



Air and Waste Matters

DNREC Division of Air and Waste Management

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Welcome to the Division's First Quarterly Newsletter!

Welcome to *Air and Waste Matters!*

This quarterly newsletter is designed to provide timely news on air and waste-related issues in Delaware. We want to inform you about policies and resources that can affect air quality, site cleanup/reuse, recycling, solid and hazardous waste management, enforcement, and emergency preparation and response in the State. More information on the Division can be found on the last page of the newsletter. A subscription

to the newsletter and the Division's companion bimonthly electronic E-News Update is **FREE!** Please sign up to receive it at: <http://www.dnrec.state.de.us/DNREC2000/admin/maillists/maillists.htm>.

No forms to fill out; done in 3 clicks!

DNREC Air and Waste Management Division



James D. Werner
Director

April 2006 Brownfields Conference at the Riverfront

The 2006 Brownfields Conference — *Sustainable Progress Through Partnership*, will feature keynote speaker **Marianne L. Horinko**, executive director of the Global Environmental Technology Fund and former acting EPA Administrator. As assistant administrator for the EPA's Office of Solid Waste and Emergency Response, Ms. Horinko oversaw the EPA's responses to the Sept. 11th terrorist attacks and the Space Shuttle Columbia disaster.

The conference will be held **from 9 a.m. to 4:30 p.m. on Thursday, April 27th** at the Chase Center on the Riverfront in Wilmington, and is presented by the Delaware Department of Natural Resources and Environmental Control and the Delaware Economic Development Office (DEDO).

Designed for anyone interested in Brownfields development, from community groups and local government to developers, the conference will provide key information presented by Brownfields consultants and ex-

perts from the EPA, DNREC, DEDO and other city, state, county and community representatives.

Workshop topics will include "Brownfields Basics – Cleanup and Redevelopment 101," plus new cleanup and site assessment technology, integration of Brownfields redevelopment into community planning and answers to questions such as "How do I pay for cleanup at that site?"

Registration is \$95 per person and includes a conference notebook, continental breakfast, lunch and networking reception. For registration and more information, visit:

<http://www.dnrec.delaware.gov/lawml/BrownfieldsConf.htm>.

Click on "Brownfields Conference Brochure" for a registration form, or call the DNREC Site Investigation and Restoration Branch at 302-395-2600. More information on the conference is also available at:

<http://www.dnrec.state.de.us/dnrec2000/admin/press/story1.asp?PRID=1990>.

“For 200 years, Wilmington sustained shipbuilding, rail car manufacturing, steel mills, tanneries, and other industries, for which we are now paying the environmental price,” said Division Director Jim Werner.

DNREC Awarded Brownfields Job Training Grant

In March 2006, EPA Mid-Atlantic Regional Administrator, Donald S. Welsh, announced **\$141,764 in federal funding** awarded to the DNREC in partnership with Delaware Technical and Community College (DTCC), the City of Wilmington, New Millennium Community Development Corporation (CDC) and the Bethel Temple CDC to recruit and train Wilmington residents for environmental clean-up jobs. Welsh joined Delaware Governor Ruth Ann Minner in a ceremony in Wilmington highlighting efforts underway to redevelop brownfields sites in Wilmington, and to award the grant to DNREC.

This is the second job training grant that has been awarded to Delaware to teach environmental cleanup skills to residents in Wilmington, whose neighborhoods have been affected by brownfields. Brownfields are abandoned, industrial properties where environmental contamination has been a barrier to redevelopment.

“My administration has a strong commitment to the redevelopment of brownfields and working with our federal partners, municipalities, community organizations and the private sector to spur revitalization in

affected communities,” said Delaware Governor Ruth Ann Minner. “Redeveloping historic industrial and manufacturing sites improves the environment while bringing new jobs and growth to targeted areas.”

The EPA selected DNREC to receive grant funding that will provide job training for Wilmington’s inner-city residents. The grant award will provide residents of communities, potentially affected by brownfields properties, with the skills and training needed to effectively gain employment in assessment and cleanup activities associated with brownfield redevelopment and environmental remediation.

According to James D. Werner, Director of DNREC’s Division of Air and Waste Management, the grant focuses on the Southbridge and East Wilmington neighborhoods, where there are a disproportionate number of brownfields sites. “For 200 years Wilmington sustained shipbuilding, rail car manufacturing, steel mills, tanneries, and other industries, for which we are now paying the environmental price,” said Werner. “Not only will the grant bring training funds to these communities, ultimately resulting in more assessment and cleanup activities, but underemployed residents will be recruited from the neighborhoods providing much needed employment opportunities for those who live there,” he said.

The grant will provide full training for 100 students, and DNREC plans to place at least 70 graduates in environmental positions and track them for at least one year. The 126-hour curriculum includes construction safety, outreach, forklift operator, and brownfields environmental course work, leading to HAZWOPER, asbestos worker, lead worker, and forklift operator certifications. For inquiries regarding participating in the job training program, please call Robert Needs, with DTCC at 302.453.3003. More information is also available at: <http://www.dnrec.state.de.us/dnrec2000/admin/press/story1.asp?PRID=1867> and <http://www.dnrec.state.de.us/dnrec2000/admin/press/story1.asp?PRID=1941>.



Mike Purzycki, Don Welsh, Lt. Governor Carney, and DNREC Sec. Hughes at the event.

Hi-Tech - 2005 Brownfields Success Story



Before (2004)



After (2005)

These are the before and after pictures of the former Hi-Tech gas station located in Brandywine Village, Wilmington, Delaware. A successful collaboration between the City, DNREC, and the EPA turned what was once an eyesore into an aesthetically pleasing green space with useful paved and storm water drainage areas. DNREC's Tanks Management Branch oversaw the extensive investigation and cleanup of the property. More information is available at: <http://www.epa.gov/reg3hwmd/bfs/success/DE-wilmington.htm>.

Thinking about Purchasing a Brownfields Site?

Did you know that there are certain environmental activities that should be performed prior to purchasing sites with a history, or suspected history, of contamination? These activities are called environmental due diligence or all appropriate inquiry. EPA has recently established requirements for activities performed as part of environmental due diligence, referred to as the final **All Appropriate Inquiries Rule**. The rule was released by the EPA on November 1, 2005, with an effective date of November 1, 2006. The rule provides specific regulatory requirements for conducting an inquiry into the previous ownership, uses and environmental conditions of a property. These requirements are applicable to purchasers who do not want to be held liable for the contamination (i.e., innocent land-owners, bona fide prospective purchasers, or contiguous property owners). For more information, please see the following EPA link on the new All Appropriate Inquiry rule at:

<http://www.epa.gov/region3/revitalization/newsletter/winter05-06/aaqi.htm>.

Brownfields Development - New Destiny Fellowship Church

DNREC's Division of Air and Waste Management was recently recognized by Wilmington pastor Bishop Thomas Weeks, Sr. "for their invaluable direction and assistance that has led to an environmentally-safe property." Division Director James D. Werner accepted a plaque on behalf of DNREC from Bishop Weeks at a dedication for the New Destiny Fellowship Church in northeast Wilmington. Bishop Weeks also presented appreciation plaques to the project architect and Wilmington Mayor James Baker.

"I was humbled to receive such sincere gratitude on behalf of DNREC," Werner said, noting DNREC's Brownfields cleanup and redevelopment expert, Jim Poling, was the key player on the project. Werner noted he also gained a more complete picture of the congregation and its community activities, which include plans to build retail and office space that will house the West End Medical Clinic (now underway) and pharmacy. For more information, please see the complete story at:

<http://www.dnrec.state.de.us/dnrec2000/admin/press/story1.asp?PRID=1964>.



Bishop Weeks and Director Werner.

**Learn More
About
Brownfields!**

**Don't miss the
Brownfields
Conference at
the Chase
Center on the
Riverfront
(formerly
Bank One
Center) on
April 27, 2006.**

**The event will
focus on
cleanup and
revitalization
of Brownfields
properties.**

Delaware Air Toxics Assessment Study (DATAS)

DATAS was initiated to identify air toxics, their sources, and the human health risks for cancer and non-cancer health effects.

On May 4th, DNREC's Air Quality Management Section and the Office of the Secretary will hold an open educational forum, "Toxics in Our Air," at Southern Elementary School near Delaware City. The forum will present the results of Phase I of the Delaware Air Toxics Assessment Study.

Scientists and educators from DNREC's Air Quality Management (AQM) Section will meet with the public, one-on-one, at the exhibits and discuss the results of the air toxics study. DATAS represents a major undertaking by AQM—the largest and most comprehensive study of air toxic contaminants and the potential risks to human health in the Mid-Atlantic region. Phase I of the project was completed last summer,

while Phase II is on-going this year.

Delaware's air quality is affected by toxic chemicals from several sources. The study determined that the most significant source is mobile sources, including cars, trucks, and buses. This was among the major findings of the study completed by DNREC with partial funding from the EPA, Delaware Cancer Consortium and others.

The Delaware Department of Health and Social Services - Division of Public Health partnered with DNREC in the study. The study measured air toxics in five locations in the state and determined the potential risks of these air toxics to human health.

DNREC's goal is to educate Delawareans about air quality (the air that we breathe) and the potential health risks from exposure to air toxics. We also hope to engage the public and private sector to partner with us to help reduce the adverse impacts of air toxics and improve air quality. The first public forum to discuss the results of Phase I was held on March 28th in Felton, Delaware. Additional public informational forums will be held as follows:

- **Thursday, May 4 at Southern Elementary School near Delaware City, 5:00 – 8:00 p.m.**
- **Tuesday, May 23 at Seaford High School in Seaford, 5:00 – 8:00 p.m.**
- **Thursday, June 1 at Delaware Technical and Community College in Wilmington from 12:00 – 2:00 p.m. and 5:00 – 8:00 p.m.**

For more information on the forums, please contact Terri Brixen at 302.323.4542, or Melanie Rapp at 302.739.9073. For more information on DATAS visit:

http://www.dnrec.state.de.us/air/aqm_page/DATAS.htm



0 10 20 Kilometers

Legend

- ▲ Toxics Monitoring Sites
- Town Boundaries

Air Quality Monitoring Station Locations in Delaware

Tank Owners Prepare for Ethanol-Blended Gasoline

Why ethanol, and why now? As a result of the Energy Policy Act of 2005, your local gas station will be making some changes. The Act addresses everything from underground storage tank compliance, to renewable energy sources, to tax credits for energy-saving technologies.

The Energy Policy Act included a few key provisions pertaining to ethanol use in motor fuels:

- it lifted the oxygenate requirement for reformulated gasoline,
- it required increased usage of ethanol in gasoline nationwide, and
- it did not provide a "safe harbor" for methyl tertiary butyl ether (MTBE) manufacturers against defective product lawsuits.

These key factors paved the way for the phase-out of MTBE-blended gasoline and the increased use of ethanol-blended gasoline in our region. Ethanol blends have been sold in the Midwest for several years.

DNREC's Tank Management Branch is educating tank owners, operators, contractors, consultants, and consumers about ethanol-related issues. As Delaware prepares for the delivery of the first load of gasoline blended with **10% ethanol (E10)**, many important factors must be considered on how to safely store the new product. The technology for storing and dispensing ethanol is essentially the same as that used for gasoline. **However, what may have been compatible with gasoline is no longer fully compatible with ethanol blends.**

Ethanol blends do not have the same compatibility characteristics of conventional fuel when it comes to storage and dispensing. Soft metals such as zinc, brass or aluminum, which are commonly found in conventional fuel storage and dispensing systems, are **not fully compatible** with ethanol blends.

Some **nonmetallic materials** may also degrade when in contact with ethanol such as natural rubber, polyurethane, alcohol-based adhesives (frequently used in older fiberglass piping), certain elastomers and polymers used in flex pipe, bushings, gaskets, meters, filters, and materials made of cork. In order to store and dispense ethanol blends safely, UST Systems must be made ethanol compatible.

Tank linings with epoxy or polyester resins from the late 1970s and early 1980s may fail when in contact with ethanol. Tank leak detection equipment such as Automatic Tank Gauges using capacitance technology may not work properly and magnetostrictive probe floats may have compatibility/operability issues with ethanol blends due to changes in product specific gravity. Also, product dispenser meters may need to be recalibrated after conversion to ethanol and special filters with 10 micron or smaller pores need to be used on product dispensers.

In addition, **phase separation** is a concern because ethanol is completely miscible in water. Ethanol also blends well with gasoline. When water infiltrates a tank (i.e., through sump covers and loose fittings at the top of the tank), the ethanol in the ethanol-gasoline blend will absorb the water. If enough water is present, it will overwhelm the ethanol's capacity to remain blended with the gasoline. In addition, once phase separation occurs, the affected tank(s) must be completely emptied by a disposal company before a delivery of new product can occur. Emptying and cleaning operations may cause some spot shortages. More information on E10 is available at:

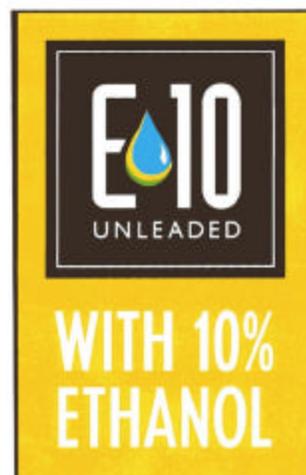
www.dnrec.delaware.gov/awm.

For more information about the switch to ethanol, please contact the Tank Management Branch at 302-395-2500. **Automobile fuel compatibility can be checked at:**

<http://e10unleaded.com/whosays.htm>.

Short-term gas shortages may occur as gas station owners empty and clean tanks in preparation for delivery of ethanol blends.

Ethanol tends to cause leaching from soft metals, which can contaminate a vehicle's fuel system, resulting in poor performance.



FREE Curbside Recycling Pilot Comes to Wilmington

Mayor Baker Proposes Free, Mandatory Curbside Recycling:

Wilmington Could Save Thousands of Dollars in Landfill Fees

Citizens Would Earn

RecycleBank Dollars or RecycleBucks Redeemable at Area Businesses (\$25/month)

Approximately 8,000 residents would begin in June, with citywide recycling projected to start in early 2007.

Wilmington Mayor James M. Baker, Public Works Commissioner Kash Srinivasan and the Clean Wilmington Committee announced that the City would take an important step toward improving the environment, while saving thousands of dollars in landfill fees by adopting a **free**, mandatory curbside recycling program for Wilmington.

On April 4, 2006, the Mayor announced that Wilmington has reached a tentative contract agreement with RecycleBank, a Philadelphia-based company, for both a pilot recycling program and a Citywide recycling program that rewards citizens for participating.

Wilmington is the first city in Delaware to provide **free** curbside recycling to its residents. The Mayor said RecycleBank provides a more convenient 'single stream' recycling system so citizens can deposit all recyclables into a single container instead of having to sort recyclables into separate containers. "There are enormous environmental and financial benefits to the City if we embrace this program and embrace the concept of less trash being taken to the landfill and more and more being recycled," said Mayor Baker.

Commissioner Srinivasan said the City has determined that yearly savings on landfill fees could amount to about \$350,000 if 60% of residents participate. If 80% participate, he said the savings would top \$800,000. The City spends approximately \$5 million yearly to dispose of trash from regular weekly curbside and special collections.

As an incentive for participation, and determined by the amount of materials a

household recycles, Mayor Baker said citizens will receive RecycleBucks, worth up to \$25.00 a month, that are redeemable at area businesses. Participating recycle business sponsors include:

- **ACME,**
- **Happy Harry's,**
- **Rite Aid,**
- **FedEx Kinko's,**
- **Starbucks**
- **Whole Foods,**
- **Bed Bath and Beyond,**
- **Food Source,**
- **Wilmington Blue Rocks Baseball,**
- **Grotto Pizza,**
- **Iron Hill Brewery & Restaurant,**
- **Kelly's Logan House,**
- **Happy Dog Healthy Dog,**
- **Kimpton Hotel Chain,**
- **Regal Cinemas,**
- **Patagonia, and**
- **Minster's Jewelers.**

City Council Member At-Large Charles 'Bud' Freel, who helped develop the recycle program in conjunction with the City Administration, is the prime sponsor of the Council ordinance. Councilmember Freel said that the six-month pilot recycling program would begin on June 1st and would involve approximately 8,000 households in six neighborhoods, three east of Interstate 95 and three to the west of the Interstate 95 and three to the west of the Interstate 95 along already established City trash collection routes. He said that there will also be no cost to the City for the pilot program with RecycleBank.

Excerpts provided by the City of Wilmington; the complete story is available at:

http://www.ci.wilmington.de.us/mayorpress/2006/060404_recycling_program_pilot.pdf



DNREC Awards Recycling Assistance Grants

DNREC is pleased to announce the recipients for the Recycling Assistance Grants for fiscal grant year 2006 to fund proposals from three schools, a museum and the City of Wilmington. A total of \$50,000 in grant funding was available in fiscal year 2006.

The projects and amounts of state funding awarded are as follows:

- **Delaware Academy of Science/ Iron Hill Museum -- \$5,400** to conduct outreach on recycling at elementary schools.
- **Middletown High School -- \$2,237** to establish a program at the school to recycle 80% of the waste paper currently going to landfills.
- **Mt. Pleasant Band Boosters Association -- \$3,059** to expand the group's aluminum recycling program with a goal of doubling the amount of aluminum collected.
- **City of Wilmington -- \$24,679** to help cover administrative and outreach costs associated with the implementation of a pilot curbside collection program.
- **University of Delaware -- \$14,625** to conduct composting education in the classroom and in other group settings.

Wilmington received the largest grant, \$24,679, to help cover the administrative and outreach costs of implementing a pilot curbside recycling program serving approximately 8,000 households. The city is partnering with RecycleBank, a Philadelphia-based company that has developed an innovative incentive program that rewards people for recycling. When a resident's recyclables are picked up, they are weighed, and the household is rewarded in the form of discount coupons redeemable at many local

businesses (see article on page 6).

DNREC developed the grant program in conjunction with the Recycling Public Advisory Council to enhance Delaware's recycling efforts. The program is designed to empower Delawareans to develop or expand innovative waste reduction, reuse, and/or recycling projects tailored to community needs.

This is a matching program, with grant recipients required to provide 25% of total project funding in either cash or in-kind services.

The Recycling Assistance Grant Program's goal is to reduce the amount of residential solid waste generated and disposed of in Delaware and contribute towards achieving the State's goal of recycling 30% of residential solid waste. Existing recycling programs in Delaware capture only about 5% of the waste generated by Delaware's households.

Greater recycling participation keeps more recyclables out of the landfills. This helps to conserve Delaware's precious resources, reduce reliance on imported oil, extend the life of the landfills, and promote sustainability.

For more information about the Recycling Assistance Grant program, please contact Janet Manchester at 302-739-9403 or via email at:

Janet.Manchester@state.de.us.

Summaries of projects funded in previous years can be found on DNREC's website at

www.dnrec.state.de.us/dnrec2000/Recycling.asp.

Additional information on the grant announcement is also available at:

<http://www.dnrec.state.de.us/DNREC2000/Admin/Press/Story1.asp?PRID=2003>.

***DNREC's
Recycling
Assistance
Grant
Program Aims
to Reduce the
Amount of
Residential
Solid Waste
Generated and
Disposed of in
Delaware***

AND

***Contribute
Towards
Achieving the
State's Goal of
30%
Residential
Solid Waste
Recycling***



DELAWARE
DEPARTMENT OF
NATURAL
RESOURCES AND
ENVIRONMENTAL
CONTROL

Secretary John A. Hughes
Deputy Sec. David Small

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Calendar/Calendar.asp](http://www.dnrec.state.de.us/DNREC2000/Test/Calendar/Calendar.asp)
for a complete
listing of the
Department's
events.



Integrity, Respect and Customer Focus

The Division of Air and Waste Management oversees the handling, transferring and storing of solid and hazardous materials by regulating, monitoring, inspecting, enforcing and responding to emergencies. The Division also implements the state's air monitoring, permitting and compliance programs. The Division's responsibilities include administering air and waste programs including:

- Delaware's Air Quality Section — air monitoring and regulating air emissions.
- Tank Management Branch — maintenance & installation of underground and above ground storage tanks & overseeing cleanup of tanks which may leak.
- Emergency Prevention & Response Branch — preventing industrial accidents, assuring emergency planning and community right to know, and responding to environmental emergencies.
- Enforcement Section — the Environmental Protection Officers enforce the state's air, waste and water pollution laws and participate on DNREC's Environmental Response Team by responding to environmental emergencies.
- Site Investigation and Restoration Branch — remediation of sites contaminated by hazardous substances (Superfund/Brownfields).
- Solid and Hazardous Waste Management Branch — reuse, recycling, transport and disposal of solid and hazardous waste.

EASY REFERENCE PHONE NUMBERS

24 Hour Report and Spill Notification Line - 1-800-662-8802
Aboveground Storage Tanks - 302-395-2500
Air Quality - Dover Office - 302-739-9402
- New Castle Office - 302-323-4542
Asbestos - New Castle - 302-323-4542
- Kent & Sussex - 302-739-9402
Boiler Safety - 302-744-2735
Brownfields - 302-395-2600
Emergency Prevention and Response - 302-739-9404
Enforcement - 302-739-9401 or 1-800-662-8802
Hazardous Waste - 302-739-9403
Medical Waste - 302-739-9403
Open Burning - 302-739-9402
Outreach Ombudsman - 302-395-2515
Recycling - 302-739-9403
Site Investigation & Restoration Branch (Superfund/Brownfields) - 302-395-2600
Solid Waste - 302-739-9403
Underground Storage Tanks - 302-395-2500

DID YOU KNOW...

The Division's Enforcement Officers handled over 4,000 complaints and 340 enforcement actions during 2005! The Division's Environmental Protection Officers enforce the state's air, waste and water pollution laws and participate on DNREC's Emergency Response Team (ERT) by responding to environmental emergencies. In 2005, the ERT responded to over 330 emergencies.