



North Carolina Division of
Pollution Prevention and
Environmental Assistance

FOCUS

waste minimization

Providing pollution
prevention
assistance to North
Carolina industries
since 1984

DENR Recognizes State's First Environmental Steward

State and local officials came together in Franklinton on Feb. 27 to congratulate Novozymes North America as it was named North Carolina's first Environmental Steward.

In a ceremony led by Secretary Bill Ross of the Department of Environment and Natural Resources (DENR) and Secretary Jim Fain of the Department of Commerce, Franklinton's Novozymes became the first Steward in DENR's voluntary Environmental Stewardship Initiative (ESI), which debuted on Earth Day 2002.

"Novozymes was chosen as our first Environmental Steward because of its strong past performance in setting and achieving environmental performance improvements, its attention to potential environmental impacts when establishing business goals, and its proactive communication of environmental goals and impacts to its employees and the public," said Secretary Ross.



Reasons cited by the Advisory Workgroup in its selection of Novozymes include:

- The company's inclusion of environmental requirements in employee job descriptions and recognition of employees for reaching environmental goals;
- Novozymes' extensive integration of its environmental management system and environmental performance goals into its business operations;
- Its practice of tracking environmental and social measurements and improvement goals and communicating these with the public; and
- Actively including requirements for suppliers in its environmental management system.

"Novozymes serves as an example to companies across our state that profitability and environmental responsibility need not be

mutually exclusive," said Secretary Jim Fain of the Department of Commerce. "The company's record can work to inspire other industries to help us maintain the quality of life that has always been a fundamental part of economic development and prosperity in North Carolina."

As an Environmental Steward, Novozymes is recognized for its commitment to exemplary environmental performance beyond what is required by law. Stewards are required to set aggressive environmental performance goals that include pollution prevention, a commitment to exceed compliance, and annual improvements to performance.

"We continuously strive to minimize resource consumption and environmental impacts related to our production by using best available technology, optimizing our processes, developing recycling schemes for waste materials, and by disposing of emissions and waste in an environmentally sound manner in accordance with regulations and local requirements," said Lee Yarbrough, president of Novozymes North America Inc.

To continue its recognition of organizations with superior environmental performance in North Carolina, DENR is soliciting another round of applications for the ESI (see story page 2).

INSIDE THIS ISSUE



State Looks for Environmental Champions	2
Profile: Novozymes North Carolina Inc.	3
ESI Partners Pledge Stewardship Support	4
Boiler MACT	5
Water Quality News	6-7
EMS Resources/Calendar of Events	7

Round Two: State Looks for Environmental Champions

Beginning on Earth Day, April 22, the N.C. Department of Environment and Natural Resources (DENR) is once again looking to recognize and partner with organizations that keep the environment in mind as part of their daily business practices. These organizations are invited to apply for membership in the Environmental Stewardship Initiative (ESI), a voluntary program designed to promote and encourage superior environmental performance.

In its second year, the ESI establishes incentives to stimulate regulated organizations to develop and implement programs that use pollution prevention and other innovative approaches to meet and exceed their regulatory requirements. This program seeks to reduce the impact on the environment beyond measures required by any permit or rule, producing a better environment and a stronger economy and conserving natural resources. Any organization that operates a facility in North Carolina is eligible to participate in the initiative. This includes but is not limited to manufacturers, businesses, agribusiness, service providers, government agencies, schools and nonprofit agencies.

Participants can become involved at one of two levels. The "Partner" level is designed for adoption by a broad range of organizations that are interested in beginning the process of developing a systematic approach to improving their environmental performance. Partners must commit to environmental compliance, to developing an environmental management system (EMS), and to setting environmental performance goals. DENR provides technical assistance to Partners and a single point of contact regarding regulatory issues.

Environmental Partner applications are now being accepted year-round. Partner applications will be reviewed on a quarterly basis, during the first month of each quarter – July, October, January and April. Applications must be received at least two weeks preceding the first day of each review month to be considered during that review cycle. For example, to be considered in the next Partner review cycle, applications must be received by Tuesday, June 17.

The "Steward" level is for those organizations that already display a commitment to exemplary environmental performance beyond what is required by law. Stewards must have implemented an



EMS, have aggressive environmental performance goals, and demonstrate a commitment to exceed compliance. Stewards will receive formal public recognition from Gov. Mike Easley and DENR Secretary Bill Ross, use of a program logo, established time frames for permit decisions, and consideration for regulatory innovations. Organizations selected as Stewards undergo a thorough review by DENR staff of any significant violations in the preceding two years. They are given an on-site assessment, followed by an evaluation by members of the Advisory Workgroup (below), which forwards its recommendations to Secretary Ross. Applications to become an Environmental Steward will be accepted until Monday, June 23, with a decision expected in late fall.

Stewards and Partners must report annually on progress toward the organization's environmental performance goals, net reductions of releases, emissions and disposal, net reductions in energy/water use, and any reportable non-compliance events.

A 10-member advisory workgroup appointed by Secretary Ross oversees program development and implementation. Membership consists of individuals from manufacturers, industries, industry trade groups, environmental and citizen nongovernmental organizations, and small businesses.

For more detailed information or to apply for the program, please visit the Environmental Stewardship Initiative Web site at <http://www.p2pays.org/esi>, or contact Beth Graves of the Division of Pollution Prevention and Environmental Assistance at (919) 715-6506 or beth.graves@ncmail.net.

ESI Advisory Workgroup Members

Carolyn Anderson
Dr. Richard Andrews
Alan Briggs
Jimmy Carter (chair)
Preston Howard Jr.
Matt Jordan
Maj. Gen. David Mize
Jane Preyer
Larry Spence
Steve Wall

Progress Energy
UNC-Chapel Hill
Save Our State
DENR
MCIC
City of Gastonia
MCB Camp Lejeune
Environmental Defense
Ready Mixed Concrete
Conservation Council of N.C.

NORTH CAROLINA'S FIRST ENVIRONMENTAL STEWARD: NOVOZYMES NORTH AMERICA INC.

Novozymes, the world-leading producer of enzymes, is a biotechnology-based company with headquarters in Denmark. Novozymes' Franklinton site employs approximately 375 staff and serves as the company's North American headquarters. Novozymes has activities in more than 20 countries and sells its enzymes in more than 130 countries, with enzyme production facilities in Denmark, Switzerland, Brazil, China and the United States. The plant produces liquid and granulated enzymes, primarily for the North American market. Markets include the detergent, corn sweetener, fuel alcohol and food processing industries.

Novozymes pledges its commitment to sustainable development as an integral part of business management. Novozymes is committed to maintaining a balance of economic, environmental and social priorities and goals through its worldwide "Triple Bottom Line" approach. Each year, all site employees play a part in striving to meet a "Balanced Scorecard" of objectives aimed at continual improvement in economic, environmental and safety, and social performance.

The following briefly summarizes the facility's environmental performance goals that demonstrate Novozymes' exemplary efforts to go beyond compliance and integrate superior environmental performance into business and social activities.

Franklinton Environmental Performance Goals

- Reduce Total Solid Waste indexed to production by 15 percent by the end of 2003 compared to 2000 levels;
- Increase solid waste recycling per employee by 15 percent by the end of 2003 compared to 2000 levels;
- Reduce the amount of water used, indexed to production volume, by 1.5 percent annually through 2003;
- Educate and assist customers to reduce environmental impact of their processes and products; and
- Increase efficiency of energy usage.

In addition to recognition from DENR, Novozymes continues to lead the Healthcare market sector in the Dow Jones Sustainability Indexes. This environmental leader won the 2000 North American Maintenance Excellence Award, which requires both good preventive maintenance and repair activities. The company also was awarded the 2001 Presidential Green Chemistry Challenge Award for the BioPreparation™ of cotton textiles, which replaces harsh scouring chemicals used in the textile industry. Novozymes is also a participant in EPA's National Environmental Performance Track program, which recognizes facilities with environmental management systems and who are going beyond regulatory compliance requirements to further improve environmental performance. Novozymes received registration to ISO 14001 on May 15, 2000.



The ESI Award: Statement of Sustainability

The Environmental Stewardship Initiative presents Environmental Stewards with an award that embodies the recipient's efforts to promote natural resource conservation and environmental sustainability. The award plaque is unique both for its content as well as its construction. The award is constructed from 100 percent reclaimed wood. The antique poplar frame is carefully salvaged from abandoned barns, kiln-dried, re-sawn and re-milled in preparation for its new purpose. Nail holes, wormholes and other signs of wear enhance the frame's appearance. The frame's paint is an oil-based finish made from naturally derived raw materials, including citrus peel extracts, essential oils, seed oils, tree resins, inert mineral fillers, tree and bee waxes, lead-free driers and natural pigments (earth and/or rock). The raw materials for this finish are low in toxic substances, renewable and have a minimal environmental impact.

The mat boards are made from reclaimed wood pulp fibers, and the mounting (middle) boards have the highest percentage of recycled fibers available. The award manufacturer, Rivanna Natural Designs, located in Charlottesville, Va., has a sincere concern for the environment and its surrounding community.

The photo collage displays the natural beauty of North Carolina in three photos, showcasing Polk County's Pearson's Falls, the Linn Cove Viaduct on the Blue Ridge Parkway (one of society's most elegant solutions to an environmentally formidable problem), and a photo of sunrise taken at Atlantic Beach on the coast of eastern North Carolina. All photos are courtesy of the N.C. Division of Tourism, Film and Sports Development.

ESI PARTNERS PLEDGE ENVIRONMENTAL STEWARDSHIP

On March 3, at a ceremony hosted by the N.C. Zoological Park, 25 organizations met for the first time and were recognized by DENR Secretary Bill Ross as Partners in DENR's first round of the Environmental Stewardship Initiative. This diverse group consists of industrial manufacturing facilities, military installations, food processing plants, a state agency, academia and utility providers.

"These participants have voluntarily committed to take a similar environmental journey toward becoming environmentally sustainable by protecting the land, air and water – all finite resources," said Ross. "My hope is that this program provides a forum for facilities to proactively address environmental issues and share successes through annual reporting."

The ESI is comprised of two levels of participation. The "Environmental Partner" level is designed for adoption by a broad range of organizations interested in developing a systematic approach to improving environmental performance. Partners must set environmental performance goals, including pollution prevention, that are appropriate to the nature, scale and environmental impact of the organization. Partners must report annually on progress towards their environmental performance goals, net reductions of releases, emissions and disposal, net reductions in the use of energy and water, and any reportable non-compliance events. DENR provides technical assistance to Partners and a single point of contact regarding regulatory issues.

The March ceremony provided partners a forum to discuss their thoughts and expectations as ESI participants. Many spoke about the benefits of sharing knowledge and assisting in identifying gaps, engaging in networking activities, and creating an ESI listserv.

"We're looking for a regional approach of bringing other partners into our facility to share their knowledge," said Greg Lathrop of Engineered Sintered Components. "We think networking will be a great advantage of this program."

Matt Jordan with the City of Gastonia spoke of the state's resource concerns in conjunction with the program. "It's going to be important that we're helping others ourselves, as we develop some type of database so we can refer people there to

draw off some of the burden. Being a partner means: sharing resources, mentoring and developing a database of resources." To apply as an ESI Partner, please see story page 2 or visit the ESI Web site at <http://www.p2pays.org>.

2002 Environmental Partners

American & Efird Inc.	10 locations statewide
Baker Furniture	3 locations statewide
Camp Lejeune MCB	Camp Lejeune
Duke University	Durham
Engineered Sintered Components Co.	Troutman
Flextronics International N.C. Inc.	Youngsville
Fort Bragg	XVIII Airborne Corps
City of Gastonia Wastewater Treatment Plant	
Highland Industries Inc. Kernersville Finishing Plant	
Hunter Farms Dairy	High Point
N.C. Natural Gas Corp.	locations statewide
N.C. Zoological Park	Horticulture Section
City of Shelby First Broad River Wastewater Treatment Plant	
Smithfield Packing Company Tar Heel Division	Tar Heel

FOCUS: Waste Minimization is published by the divisions of Pollution Prevention and Environmental Assistance, Waste Management, Air Quality and Water Quality of the N.C. Department of Environment and Natural Resources (DENR). It is intended to provide North Carolina industries and other interested parties with current information concerning proper waste management and waste reduction. The information contained in this publication is believed to be accurate and reliable. However, the application of this information is at the reader's own risk. Mention of products and services in the publication does not constitute an endorsement by the state of North Carolina. The information contained in this publication may be cited freely.

If you have comments, waste minimization case summaries, resource information or questions for the next issue of the *FOCUS* newsletter, call Norma Murphy at (919) 715-6513, fax (919) 715-6794, e-mail Norma.Murphy@ncmail.net, or write the N.C. Division of Pollution Prevention and Environmental Assistance (DPPEA), 1639 MAIL SERVICE CENTER, RALEIGH NC 27699-1639.

State of North Carolina: Michael F. Easley, Governor; William G. Ross Jr., DENR Secretary; Gary Hunt, DPPEA Director.



Visit
DPPEA
online:

www.p2pays.org

Air Quality - Boiler MACT

The boiler MACT is nearly complete. The following information summarizes the key parts of the MACT, though there are still many aspects of this MACT to be finalized. You are encouraged to contact the N.C. Division of Air Quality at (919) 733-3340 for further information.

The proposed MACT was published in the Federal Register on Jan. 13, 2003, page 1660, and is scheduled to be finalized on Feb. 28, 2004. It can be found at 40 CFR Part 63, Subpart DDDDD, which begins at 63.7480.

What does it do?

- Establishes national emission limitations for hazardous air pollutants (HAPs) for industrial, commercial and institutional boilers and process heaters.
- Requires demonstration of initial and continuous compliance with emission limitations and work practice standards.

Who is covered by this MACT?

- Owned and operated boilers and process heaters located at or are part of a major source of HAPs, except as exempted. The boiler itself does not have to be a major source, it just has to be located at a Title V major facility. **This MACT doesn't cover all Title V major facilities, only facilities that are Title V for HAPs.**

Facilities must submit an initial notification within 120 days of the publication of the final rule in the Federal Register. This notifies N.C. DAQ that you are covered by this MACT, or that you claim not to be covered by it.

If you claim your facility is not covered by this MACT, a facility can "opt out" of this MACT by taking a limit on HAP emissions, essentially becoming a HAP synthetic minor, in addition to the current Title V permit. This will probably require a permit modification, and probably should be done prior to the publication date of the final boiler MACT.

- New, reconstructed, and large existing boilers and heaters. The boiler/heater is considered new if its construction commenced after Jan 13, 2003, and met applicability criteria at the time construction commenced. It's considered reconstructed as defined in 63.2. It's considered existing if not new or reconstructed.

The following boilers/heaters are exempted from the MACT. There may be other exemptions in the final regulations.

1. Waste heat boilers
2. Municipal waste combustor, Part 60-AAAA,BBBB,Eb,Cb
3. Hospital/medical/infectious incinerators, 60-Ce,Ec
4. Electric utility steam generating units larger than 25 megawatts, producing electricity for sale.

5. Boilers and heaters permitted under Part 63-EEE
6. Incineration units covered by 60-CCCC, or DDDD
7. Recovery units, 63-MM
8. Units used specifically for research and development
9. Hot water heaters-gaseous fuel, less than 160 psi, temp less than 210 °F
10. Refining kettles,63-X
11. Ethylene cracking furnace, 63-YY

The N.C. air quality regulations, 2Q 503 (7), as part of insignificant activities, exempts comfort heaters. These are heaters that are used only for providing comfort heat, and not for process uses. These boilers/heaters may still have to comply with this MACT.

When is compliance required?

If New or Reconstructed:

- A) No later than date of Final Rule publication in the Federal Register, if started prior to this date.
- B) Date of start-up, if started after date of final rule publication

If Existing: no later than three years after date the final rule is published in the Federal Register

If an area source becomes subject to this MACT, the compliance dates are the same as above.

Emission Limitations

	PM	Metals	HCl	Hg (Lbs/MMBtu)
New or reconstructed –				
Large Solid Fuel	0.026	0.0001	0.02	0.000003
Large Liquid Fuel	0.03		0.0005	
Ltd. Use Solid Fuel	0.026	0.0001	0.02	0.000003
Ltd. Use Liquid Fuel	0.03		0.0009	
Small Solid Fuel	0.026	0.0001	0.02	0.000003
Small Liquid Fuel	0.03		0.0009	
Existing –				
Large Solid Fuel	0.07	0.001	0.09	0.000007
Ltd. Use Solid Fuel	0.21	0.001		

Large—greater than 10MM Btu/Hr

Limited— a large boiler that operates less than 10 percent of the time

Small— less than 10MM Btu/Hr

PM— Particulate Matter, 2.5 microns

HCl—Hydrochloric Acid

Hg— Mercury

A facility may have a choice of complying with either the PM limits or the alternate metal standards. There appear to be no new regulations in this MACT for existing small boilers. The proposed regulation contains many permutations and combinations of types and sizes of boilers and various control alternatives for complying with this MACT.

Water Quality News

Stormwater Phase 2 Draft Permanent Rules

The N.C. Division of Water Quality administers a program that regulates stormwater discharges to state waters. The regulation helps to reduce the amount of pollutants entering streams, lakes and rivers from runoff generated by industrial areas, construction sites and urban areas. The regulation is administered by issuing discharge permits that authorize the permittee to discharge stormwater to receiving waters of the state. The discharge permits are part of a program delegated to North Carolina by the Environmental Protection Agency under the federal Clean Water Act. Industrial facilities and construction sites that discharge stormwater either directly to surface waters or indirectly, through municipal separate storm sewers (MS4s), must be covered by a State National Pollution Discharge Elimination System (NPDES) permit. The industries covered by the program include most manufacturers, mining, transportation facilities, power plants, landfills, wastewater treatment plants, and auto recyclers.



Phase 1 of the stormwater program began in October 1992. At that time, stormwater discharges from certain industrial activities owned or operated by municipalities (including cities and counties) with a population of less than 100,000 people were granted a temporary exemption from the need for stormwater permits. Municipalities serving a population of less than 100,000 have been included in this exemption for the past 10 years. Phase 2 rules ended this temporary exemption on March 10, 2003. Municipalities required to obtain state permit coverage have been notified by DWQ.

The Environmental Management Commission (EMC) approved NPDES Phase 2 implementation temporary rule language on Oct. 10, 2002. At its Feb. 13, 2003, meeting the EMC gave approval for DWQ to move forward to public notice and public hearings with draft permanent rule language for implementing the NPDES Phase II Stormwater program in North Carolina. Public hearings were held across the state in April 2003. The public comment period is scheduled to close on May 16, 2003. For information on the Stormwater Phase 2 public hearings and public comment, please visit: http://h2o.enr.state.nc.us/su/NPDES_Phase_II_Stormwater_Program_Perm_Rules.htm.

Metal Products and Machinery (MP&M) Final Rule

On Feb. 14, 2003, EPA's Administrator signed a final rule (pre-publication) copy to establish wastewater controls for the Metal Products and Machinery (MP&M) industrial category, Title 40 of the Code of Federal Regulations, Subpart 438. The (pre-

publication) MP&M regulation applies to about 2,400 facilities that generate oily wastewater.

EPA's Jan. 3, 2001, proposed rule [see 66 FR 424] (that replaced an earlier proposal dated May 30, 1995 [see 60 FR 28210]), would have established new limitations and standards for approximately 10,000 facilities in 18 industrial sectors. The agency proposed



establishing eight subcategories of facilities that would be covered under the rulemaking. The final rule (pre-publication) essentially eliminates the eight subcategories except for the Oily Wastes group. Limitations and standards (oil and grease and total

suspended solids based on the best practicable control technology) are set only for point-source facilities that discharge treated wastewater from oily operations in the Oily Wastes subcategory. Direct (point-source) dischargers must comply with effluent limitations in National Pollution Discharge Elimination System (NPDES) permits; indirect dischargers (to a publicly owned treatment works) must comply with pretreatment standards. The final rule (pre-publication) does not include pretreatment standards for any of the subparts. The official 40 CFR 438 MP&M regulation is a forthcoming Federal Register publication. A link to the pre-publication rule is posted on this EPA Web site: <http://www.epa.gov/waterscience/guide/mpm/rule.html>.

Does Your Waste Have a Home?

*Available on a Computer Screen
Near You...*

www.ncwastetrader.org
N.C.'s Industrial Waste Exchange

Have Your Waste Ready!

for more information, call:
Tom Rhodes, (919) 715-6516



Environmental Management System Resources

The Environmental Stewardship Initiative (ESI) encourages organizations to use a systematic approach to integrate environmental management into core business functions and day-to-day activities. Many prospective Environmental Partners may not have a formal structured system in place to help manage their overall environmental responsibilities. Environmental Management Systems (EMSs) provide a framework to help oversee environmental affairs including compliance and performance improvements. An EMS based on the voluntary ISO 14001 model includes a structure that begins with top management support and progresses to setting improvement goals, training employees, documenting procedures and continually assessing the system's performance. Receiving certification to the ISO 14001 standard or even obtaining upper management's support to embark on design, implementation and maintenance of an EMS can require substantial resources (i.e., financial support, staff time, etc.). However, free, expert assistance is available to guide through successful development and implementation of an EMS. Those organizations who are extended participation in the ESI are offered a coach to assist with EMS design and implementation.

A number of EMS resources can be found on the Internet. The following Web sites provide a sampling of tools available.

Resources and Links

N.C. Division of Pollution Prevention and Environmental Assistance

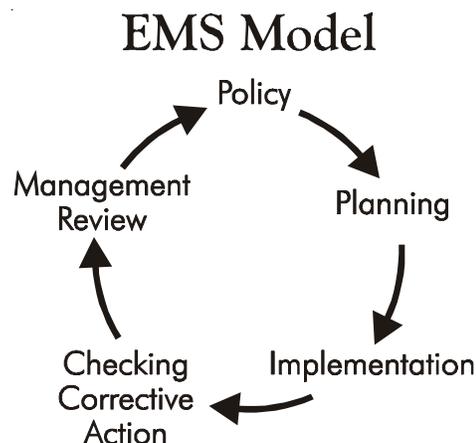
<http://www.p2pays.org/>

The environmental management systems section of this site includes several sector-specific resources, implementation guides, and links to other ISO 14000 information on the Internet.

Public Sector EMS PEER Center

<http://www.peercenter.net>

This Web site is hosted by the Public Sector Environmental Management System Resource Center, and provides EMS information, field-tested tools, materials and links to local resource centers around the country.



EPA Environmental Management Systems Clearinghouse

<http://www.epa.gov/ems>

This site contains EMS publications, policies and programs available from EPA.

P2RIC EMS Topic Hub

[http://www.p2ric.org/TopicHubs/toc.cfm?](http://www.p2ric.org/TopicHubs/toc.cfm?hub=9&subsec=7&nav=7)

[hub=9&subsec=7&nav=7](http://www.p2ric.org/TopicHubs/toc.cfm?hub=9&subsec=7&nav=7)

EPA's Region 7 Pollution Prevention Regional Information Center (P2RIC) presents this EMS topic hub for Small to Medium Enterprises (EMS4SME). This annotated resource guide serves SMEs (manufacturers with less than 500 employees) and their technical consultants that want to find the best online EMS resources freely available. This hub is intended to serve those who are interested in learning more about what an EMS is, how it works, reasons to adopt an EMS, how an EMS can help reduce waste, and where to turn for additional implementation and ongoing operational support. The resources linked to this hub provides access to information resources for all ranges of EMS, from novice to expert.

CALENDAR OF EVENTS

EVENT	DATE	LOCATION	CONTACT
Sixth Annual Learning Together Workshop on Environmental Innovation and EMS	June 2-3	San Antonio, Texas	www.mswg.com
Environmental Stewardship Initiative Partner Applications Due - 3rd quarter review cycle	June 17	n/a	Beth Graves, (919) 715-6506
Environmental Stewardship Initiative 2003 Steward Applications Due	June 22	n/a	Beth Graves, (919) 715-6506