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Reducing Financial Risk to Delaware

How do you compel companies to be responsible for the cleanup of their polluted sites?

In Delaware, we now have a new act that provides the Department of Natural Resources and Environmental Control (DNREC) with the authority to impose an environmental lien upon real property after DNREC has incurred costs in environmental investigation and/or remediation of a hazardous or regulated substance release.

It may also permit DNREC to attach a lien on other real property of a responsible party, but only if the property is owned by the same entity, and after showing that the broader lien is necessary to protect the interests of the state.

The legislation will improve DNREC's ability to recover emergency response and environmental cleanup costs from responsible parties that have failed to meet their cleanup obligations. This will significantly reduce the financial risk to

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T. Keyser, SIRS

Delaware and the USEPA have spent millions in environmental cleanup costs at the Standard Chlorine of Delaware/Metachem Superfund Site near Delaware City.

Reducing Financial Risk to Delaware *Continued...*

Delaware for companies that go bankrupt and simply “walk away” from their environmental cleanup liabilities like the former Standard Chlorine of Delaware/Metachem Superfund Site.

In 2003, the Metachem Task Force recommended that lien legislation be passed in its report. It also noted that at that time, 34 states already had such laws, including all of our neighboring states. Lien legislation would allow Delaware’s taxpayers to recover some or all of the state funds used to clean up contaminated sites from the responsible parties.

Delaware has incurred more than \$21 million in unrecovered costs over the past ten years.

These costs are due to business owners that have not paid for the extensive environmental cleanups at their facilities. The business owners who are responsible for the release or spill should bear the burden of the cleanup costs, not Delaware taxpayers.

The act, also known as the lien legislation act, amends Title 7 of the Delaware Code relating to Conservation and Environmental Liens. The act may be reviewed at:

<http://legis.delaware.gov/LIS/lis147.nsf/vwLegislation/ HB+95?Opendocument>

Article by C. Wirtz, WHS

CONTAMINATED SITES FOR WHICH DNREC HAS INCURRED CLEANUP COSTS

Delaware’s cleanup funding comes from the State’s Hazardous Substance Cleanup Act (HSCA) fund, created by a tax on petroleum products for the purpose of addressing petroleum and other regulated or hazardous substance release sites in Delaware. Sites that have become a burden to taxpayers and associated financial status include:

- ✦ **BANKRUPTCY**—DNREC and the USEPA have spent, and will continue to spend, millions in cleanup costs at the **former Standard Chlorine/Metachem Site near Delaware City**.
- ✦ **TAX DEFAULT/INABILITY TO PAY**—**Harper-Thiel** is a small former electroplating facility located on **Miller Road in Wilmington** that required over \$2.8 million in cleanup costs from the HSCA fund.
- ✦ **FORECLOSURE**—DNREC will likely spend over \$100,000 removing underground storage tanks (USTs) and cleaning up petroleum releases at the **Universal Delaware Inc./Former Harrington CITGO in Harrington and the closed Universal facility in New Castle**. Universal Delaware filed for bankruptcy in 2009 leaving nine former gas stations vacant and abandoned.
- ✦ **ABANDONMENT**—DNREC will have to spend several hundred thousand dollars from the HSCA fund to clean up the **Christy Tire Site in Georgetown**. The former gas station was abandoned by its most recent owner, who walked away leaving several leaking USTs that had contaminated both soil and groundwater at the site.

RE-Powering America's Land: EPA-NREL Solar Feasibility Study

Did you know? Delaware is among the states leading the nation in solar energy – ranked 5th per capita for solar installations in 2012, and 7th per capita for cumulative solar installations. This is according to a new report, *Lighting the Way: What We Can Learn from America's Top 12 Solar States*, released by Environment America Research & Policy Center in July 2013.

Delaware's growth in solar power has been tremendous. From Dec. 2008 through Dec. 2012, the state's solar capacity grew from 2 Megawatts (MW) to 44 MW, with last year's capacity increasing by 41% over the previous year. The report attributed Delaware's leadership, energy legislation, strong public policies and innovative financing options for the solar boom in the state.

The U.S. Environmental Protection Agency (EPA) hopes to leverage some of those innovative financing options in Delaware through the RE-Powering America's Land Initiative: Siting Renewable Energy on Potentially Contaminated Land and Mine Sites, begun in 2010.

The EPA initiative makes it easier to identify contaminated sites with renewable energy potential, explore opportunities and barriers by funding an initial feasibility study and assisting in the development of the projects. The study also reviewed financing options that could help implement a PV system at the site.

In 2011, the Division of Waste and Hazardous Substances—Site Investigation and Restoration Section (SIRS) submitted an application to the EPA for a grant for the former Standard Chlorine of Delaware/Metachem Superfund site under the EPA's RE-Powering Initiative.



Remedial actions at the former Standard Chlorine/Metachem site included sorting clean, metal-scrap materials for recycling.

T. Keyser, SIRS

In 2012, the EPA selected the Standard Chlorine/Metachem site for a feasibility study of renewable energy production. The National Renewable Energy Laboratory (NREL) provided technical assistance for the project and evaluated the site for a possible photovoltaic (PV) system installation, as well as estimated the cost, performance, and site impacts of different PV options.

The EPA-NREL Solar Feasibility Study, titled *Feasibility Study of Economics and Performance of Solar Photovoltaics at the Standard Chlorine of Delaware Superfund Site in Delaware City, Delaware*, and a fact sheet are now available at the RE-Powering Feasibility Studies webpage at:

http://www.epa.gov/renewableenergyland/rd_studies.htm

The study found that the Standard Chlorine/Metachem site could be suitable for deployment of a large-scale PV system following the remedial cleanup action of capping the Operable Unit 3 plant-area soils.

Article from DNREC Press Release 7/23/13&T. Keyser, SIRS

Booming Exercise at Indian River Inlet



Practice does make perfect, so on May 14, 2013, the US Coast Guard (USCG) Sector Delaware Bay and DNREC's Division of Waste and Hazardous Substances' Emergency Prevention and Response Section (EPRS) set out to do just that. With curious seagulls gliding overhead, the Coast Guard and EPRS conducted a training drill at the Indian River Inlet.

The training was on the Coast Guard's newly acquired boom vane. The \$20,000 boom vane was purchased to protect coastal inlets such as Indian River, with its swift incoming tides. The new booming equipment was developed specifically for oil spills that could occur in fast-moving currents.

Clean Ventures, Inc., the environmental contractor, and the Delaware Bay and River Cooperative (DBRC) assisted in deploying the boom vane at the end of several hundred feet of boom, which was initially anchored to the shore.

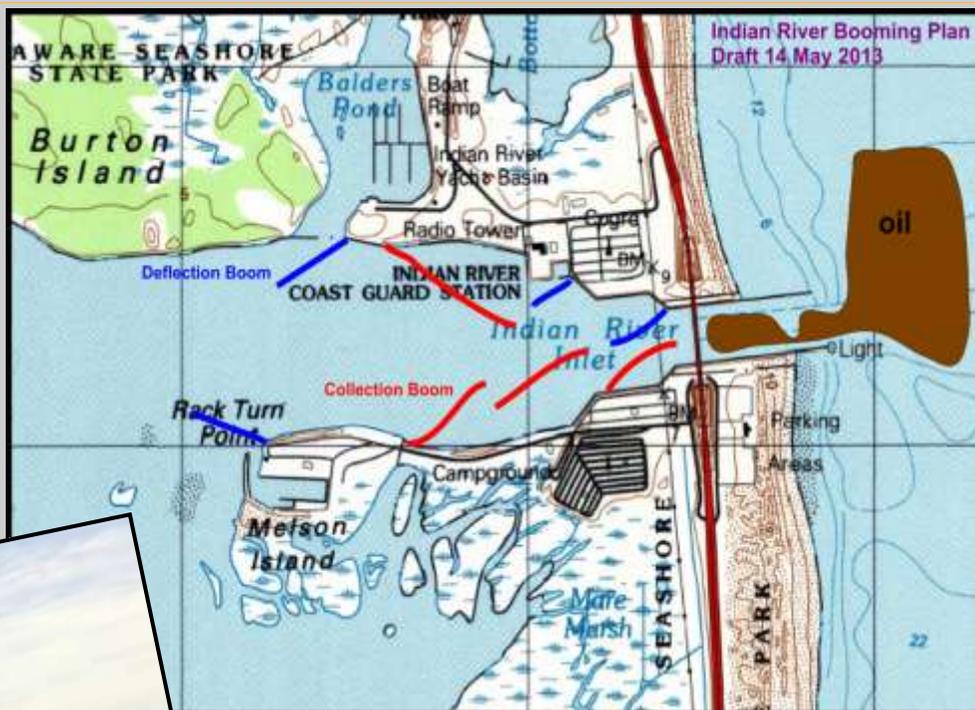
The yellow boom is a floating barrier formed by continuous yellow floats covered with foot-long plastic "skirts" that catch or deflect the oil.



(Continued on page 5)

Booming Exercise *Continued...*

The boom vane was deployed into the current of the incoming tide at the end of several hundred feet of conventional boom in various configurations designed to either deflect oil (shown as the blue lines on adjacent figure), or collect oil (shown in red). 



No boat traffic was allowed in the area of operations at the Indian River Inlet. The USCG Station Indian River and DNREC Fish and Wildlife maintained a safety zone around the booming activity in the inlet to ensure boater safety during the exercise.

The boom vane deployment exercise was part of a test to develop new strategies and a plan for the inlet that will help protect the Indian River and the Inland Bays in the event of an oil spill. Nearly 42 million gallons of crude oil move through the Delaware River and Bay each day.

The new protective strategies were being developed to replace the current booming strategies for the Indian River Inlet in the Coast Guard's **Area Contingency Plan**, which were made obsolete as a result of the removal of the old bridge supports located in the inlet.

Even with the practice exercise, the booming and oil recovery efforts may not be one hundred percent effective because of the tidal and current conditions in the inlet. However, proactive booming will go a long way in protecting the **Delaware Inland Bays' valuable natural, cultural and economic resources.**

*Photos by EPRS Staff
Article from EPRS Fact Sheet 5/14/13 and E. Malenfant, EPRS*

DNREC Funds Clean Diesel Projects Statewide

Everyone wants cleaner air to breath, but with mobile sources being the largest single source of air emissions, it is not an easy task. So in 2008, when funding authorized from the Diesel Emission Reduction Act (DERA I) was allocated to every state and territory in the union that applied, DNREC's Division of Air Quality (DAQ) jumped on it.

The funding was available from 2008 through 2011 and Delaware received \$1.28 million during those four years. Along with matching funds from the state and a private partner that totaled to almost \$1.1 million dollars, DNREC was able to fund clean diesel projects statewide.

The projects included retrofitting 13 school buses, 37 DeIDOT dump trucks, and 16 municipal sanitation vehicles with filters on their exhaust system. The exhaust filters reduced harmful soot (particulate matter) emissions up to 90%, as well reductions in oxides of nitrogen, carbon monoxide, and hydrocarbons.

The Port of Wilmington's diesel engines emissions were reduced as well. Diesel engines for the two ship-to-shore cranes oper-



Wilmington Tug Company's tugboat, the Lindsey, was retrofitted with cleaner burning engines.

ated by the Port were retrofitted with exhaust filters. In addition, four of the Port's cargo loading vehicles had their diesel engines replaced with cleaner units and two yard jockeys had exhaust filters installed.

The tugboat "Lindsey" operated by the Wilmington Tug Company was repowered with cleaner burning engines, as well.

Finally, using the DERA I allocation and state match, the Department's Public Affairs office created a school bus anti-idling video with the Smyrna Middle School 7th grade science class as performers in the production.



Interior view of the Lindsey's engine room.

The total numbers show how all these projects have significant health benefits in reducing air pollution. In total, the engine emission reductions are: 1,741 tons of oxides of nitrogen, 25 tons of particulate matter, 30 tons of hydrocarbon, and 122 tons of carbon monoxide.

DNREC's DAQ is not stopping there. The DAQ is currently in the process of funding another series of clean diesel projects with the second round of DERA funding, appropriately called DERA II.

Photos and article by P. Wheeler, DAQ

Oil Pollution Liability Act Signing Ceremony

On June 6, Gov. Jack Markell signed House Bill 32 into law thereby removing outdated oil spill liability limits that would have left the state with the majority of the cleanup costs in the event of a catastrophic spill.

Pictured at the bill signing ceremony are (from left) DNREC Secretary Collin O'Mara; DNREC Division of Waste and Hazardous Substances (WHS) Division Director Marjorie Crofts; DENIN Associate Director Jeanette Miller; WHS' Site Investigation and Restoration Section (SIRS) Administrator Tim Ratsep; Governor Jack Markell (seated); SIRS Environmental Scientist Greg DeCowsky; and legislative bill sponsors, Senator Nicole Poore and Representative Valerie Longhurst.



Did You Know?

The Division of Waste and Hazardous Substances' Emergency Prevention and Response Section (EPRS) is responsible for all activities related to environmental emergencies, from planning to preventing, and responding to environmental emergencies. The section is comprised of three groups: Accidental Release Prevention, Emergency Planning & Community Right-to-Know and Emergency Response. Here's are some of the EPRS' statistics from 2012:

- **The Accidental Release Prevention (ARP) Branch** provides protection for the lives and health of the citizens of Delaware by ensuring that companies with extremely hazardous substances have proper control plans and operations to prevent disasters. Regulation includes oversight of 27 federally delegated sites and over 75 Delaware sites.
- **The Emergency Planning & Community Right-to-Know Act (EPCRA) Branch** operates Delaware's EPCRA Program, which includes a number of requirements for facilities to report on the production, use, storage and releases of hazardous chemicals. For 2012, 60 facilities were required to report under the Toxic Release Inventory program with 235 reports containing 88 different chemicals. The EPCRA Branch also received Tier II hazardous chemical inventory reports from 1,785 facilities. Tier II fees collected each year support the State Emergency Response Commission and the Local Emergency Planning Committees in Delaware.
- **The Emergency Response Branch (ERB)** responds 24/7 statewide to oil spills, hazardous material incidents, and weapons of mass destruction events as the co-lead for the DNREC Emergency Response Team (ERT). The DNREC ERT includes environmental protection officers (EPOs), ERB scientists and after-hours volunteer supplemental responders from WHS, and the Divisions of Air Quality and Water. The Branch also coordinates responses with local fire departments and various local, state, and federal agencies. In 2012, the DNREC ERT responded to over 330 incidents. The incidents included 68 transportation-related, 40 residential oil spills, 32 abandoned drums/containers, 27 marina/waterway spills, 22 storage tank releases, 15 fires, 12 fish kills, 10 white powder biological, and 8 sunken vessels, as well as 32 without a defined category.

For more information, please visit the EPRS website:

<http://www.dnrec.delaware.gov/whs/awm/EPR/Pages/EPRPortal.aspx>

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The Division of Waste and Hazardous Substances plans for and responds to, environmental incidents; regulates the handling, transfer, storage and disposal of solid, infectious and hazardous waste; manages the recycling program in Delaware; regulates above and underground storage tanks and boilers; oversees the remediation of sites that have been contaminated by hazardous substances and chemicals; and implements Delaware's Brownfields Development Program.

The Division of Air Quality handles the majority of air issues in Delaware including: monitors and regulates all emissions to the air; issues "permits to construct" and "permits to operate" to air contaminant sources; maintains emission inventories from business and industry; develops the State Implementation Plan as required by the Clean Air Act; adopts new regulations and enforces existing regulations and permits; and inspects asbestos removal sites.

The Division of Water manages and protects water resources through various programs by providing technical assistance, laboratory services, regulatory guidance and implementation, and educational services; and performing applied research.

EASY REFERENCE PHONE NUMBERS

24-Hour Report and Spill Notification Line - 1-800-662-8802

Aboveground Storage Tanks - 302-395-2500

Air Quality - New Castle Office - 302-323-4542

Air Quality - Kent & Sussex - 302-739-9402

Asbestos New Castle - 302-323-4542

Asbestos Kent & Sussex - 302-739-9402

Biosolids Permits - 302-739-9946

Boiler Safety - 302-744-2735

Brownfields - 302-395-2600

Delaware Estuary Program - 302-739-9949

Division of Air Quality Director's Office - 302-739-9402

Division of Waste and Hazardous Substances Director's Office - 302-739-9400

Division of Water Director's Office - 302-739-9950

Dock/Dredging/Bulkheads/Rip-Rap/Wetlands & Subaqueous Lands - 302-739-9943

Emergency Prevention and Response - 302-739-9404

Environmental Crimes Unit - 302-739-9401 or 1-800-662-8802

Environmental Laboratory - 302-739-9942

Hazardous Waste - 302-739-9403

Loans & Grants for Wastewater and Septics (Financial Assistance Branch) - 302-739-9941

Medical Waste - 302-739-9403

Non-Hazardous Liquid Waste Transporters - 302-739-9948

On-site Wastewater Licensing Program - 302-739-9948

Open Burning - 302-739-9402

Outreach Ombudsman - 302-395-2600

Recycling - 302-739-9403

Septic System Permits - Large Systems (Community & I/A) State-wide - 302-739-9948

Septic System Permits - Small Systems for Kent & New Castle Counties - 302-739-9947

Septic System Permits - Small Systems for Sussex County & Holding Tank Compliance Program - 302-856-4561

Site Investigation & Restoration Section (Superfund/Brownfields) - 302-395-2600

Solid Waste - 302-739-9403

Source Water Protection - 302-739-9945

Stormwater Permits - 302-739-9946

Surface Water Discharge Permits (NPDES) - 302-739-9946

Underground Injection Control & Spray Irrigation - 302-739-9948

Underground Storage Tanks - 302-395-2500

Wastewater Collection, Conveyance and/or Treatment Facility Construction Permits - 302-739-9946

Wastewater Treatment Facility Operators - 302-739-9946

Water Allocation Permits - 302-739-9945

Water Testing - Drinking Water (Division of Public Health) - 302-741-8630

Water Supply - 302-739-9945

Well Driller's License - 302-739-9944

Well Permits & Licensing - 302-739-9944

Wells - 302-739-9945

Wetlands and Subaqueous Lands Section - 302-739-9943