



# Air and Waste Matters

DNREC Division of Air and Waste Management

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## More Options for Recycling Christmas Trees and Yard Waste

**W**ith the effective date of the yard waste ban at Cherry Island Landfill just around the corner, a 2nd community yard waste site in New Castle County opened just in time for recycling Christmas trees and other holiday greenery: the Polly Drummond Hill Community Yard Waste Site in the Pike Creek area.

DNREC Secretary Hughes and Division Director Jim Werner were joined by Senator Karen Peterson, Representative Pamela Maier, Delaware Solid Waste Authority CEO Pasquale Canzano, and Recycling Public Advisory Council Chairman Brock Vinton at the opening of the site in November.

The site provides a cost-free option for disposing of yard wastes including holiday greenery and trees. The new site is located ½ mile north of Kirkwood Highway on Polly Drummond Hill Road, directly across from the entrance to the Judge Morris Estate.

In addition, five state parks will accept Christmas trees for recycling: Bellevue and Brandywine Creek in northern New Castle County, Killens Pond near Felton, Trap Pond near Laurel, and Cape Henlopen in Lewes.

Lums Pond and White Clay Creek State Parks will not accept trees this year; residents living near these parks are asked to take their Christmas trees to one of the new yard waste drop-off sites nearby for recycling.

Yard wastes make up nearly 1/4 of the residential waste that goes into landfills and includes all plant materials resulting from lawn maintenance and landscaping activities. These include grass clippings, leaves, prunings, brush, shrubs, garden materials, holiday trees and tree limbs up to four inches in diameter.

Yard waste drop-off sites provide northern New Castle County residents with one of many options to comply with the upcoming ban on January 24, 2008.

*(Continued on page 3)*



Polly Drummond Hill Community Yard Waste Site Entrance

## A Waste is a Terrible Thing to Mind...

Did you know that over 27,000 tons of hazardous waste and 1,200,000 tons of solid waste (non-hazardous) are generated every year in Delaware? That's nearly 1.5 tons of waste per person each year that the Division's Solid and Hazardous Waste Management Branch must ensure is managed properly.



Unloading Garbage and Container Trucks at Cherry Island Landfill

Waste management includes careful regulatory oversight to make sure that hazardous waste generated, transported, treated, or disposed in Delaware is properly handled. Infectious, sanitary, industrial, and dry wastes must also be handled in an environmentally-safe manner. Staff track waste from generation through final disposal, and monitor proper management of solid and hazardous waste by permitting and inspecting facilities. The Branch also manages the Division's recycling, scrap tire control and cleanup, Resource Conservation and Recovery Act and other waste programs.

Improper solid and hazardous waste handling and disposal practices may result in environmental damage, including substantial degradation of surface and ground water, as well as wasting valuable land and other resources. These practices may also constitute a hazard to the health and welfare of our communities. Therefore, facilities that han-

dle and dispose of solid and hazardous waste must be properly located, designed, operated, and monitored. Currently, 31 administrative and technical staff are responsible for overseeing waste management within the Branch.

The facilities vary from small family-owned dry cleaners to large corporate-owned manufacturing facilities. The numbers of facilities reporting include thousands of hazardous waste generators, 600 transporters of hazardous and solid wastes, and hundreds of permitted entities managing waste (i.e., disposing, transferring, incinerating, treating and recycling waste).

Reducing the waste generated, preventing mismanagement of waste when it is generated, and ultimately cleaning up mismanaged waste via a corrective action program are all in a day's work for the Branch. However, the real goal for the Branch is going past managing waste and even waste diversion from landfills to focus on something new—redesigning operations so the waste never gets generated in the first place! Because as they say at the Solid and Hazardous Waste Management Branch, "A waste is a terrible thing to mind."

*Article by N. Marker, SHWMB*



Avery Dalton Inspecting Southern Landfill

## Who's Watching the Landfills—The Division's Two Fulltime On-site Inspectors

The role of the Division's onsite landfill regulators is a very important one. Not only are they responsible for ensuring that the landfill operators comply with their state and federal permits, but they are onsite everyday, experiencing the landfill much the same way as the people who live nearby. Nobody understands better than Mark Lyon, the Division's onsite inspector at Cherry Island Landfill, that 12th Street is more than just a line on a map.

If you are familiar with the street, you are probably all too familiar with the landfill, the mulch recycling facility and the sewage treatment plant in the area. Operations at any of these sites may be the source of litter, odors or dust. As one of the older avenues first established in Wilmington, there are many residential properties, small businesses and schools on 12th Street that may be adversely affected by poor operational practices.

Inspector Lyon travels the street often to ensure that the landfill operator keeps it clean. Lyon is there to provide careful oversight and a quick response when there is a problem. This is part of his daily responsibilities as an onsite landfill inspector at Cherry Island Landfill (see story on page 4).

Fulton Williams, the Division's onsite landfill inspector for DPRI, is a seasoned Environmental Compliance Specialist responsible for compliant operations at the landfill, and the well-being of the adjacent community of Minquadale. A lot of the demolition waste arrives at DRPI from out of state, and Williams is quick to find any prohibited materials. He oversees the incoming truck loads at the scale house where the trucks are weighed and inspected, and operations at the five cells where the loads are disposed of. He also oversees quality control of the new cell construction at DPRI (see story on page 5).

Williams gets plenty of exercise walking the hills and valleys at DRPI everyday through every season. Looking for litter, landfill erosion, chasing odors and other compliance issues at the landfill requires him to cover a lot of territory. In addition, Williams often visits the nearby community of Minquadale, just to see things from their perspective. Protecting public health, welfare and the environment and onsite safety are everyday top priorities for both Williams and Lyon. And happy neighbors mean a job well done for the Division's onsite landfill inspectors.

*Article by R. Hartman, SHWMB*

## More Options for Recycling Christmas Trees and Yard Waste...

*(Continued from page 1)*

The site is open from 8:30 AM—4:30 PM everyday until January 21 for use by New Castle County residents. Commercial businesses, such as landscaping and lawn care companies, as well as municipalities, are restricted from using the site. They have other means of managing yard waste.

In early July 2007, DNREC's Mid-County community yard waste drop-off site was opened at the southwest corner of U.S. Routes 13 and 72 near Bear. The site is also open from 8:30 AM until 4:30 PM everyday until January 21. However, after January 21, both of the community yard waste sites will return to a weekend schedule, Friday-Sunday, 8:30 AM to 4:30 PM. A third yard waste drop-off site is scheduled to open in January in northern New Castle County.

For more information, please contact Bill Miller or Jim Short at (302) 739-9403 or visit the Division's web site at: [www.dnrec.delaware.gov/yardwaste](http://www.dnrec.delaware.gov/yardwaste).

*Article and Photos by W. Miller, SHWMB*



**Henrietta and Jack Werner  
Drop Off Yard Waste at Polly  
Drummond Hill Community  
Yard Waste Site**

## Landfill Inspector—It's a Wonderful Life!

The day starts as any other for Mark Lyon, the Cherry Island onsite landfill inspector with the Division's Solid and Hazardous Waste Management Branch. He begins his work at 7:30 AM at the Lukens Drive office to verify reporting information and enter daily information into his online journal for the landfill. He enters his observations and findings from the previous day's work and documents conditions that may affect the current day's operations at the landfill. The weather forecast is very important including wind direction, temperature, and every landfill's nemesis, rain.



Mark Lyon and Donald Young at "Small Can" Area. Rain can run the gamut from an inconvenience at the working face of the landfill, which is moved to a working rain pad when it rains, to severe slope erosion. A massive onsite expansion is currently underway at Cherry Island Landfill, and Lyon is trained and certified for erosion and sediment control for construction review.

We are in luck today, no rain, however, the previous four days of rain have already caused damage at the landfill. Lyon wraps up his office work and drives his mud-splattered truck to the landfill. He checks for litter along 12th Street and I-495 ramps near the landfill. Lyon knows 12th Street well and makes a quick call to a contractor to clean up the litter. He arrives at Area 1 of the landfill, the "small can" area for public drop-off.

For approximately \$4.50, you can drop off a single car load or pickup truck of approved waste. Donald Young, one of the landfill's four area spotters, is available at the public area to screen the waste and assist with other options, as needed.

We quickly inspect the other areas at the landfill including Area 2, the Recycling Area, where tires, residential and commercial yard waste, and refrigerators are recycled. We also pass Area 3, where trailers too large for Area 1 are unloaded by hand, and a cleanout area for the trucks.

However, the really active area at the landfill is the Commercial Area. This is the "working face" of the landfill where trucks, trash and sea gulls seem equally abundant. The area is controlled with one traffic spotter to direct all traffic. The trash is crushed, compacted and covered as soon as possible, and always at the end of the work day, to limit windblown litter. The lines of trucks and mountains of trash are carefully managed by dozers, compacters, and the ever-watchful waste screeners to detect unapproved waste - directing and covering, sorting and picking, as the endless loads of waste roll in.

The entire landfill operation is staggering, especially when you look at the numbers. On an average day, 5,000 tons of material are managed at the landfill including 2,300 tons of soil from Clean Earth's nearby recycling operation that is used as cover material for the landfill. In addition, the landfill sends approximately 6,000 standard cubic feet per minute of methane gas to the adjacent Conectiv plant to help generate electric power. And then there is the new Expansion Area, which will extend the footprint of the landfill to the north, south and east. Lyon inspects the expansion area daily and documents the work in progress. Lyon takes pride in protecting the environment and making sure the nearby community is not adversely impacted by daily operations at the landfill. It's a lion-sized job to oversee it all, and Lyon is up to the task.

*Article and Photo by C. Wirtz, DAWM*

## Expanding DRPI Landfill

The Delaware Recyclable Products Inc. (DRPI) landfill, owned by Waste Management, Inc., is currently under a major two-year expansion. The expansion will add an entire new cell to the landfill, and the base for it is currently under construction. The Division's certified onsite landfill inspector at DRPI is Fulton Williams, and he is a very busy man.

DRPI accepts construction and demolition debris, most of which comes from out-of-state. Williams is quick to find any prohibited waste that may be hiding in the trailers of trash from Delaware and across the line. The waste haulers know he's watching, so they do their best to exclude it themselves before carting it to DRPI.



**New Cell Construction at DRPI Landfill**

"It can be a dangerous place sometimes," Williams will tell you, perhaps remembering a grizzly accident from years past when one of the truckers lost his life in a trailer incident. Williams is alert to potential dangers at the landfill, and ensures that safety precautions and permit conditions are being met at the landfill. He divides his time between overseeing the landfill disposal operations and quality control of the new expansion at DRPI. Neither is a small job. Illegal asbestos disposal has been one of the big issues that Williams has worked to keep under control.

The Division's landfill permits for the DRPI ex-

pansion require that the entire base be lined with geomembrane, a thick plastic liner. That is 437,000 square feet of geomembrane. The rolls are onsite and ready to be laid in place; but yet again, rain is causing problems.



**Fulton Williams On-call at DRPI**

The geomembrane can only be laid in dry conditions, with a smooth dry base of approved material. A geocomposite drainage layer and two-foot drainage layer/protective dry cover will be put in place as soon as it is laid down. Every time Williams believes they will be ready, it literally rains on his parade.

It is not only the rain that he is concerned about, now frost is an issue as well. The whole operation may have to be postponed until spring. That means all of the liner materials will have to be stored under cover during the winter. Fortunately, Williams will be there to provide quality control and oversee what will be another big job at DRPI.

*Article and Photos by C. Wirtz, DAWM*



**Geomembrane Storage Area at DRPI Landfill**

## Finalizing Fox Point Park—Phase II

**F**ox Point State Park serves as the northern terminus of the ninety-mile Coastal Heritage Greenway that stretches south to Cape Henlopen State Park. It also serves as the eastern-most point of the Northern Delaware Greenway.

The land beneath the park was created when the Pennsylvania Railroad began filling in the bank of the river along its right-of-way. S. Marston Fox, for whom the park is named, began a battle in 1958 to stop the filling process and preserve the four-mile stretch of shoreline as a “window on the river.” His vision will finally become a reality with the completion of Phase II of the park restoration by the Division’s Site Investigation and Restoration Branch (SIRB) staff.



S. Marston Fox’s “Window on the River”

It wasn’t until the late 1970s that the land was finally turned over to public control. Led by then Rep. David Ennis and Eugene “Tom” Snell, the Fox Point Civic Association took up the fight to turn the area into parkland. In 1990, the land was transferred to the state by New Castle County and the remediation process began.

The past filling and disposal practices at Fox Point had contaminated the soil at the site with heavy metals. These practices included the distribution of sewage sludge. Environmental scientists and engineers in SIRB required extensive environmental assessments to identify appropriate remedial options in order to safely open Phase I as a park in the early 1990s.

The proposed remedy selected for the site is one commonly used at landfills - a cap system. An impermeable layer of thick plastic was placed over the 15-acre portion of the site designated as Phase I to isolate the contaminated material. Layers of sand, clean fill and topsoil were placed above and below the plastic liner for drainage and the support of future vegetation.

The second phase of the Fox Point Park, the remediation of the undeveloped land to the

north of the existing park, is now nearing completion. The Final Plan of Remedial Action for Phase II of the park calls for site capping with clean fill, culverting of drainage channels, and fence installation along the river’s edge.

SIRB’s engineering consultant, Black & Veatch, will begin construction oversight in January 2008 for culverting the drainage channels at the site. Fox Point State Park Phase II will receive approximately 144,000 cubic yards of soil from DelDOT’s Glenville Redevelopment Project to finish the soil “cap” in the spring. The final grading and fencing will begin in mid 2008 for the park expansion, which will include greenway paths for biking and walking along the riverfront, and plenty of room for ballfields and picnic areas.

S. Marston Fox would be proud to see the results of his efforts, and those of so many others, working together to create a park with outstanding scenic overlooks, historical informational displays, and riverfront biking, hiking and picnicking. And of course, the best front row seats available for his “window on the river.”

*Photo and Article by J. Cargill, SIRB*

## Fugitive Dust Control and Monitoring at Claymont Steel

The Division has been working with Claymont Steel and the surrounding community over the past year to control and monitor dust arising from the facility's operations. In late 2006, DNREC issued two enforcement orders. The first one required Claymont Steel to conduct a study on how to control dust. The second order required the facility to reduce mercury emissions from process operations.



Claymont Steel Headquarters

The study was funded by Claymont Steel. Earth Tech was selected by the Division from the consultants that responded to a Request for Qualifications for the study. Earth Tech prepared the "Fugitive Emissions Control Study."

The study was initially presented to the community at a public meeting held on August 1, 2007. The Division's Air Quality Management (AQM) Section approved the final draft in September 2007, which included the community items agreed to at the August 1<sup>st</sup> public meeting. At the same time, the Division directed Claymont Steel to initiate measures immediately for the installation and operation of the ambient air monitors at the locations noted during the August 1<sup>st</sup> meeting. Installation of the monitors will require obtaining landowner approvals and placement of the infrastructure.

The Division's AQM Section and Claymont Steel met with the community on the study's findings

and proposed air monitoring and dust control plans. Claymont Steel submitted a proposed implementation schedule on November 14, 2007. AQM noted deficiencies in the proposed schedule and required Claymont Steel to submit a revised schedule addressing those deficiencies.

The revised schedule, submitted by Claymont Steel on December 14, 2007, was approved by AQM on December 21, 2007, and has the ambient air monitors installed and operational by early February 2008.

In the meantime, Claymont Steel has already begun implementing interim dust control measures at its facility, including major modifications to process operations involving slag processing, and steel scrap handling. It also is in the process of studying the ventilation system at the melt shop, which, in its initial stages, have led to closing off the shop's roof vents. Claymont Steel also stopped recycling used oil filters at the facility to further reduce dust emissions.

In December 2007, the Russian steel maker, Evraz Group, reached an agreement to purchase Claymont Steel. DNREC expects Evraz to honor the implementation plans and other requirements to clean up the plant, which include reducing emissions for dust and mercury. For more information on Claymont Steel, please visit: <http://www.awm.delaware.gov/AWM+Claymont+Page.htm>.

*Photos by B. Klotz, AQM; Article by M. Crofts, DAWM*



Water Truck Spraying Dust on Road at Claymont Steel

