, IN	LAURA KOLO
FORT WAYNE BIOSOLIDS HANDLING FACILITY - FT. WAYNE, IN	STACEY PETROVAS
ILLINOIS (2)	
*METROPOLITAN WATER RECLAMATION OF GREATER CHICAGO - CHICAGO, IL	BRIAN LEVY
THORN CREEK BASIN SANITARY DISTRICT - CHICAGO, IL	JENNIFER HINDEL
IOWA (1)	
CITY OF DES MOINES WASTEWATER RECLAMATION FACILITY - DES MOINES, IA	PHIL KOUNDAKJIAN
KANSAS (1)	
*CITY OF LAWRENCE DEPARTMENT OF UTILITIES - LAWRENCE, KS	JEANNETTE KLAMM



Denotes agency that has received NBP EMS program certification through successful verification of their EMS for biosolids.

*Initial 27 charter POTWs participating in the National Biosolids Partnership EMS for biosolids program

For more information on the NBP's voluntary environmental management system program, visit: www.biosolids.org and click on the NBP EMS Program section of the home page.





How Can I Join?

Joining the NBP Biosolids EMS Program is Easy!

NBP encourages agencies of all sizes, regardless of biosolids management methods, to participate in the program and provides EMS training opportunities.

Agencies at various stages of EMS implementation will be recognized starting in 2006 on the NBP web page.

When a new agency joins the NBP EMS program, the Partnership offers 4 levels of recognition:

Tier 4: *Platinum*

Completion of interim audits to maintain audit company verification and NBP certification

Tier 3: *Gold*

Third party verification and NBP certification

Tier 2: *Silver*

EMS Elements in place, awaiting third party audit

Tier 1: *Bronze*

Commitment to Code of Good Practice, with the ultimate goal of third party verification & NBP certification

KENTUCKY (1)

LOUISVILLE & JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT – LOUISVILLE, KY SHARON WORLEY

MAINE (2)

CITY OF BANGOR WASTEWATER TREATMENT – BANGOR, ME BRADLEY MOORE
*LEWISTON–AUBURN WATER POLLUTION CONTROL AUTHORITY – LEWISTON, ME MAC RICHARDSON

MARYLAND (1)

WASHINGTON SUBURBAN SANITARY COMMISSION – LAUREL, MD STEVE GERWIN

MICHIGAN (8)

ANTHONY RAGNONE TREATMENT PLANT – MONTROSE, MI JOE GOERGEN
CITY OF BATTLE CREEK – BATTLE CREEK, MI LARRY DeLONG
KALAMAZOO WATER RECLAMATION PLANT – KALAMAZOO, MI ROBERT COCHRAN
CITY OF GRAND RAPIDS – GRAND RAPIDS, MI RANDY FISHER
LANSING WASTEWATER DIVISION – LANSING, MI DANIEL LeVEQUE
CITY OF WIXOM WWTP – WIXOM, MI TIM SIKMA
SOUTH HERON VALLEY UTILITY AUTHORITY – SOUTH HERON, MI NATHAN TURNER
*CITY OF WYOMING CLEAN WATER PLANT – WYOMING, MI MYRON ERICKSON

MINNESOTA (1)

CITY OF MANKATO – MANKATO, MN PATTI METTLER

MISSOURI (1)

*KCMO WATER SERVICES – KANSAS CITY, MO BOB WILLIAMSON

MONTANA (1)

CITY OF HELENA – HELENA, MT BRYAN LEWIS

NEW HAMPSHIRE (2)

*TOWN OF MERRIMACK DEPARTMENT OF PUBLIC WORKS – MERRIMACK, NH ROGER DESCOTSUAUX/JIM TAYLOR
NASHUA WASTEWATER TREATMENT FACILITY – NASHUA, NH MARIO LECLERC

NEW YORK (2)

*CITY OF NEW YORK BUREAU OF WASTEWATER TREATMENT – CORONA, NY TOM MURPHY
*COUNTY OF ONONDAGA DEPARTMENT OF DRAINAGE & SANITATION–SYRACUSE, NY RANDY OTT

NORTH CAROLINA (2)

GASTONIA WASTEWATER TREATMENT DIVISION – GASTONIA, NC LARRY CUMMINGS
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT – RALEIGH, NC MARTI GIBSON

OHIO (2)

BUTLER COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES – LeSOURDSVILLE, OH ADAM SACKENHEIM
*CITY OF WARREN WATER POLLUTION CONTROL CENTER – WARREN, OH MIKE WELKE

OREGON (2)

*CITY OF ALBANY – ALBANY, OR CHRIS BAILEY
ENVIRONMENT SERVICES OF CLACKAMAS COUNTY – CLACKAMAS, OR MONA LAPIERRE

PENNSYLVANIA (5)

ANNVILLE TOWNSHIP AUTHORITY – ANNVILLE, PA CHARLES NOLL
DERRY TOWNSHIP MUNICIPAL AUTHORITY -- HERSHEY, PA WAYNE SCHUTZ
NAZARETH BOROUGH MUNICIPAL AUTHORITY – NAZARETH, PA PAT MANDES
*CITY OF PHILADELPHIA WATER DEPARTMENT – PHILADELPHIA, PA BILL TOFFEY
ALLEGHENY COUNTY SANITARY AUTHORITY – PITTSBURGH, PA ROBERT MARTIRE

SOUTH CAROLINA (2)

SPARTANBURG WATER SYSTEM AND SANITARY SEWER BOARD – SPARTANBURG, SC ALICIA WILSON
*WESTERN CAROLINA REGIONAL SEWER AUTHORITY – GREENVILLE, SC JOEY COLLINS

TENNESSEE (2)

CITY OF CHATTANOOGA DEPARTMENT OF PUBLIC WORKS – CHATTANOOGA, TN JERRY W. STEWART
KNOXVILLE UTILITIES BOARD – KNOXVILLE, TN JOSHUA JOHNSON

TEXAS (3)

DALLAS WATER UTILITIES – SOUTHSIDE WASTEWATER TREATMENT PLANT – DALLAS, TX FARIBORZ FAKHERI
*CITY OF FORT WORTH WATER DEPARTMENT – Ft. WORTH, TX GARY ROCKERS
GUADALUPE–BLANCO RIVER AUTHORITY – SEGUIN, TX MIKE URRUTIA



84 PARTICIPATING AGENCIES (CONTINUED)



WHAT DOES IT
MEAN TO BE AN

**NBP Certified
Agency?**

UTAH (4)

TIMPANOGOS SPECIAL SERVICE DISTRICT – AMERICAN FORKS, UT
CENTRAL DAVIS COUNTY SEWER DISTRICT – KAYSVILLE, UT
SNYDERVILLE BASIN WATER RECLAMATION DISTRICT – PARK CITY, UT
SOUTH DAVIS COUNTY SEWER IMPROVEMENT DISTRICT – WEST BOUNTIFUL, UT

KYLE CLUFF
LELAND MYERS
GARY HILL
DAL WAYMENT

VERMONT (2)

*TOWN OF BRATTLEBORO WASTEWATER TREATMENT FACILITY – BRATTLEBORO, VT
TOWN OF SOUTH BURLINGTON – SOUTH BURLINGTON, VT

STEVE BARRETT
GEORGE DOW

VIRGINIA (3)

ALEXANDRIA SANITATION AUTHORITY – ALEXANDRIA, VA

CITY OF RICHMOND DEPARTMENT OF PUBLIC UTILITIES – RICHMOND, VA
HAMPTON ROADS SANITATION DISTRICT – VIRGINIA BEACH, VA

KAREN PALLANSCH
GEORGE FLOYD
CLAIR WATSON
RHONDA BOWEN

WASHINGTON (8)

CITY OF EVERETT – EVERETT, WA
*CITY OF OMAK – OMAK, WA
*KING COUNTY DIVISION OF WASTEWATER TREATMENT – SEATTLE, WA
CITY OF LYNDEN – LYNDEN, WA
CITY OF SEDRO-WOOLLEY – SEDRO-WOOLLEY, WA
CITY OF SPOKANE – SPOKANE, WA
*CITY OF TACOMA PUBLIC WORKS ENVIRONMENTAL SERVICES – TACOMA, WA
OLYMPUS TERRACE SEWER DISTRICT – MUKILTEO, WA

CHRIS CHESSON
BRYAN COFFEY
LISA VOGEL
TAMARA ADAMS
DEBBIE ALLEN
DALE ARNOLD
DAN THOMPSON
GIL BRIDGES

WISCONSIN (4)

*CITY OF APPLETON WASTEWATER TREATMENT PLANT – APPLETON, WI
GREEN BAY METROPOLITAN SEWERAGE DISTRICT – GREEN BAY, WI
*MADISON METROPOLITAN SEWERAGE DISTRICT – MADISON, WI
*MILWAUKEE METROPOLITAN SEWERAGE DISTRICT – MILWAUKEE, WI

PIERRE GRIENIER
JEFF SMUDGE
DAVE TAYLOR
PAUL SCHLECHT

In order to be admitted and certified to the National Biosolids Partnership's World Class Biosolids Environmental Management System Program, an organization must meet five requirements.

1. The agency has documented its responsibility for the Biosolids Value Chain pretreatment, treatment and final use;
2. The agency has committed to the 10 principles in the National Biosolids Partnership's Code of Good Practice;
3. The agency operates a Biosolids Environment Management System that meets all the National Biosolids Partnership's requirements;
4. The agency has committed to make continual improvements in their Environmental Management System for environmental performance; regulatory compliance; public participation; and quality biosolids management practices; and
5. The agency has successfully completed a fully independent audit of its Environmental Management System and has been verified by a National Biosolids Partnership's accredited company.

The NBP Seal of Approval means that the agency has been certified by the NBP.



**84 AGENCIES
PARTICIPATING IN
NBP BIOSOLIDS
EMS PROGRAM**

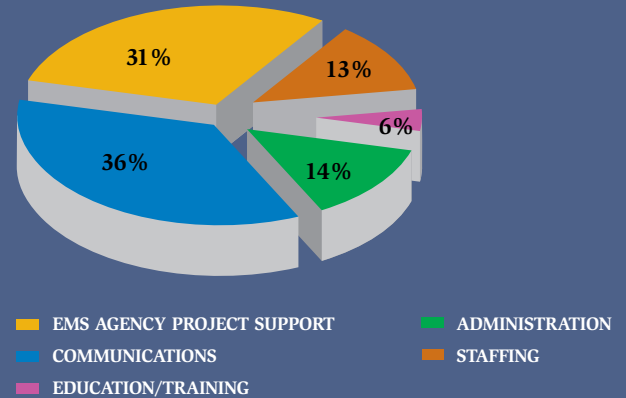
Visit biosolids.org for a complete listing of agencies.

FINANCIAL SUMMARY



The Partnership's funding has been primarily the result of a congressional appropriation administered through a cooperative agreement by U.S. EPA. In addition, the active participation and significant supplemental in-kind contributions of the National Association of Clean Water Agencies (NACWA) and Water Environment Federation (WEF) staff as well as their individual members, EPA and other biosolids professionals have added substantially to NBP resources and outreach.

NBP 2004-2005 OPERATING BUDGET



NBP WEB PAGE



www.biosolids.org is the premier search engine site for biosolids on the Internet and has over 4,000 registered users and attracts an average of 20,000 visitors per month. A weekly electronic newsletter, EMS documents, agency profiles, media & general public resources and other biosolids resources and links are posted on the NBP web site.

The Mission of the National Biosolids Partnership (NBP) is to:

- Advance environmentally sound and accepted biosolids management practices;
- Develop a comprehensive environmental management system (EMS) for biosolids that will serve as a model for the wastewater profession;
- Help EMS program participants demonstrate to their communities that they are committed to addressing management issues to augment mandatory regulatory requirements and to explain how they are working to improve their environmental performance;
- Help EMS program participants involve their communities in defining improved performance or areas that still require attention; and
- Develop and administer a centralized clearinghouse for biosolids information

NBP EMS QUARTERLY REPORTS

Guidance Template to Track Indicators for Public Acceptance of Agency Biosolids Program

In EMS for biosolids has been shown to promote a range of both quantitative and qualitative benefits to wastewater facilities across the nation. Benefits resulting from an EMS approach to sound biosolids management include:

1. Overall public acceptance and the four outcomes areas
2. Relations with Interested Parties
3. Environmental Performance
4. Regulatory Compliance
5. Quality Management Practices

The report compiles the information from the results of several interview questions. Questions range from “Is public acceptance measurable and if so, what are the indicators of public acceptance that could be measured?” to “We often hear that the cost savings (i.e. the bottom-line) is what resonates most. In your opinion how critical is it for EMS benefits to be translated into dollars saved/spent?” Data collected from this agency report will be invaluable in tracking how the NBP biosolids EMS program are helping wastewater agencies across the nation.

NBP Biosolids EMS Promotes Four Key Outcomes...

QUALITY MANAGEMENT PRACTICES

Ensure consistent product quality

BETTER RELATIONS WITH INTERESTED PARTIES

Establish and maintain credibility

REGULATORY COMPLIANCE

Exceeds compliance with regulatory requirements

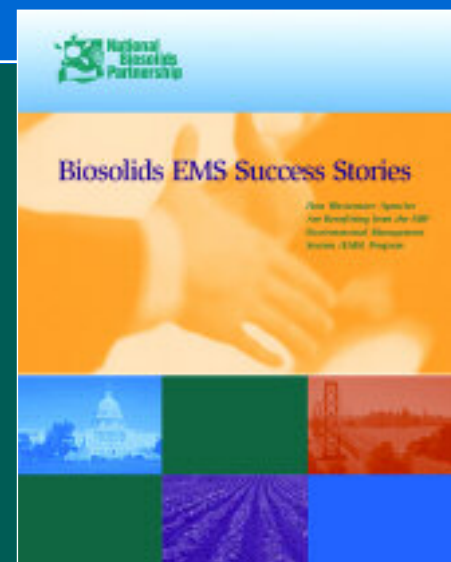
ENVIRONMENTAL PERFORMANCE

Protects environment for future generations

BENEFITS OF NBP CERTIFICATION PROCESS

NBP Biosolids EMS Success Stories

The NBP EMS program has been helping its participating agencies manage their biosolids practices to address internal efficiencies and issues of public concern in local communities. Wastewater agencies participating in the EMS program are becoming more responsive to concerns about biosolids management practices. Each of the NBP participating agencies is leading the way to excellence through environmental management and continuous improvement. NBP released in early 2005 a Biosolids EMS Success Stories brochure that provided brief case studies from the initial six NBP certified wastewater agencies highlighting how the EMS program has benefited the respective agencies' biosolids management program and lessons learned from their experience. A similar brochure will be produced in 2006 to highlight the benefits from agencies that successfully became NBP EMS certified during the period of 2003-2005.



BIOSOLIDS EMS PROGRAMS MUST UNDERGO INDEPENDENT VERIFICATION

In 2006, 20-25 more agencies plan to have their EMS programs evaluated by independent third-party auditors for verification purposes. The Third-Party Audit Program provides the opportunity for a public agency to achieve independently audited acceptance of its EMS program. The independent audit brings credibility to the program and facilitates the continual improvement process. A local agency prepares an EMS meeting NBP's requirements and then manages its biosolids accordingly. The independent audit provides verification that the agency managed within its EMS and subsequently recognized with an NBP "seal of approval."

The NBP's Auditor Guidance document is designed to guide independent auditors in reviewing local agency EMSs. This consensus document reflects and communicates the intent, expectations, and requirements of NBP's EMS Program, and will provide the basis for consistent and fair independent, third-party audits. The NBP registered three audit companies to audit local

agencies and certify those that pass the audit. The audit firms include Det Norske Veritas (DNV), KEMA Registered Quality, Inc., and NSF International. The NBP has established an EMS Appeals Board for purposes of reviewing any appeals of audit findings.



NBP Releases EMS Communications Brochure

The NBP developed a new EMS Communications Brochure in November 2005 to encourage water quality agencies to participate in the NBP EMS program. The brochure provides an overview of the NBP EMS program, benefits, costs, need, and opportunities for other agencies to participate in the Partnership's program. The brochure will be used as a marketing tool to augment the annual report and biosolids EMS success stories brochures and along with NBP efforts to encourage other wastewater agencies to participate in the NBP EMS program during 2006.

TESTIMONIALS

FROM NBP EMS PROGRAM PARTICIPANTS

ALEXANDRIA SANITATION AUTHORITY (ASA) – ALEXANDRIA, VA

ASA is in the midst of a start up of new biosolids processing facilities, implementing a new organizational structure, and transitioning to the production Class A biosolids. The EMS has helped us develop tools that communicate guidelines for operating the new processes and to ensure that all appropriate staff understands how the processes that affect biosolids should be run in order to produce Class A biosolids. ASA is continuing the start up of new biosolids processing facilities, implementing a new organizational structure, and transitioning to the production Class A biosolids. The EMS development process is helping us maintain focus on our biosolids program.

KENT COUNTY DEPARTMENT OF PUBLIC WORKS – DOVER, DE

The benefit of having third party certification for our EMS program is to add legitimacy to it in the eyes of our employees, constituents and the general public. It makes no sense to expend the resources to develop and implement the EMS program and not add a way to show it is more than just a program of the month. The cost of the audits are outweighed by the goodwill and credibility gained through them.

CITY OF CHIEFLAND – CHIEFLAND, FL

The NBP EMS program has provided more transparency in the biosolids program. We have better record keeping and reporting, and better communication tools and skills when relating to the property owners and surrounding residents.



City of Lawrence, Kansas

Photo: (L to R): Matt Bond, WEF Director; Dave Wagner, Assistant Director of Utilities - Wastewater; Mark Hegeman, Wastewater Treatment Manager; Jeanette Klamm, Residuals Coordinator; Mayor Boog Highberger; Dick Champion, Vice President NACWA.



Encina Wastewater Authority (EWA), Carlsbad, CA

Photo (l to r): Tish Berge (EWA EMS Coordinator), Marlaigne Dumaine (CASA), Jim Clark (WEF/Black & Veatch), Jim Donley (General Manager, Ag Tech LLC), Mike Hogan (EWA General Manager), Deirdre Bingham (NACWA/OCSD), Layne Baroldi (NACWA/OCSD), and Pete Machno (NBP).

DES MOINES REGIONAL WASTEWATER RECLAMATION FACILITY – DES MOINES, IA

The NBP EMS Program is helping us put Standard Operating Procedures, tasks, and action plans on paper. This is helping us look at the total project as a whole and not react to issues one at a time.

KALAMAZOO WATER RECLAMATION PLANT – KALAMAZOO MI

We have seen an increase in awareness of the importance of how each area in the plant affects the final product. Personnel have come forward with several good ideas on how to improve some aspect of the process.

SAN FRANCISCO PUBLIC UTILITIES COMMISSION – WASTEWATER ENTERPRISE - SAN FRANCISCO, CA

The NBP EMS program gives us a forum to discuss certain issues. For example, we were recently discussing some problems with centrifuge sampling, and in explaining how an EMS should work, we were able to develop a communications strategy around the sampling (because it was presented as a requirement of the EMS). The main benefit we are seeing is increasing awareness about biosolids and the EMS across the organization, including our Communications group and our management. This type of organization-wide awareness of San Francisco's biosolids issues will help us in resource allocation for the future and also reinforces the importance of quality and continuing improvement in our day-to-day activities.

SNYDERVILLE BASIN WATER RECLAMATION DISTRICT – PARK CITY, UT

The increase in documentation to support our program is very beneficial.

CLACKAMAS COUNTY- WATER ENVIRONMENT SERVICES – OREGON CITY, OR

Continued benefits include documenting what we have been doing and now having a plan to update and revise documents. We developed a new biosolids brochure and in the next quarter will be filming our video.

Denver, CO Metro Wastewater Reclamation District
 Mitch Costanzo, Director of Resource Recovery and Reuse (left-center) accepts EMS certification plaque from NBP (L-R) Ken Kirk, Tim Williams, and Pete Machno.



COLLIER COUNTY WASTEWATER DEPARTMENT – NAPLES, FL

We are continuing to develop a coherent approach to document management and record keeping. We have established goals and performance measurements. We have mapped out critical processes and activities and catalyzed a systematic process for updating, enhancing, and implementing effective management practices. We have identified legal requirements and are formulating a public participation program and communicating the approved biosolids policy to all the interested stakeholders. Collier County is well on the way to implementing a strong biosolids EMS program.

METRO WASTEWATER RECLAMATION DISTRICT – DENVER, CO

Some of the benefits of the NBP EMS program include: implementation of standard operating procedures to appropriately capture institutional knowledge, cost savings on equipment based on nonconformance investigation, creation of a Citizen Participation Group that gives valuable feedback on the EMS and biosolids management activities, improved communication between departments, and improved training related to biosolids program.

CITY OF FORT WORTH VILLAGE CREEK WWTP – ARLINGTON, TX

The City of Fort Worth has benefited from the NBP EMS program through improved internal communications and biosolids knowledge between City divisions, plant personnel and contractor. The City has also improved outreach efforts to the public relating to our biosolids program, biosolids in general, and efforts the City is moving towards in the future.



City of Fort Worth Texas, TX
 Fort Worth EMS Team: (l to r) Jerry Pressley, Pre-Treatment; S. Frank Crumb; Acting Water Director, Tom Boerth, Renda Environmental Inc.; Stacy Walters, Laboratory; Maebell Brown, Assistant Water Director; Gary F. Rockers, EMS Coordinator and Biosolids Manager.

CITY OF GASTONIA – GASTONIA, NC

The EMS program has provided the City with improved control over contractor activities, site selection process for land application sites, and cost savings.

CITY OF GRAND RAPIDS, MICHIGAN – GRAND RAPIDS, MI

Our facility is not only developing and/or refining procedures related to biosolids but also taking this opportunity to look at policies/procedures on a broader basis.

GREEN BAY METROPOLITAN SEWERAGE DISTRICT – GREEN BAY, WI

Green Bay Metropolitan Sewerage District (GBMSD) has seen improved awareness at all levels of employees on the need for an efficient and effective biosolids program and what they each can contribute to this program. The NBP EMS has also helped GBMSD increase its vision into the future for other biosolids management options, especially in regards to beneficial reuse.

KNOXVILLE UTILITIES BOARD – KNOXVILLE, TN

Knoxville Utilities Board has found the NBP EMS program has helped improve biosolids quality through an evaluation process that lead to increased sampling and a qualitative outlook on our biosolids program. An improved biosolids program has resulted due to our process review and development of an SOP manual. Annual review of SOPs will ensure the most up to date information for process control. Other benefits include: specific ownership of the biosolids process from maintenance to operations personnel, development of a training program for operations employees to ensure the best biosolids management activities, contractor involvement with SOP generation and revisions, and development of a centralized EMS document repository has provided a way to track and maintain documents.

ORANGE COUNTY UTILITIES – ORANGE COUNTY, FL

Orange County Utilities has found that our biosolids EMS program has improved communications through employee involvement in the development of SOPs and EMS manual and there is improved quality and cost awareness. Some operators took proficiency tests in biosolids operations that included several questions on EMSs. We have also had contractor willingness to support our EMS.

WHY JOIN THE NBP EMS PROGRAM?

Optimizing Internal Plant Performance

The NBP EMS program provides operators, managers and administrators tools to assess plant performance and to prevent problems or violations before they occur and improve plant efficiency by transferring operational knowledge and information using electronic databases. The NBP's EMS Program helps plant operators achieve optimized treatment performance.

Positive Return on Investment

While the NBP EMS program requires a time commitment from agencies in order to set up policies and procedures to improve efficiency, a positive return on the investment comes in the form of improved community relations, operational cost savings and improved communication between all parties.

Recognition by Your Community and Customers

Participation in the NBP's EMS program demonstrates your commitment to environmental management and performance by producing high quality biosolids. Achieving the NBP's Certification and Seal of Approval demonstrates your commitment to your community.

Complimenting Existing Permit Requirements

The Partnership's technical materials and tools help prepare utilities to augment meeting minimum regulatory standards through continual environmental improvements.

Improved Contractor Oversight and Performance

You know what's going on inside the plant — do you know what's going on out at your biosolids use sites? The NBP EMS Program helps ensure and improve issues related to contractor communication and oversight.

Resources *to Help You Get Started*

The NBP offers training workshops, technical assistance and recognition to help agencies develop and implement their EMS program. In addition, participating agencies have a network of contacts and certified agencies can serve as mentors to help ensure success!

Visit the NBP web page – www.biosolids.org – to read testimonials and contact wastewater agencies participating in the program, including those that have had their EMS programs certified.

The NBP encourages all wastewater agencies to become involved in our EMS for Biosolids program. Contact us to sign up! Agencies interested in participating in the program should contact NBP staff.

For more information contact:

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601 Wythe Street

Alexandria, VA 22314-1994

Email: shadeed@wef.org or 703.684.2418

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NACWA
A Clear Commitment to America's Waters

Water Environment Federation®
Preserving & Enhancing
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