

Delaware Sierra News

A Sierra Club Newsletter about Environmental Matters Important to Delaware June July August 2004

M e r c u r y i n D e l a w a r e

By Al Denio

As every chemist knows, mercury is a toxic element to be avoided. In recent years, OSHA has required all laboratories to meet strict standards for limiting exposure. Folks of my vintage recall the "old days" when lab life was often casual and mercury spills were no big deal. We are now older and wiser (I hope).

The real problems in Delaware are the two large coal-burning power plants (Edgemoor and Indian River), duPont's nylon plant in Seaford, and the Occidental Chemical Corp. chlor-alkali plant near Delaware City. We look to DNREC and the EPA to protect us from dangerous mercury emissions.

In December the Bush administration proposed a plan to reduce mercury emissions from power plants by 70% in 2018. No new controls would be required for six years. It is currently estimated that our coal power plants release 48 tons of mercury per year. Senator Carper is calling for a mercury reduction of 80 to 90% over the next ten years.

The Bush EPA proposal would not apply to Occidental Chemical Corporation's chlor-alkali plant that released over 1,000 pounds of mercury into the air plus 20 pounds into the Delaware River in 2001. This far exceeds the estimate of 350 pounds released from the three plants at Indian River, Edgemoor and Seaford.

On February 17, the Sierra Club and the Natural Resources Defense Council sued the EPA for failing to protect the public from the mercury emissions from the nine old chlor-alkali plants in the U.S. Lucky Delaware has one of the nine old plants that have not upgraded to the new diaphragm cell that produces chlorine, hydrogen and sodium hydroxide solution without using mercury cathodes.

It is estimated that the nine old plants released 65 tons of mercury into the air in 2000, compared to the 48 tons from coal-fired power plants. It is clearly time for these mercury cell chlor-alkali plants to change their process or shut down. It would have been nice if our American Chemical Society had taken the lead in this effort to protect our environment.



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Take Action to Keep Mercury Out of Our Air and Water

Ananda Hirsch, DC Conservation Organizer
Help Us Gather 1 Million Comments!

A record 511,000 Americans have already urged the Bush administration to start cleaning up toxic mercury pollution from power plants as soon as possible. Now, the EPA has extended the deadline on the comment period until June 29, 2004 giving the public more time to urge the administration to protect public health, not polluter's wealth.

Please comment today and tell friends about this issue to help us reach our goal of 1 million comments by the end of June.

The EPA estimates that one in six U.S. women of childbearing age has mercury levels in her blood high enough to put her baby at risk. In 2001, the EPA estimated that, by 2008, a 90% reduction in mercury emissions from

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**See center insert for
Socials, Meetings,
and
Summer Events!**

The Delaware Chapter has been found to be in violation of the election rules of the Sierra Club by the publication of an article in the last issue which referenced a website which endorsed candidates for the Board election. This is against Standing Rule 5-2-6.3 which prohibits the use of a Club resource, our newsletter, to endorse individual candidates in a Board election. We regret this error.

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We reserve the right to edit materials submitted for publication. Send Materials and Letters to the Editor to: marlenarayner@yahoo.com or the Sierra Club Office.

Ideas expressed in the Delaware Sierra News are those of the columnists and do not necessarily reflect the position of the Sierra Club. While effort is made to check for accuracy, time constraints and limited all-volunteer staff do not allow for complete data corroboration.

Editors: Marlene Rayner, Jeanie Bauer, Mike Casale, Doug Morea.

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Letter From the Chair

Matt Urban

I've been thinking recently about why I'm involved with The Sierra Club. Working to protect the environment can often occur like an endless, thankless and frustrating task. Recent circumstances both locally and nationally have left me feeling like it's all too big, too tiring, too frustrating -- just too much. With all the things that I could be doing with my time and my life, why am I dedicating so much of my time to this organization when sometimes it feels like an exercise in beating my head against the wall?

Serious stubborn streak? Masochism, perhaps?
Temporary insanity?

Not at all.

The fact is, I'm PASSIONATE about The Sierra Club. Why am I passionate?

I'm passionate about having the opportunity to make a difference, and about having a hands-on role in creating a world that works -- a world where sensible stewardship of the environment prevails over short-sighted consumption. I'm passionate about seeing the playful sparkle in the eye of the other Sierra activists as we go about our business of shaking things up. I'm passionate to see just how many committed members there are around the country and what's being accomplished, and I'm passionate about the victories we share. I'm passionate about the incredible tenacity, intelligence, and dedication of my colleagues. I'm passionate to be working with

a powerful group of people that give so generously of their time, often for little or no thanks or recognition -- it truly is a privilege to be in their midst.

Why do I share all of this? Because I would suspect that many of you have shared some of my frustrations, and have been asking yourself the same question of why you are involved.

In a recent meeting, our chapter leaders said that he "loves the Sierra Club." I could tell that he meant it, but I wanted to ask why. I think it's important to our organization to continue to open up that dialogue, and to have a conversation about why we're all involved. I think it's very important to have an empowering context from which to do our work, otherwise it's just a whole bunch of stuff to do.

I would love to have us all share why we're involved. So with that in mind I'd like to hear from YOU! Write me an email (desc@mobiusnm.com) or send me a letter (c/o the chapter office) and tell me just why YOU are passionate about the Sierra Club. Let me know when you write if you'd be willing to have your thoughts shared, and maybe we'll publish some of these in upcoming newsletters or on our chapter website.

Finally, I'd love to speak in person with more of you, so please come out to one of the fun events we have coming up over the next few months. Check the special insert for more details.

Now get outdoors and have a great season!

U n s u n g h e r o : M a r s h a H o l l e r

Marsha grew up outside of Buffalo, NY. She developed her love of nature and the outdoors visiting her grandparent's dairy farm and the beautiful land surrounding it.

In 1978 she and her husband, Bill started their own screen printing company Great Graphics. They specialize in textile printing, mostly apparel and canvas accessories. with a lot of wildlife and botanical designs. The pieces are marketed to zoos, aquariums, and resort areas around the Mid-Atlantic. Some of our local customers are Delaware State Museums, Bombay Hook NWR, Virginia Marine Science Center. They designed and produced DE Sierra's T-shirts and tote bags. Only waterbased inks are used in their screen printing process. In her words "they are healthier for our workplace, soft to the touch, and don't produce the toxic waste products of our competitors". In the summer of 2000, Marsha opened her own retail store in Lewes called, of course, "Marsha's". It's at 112 Front St., on the canal. Now she gets to meet and talk with the people who wear her stuff. Since her studio is in the store so visitors get to see how she works. Marsha says she enjoys the interaction with people, especially the kids that come in.

Running two businesses makes activism difficult, but Marsha has found time to participate on a state waste committee in the 90s, donates her screen printed pieces to the annual auction and fills in wherever she can. But as she says, she "enjoys the people in our Delaware Chapter of Sierra Club and it's a great way to keep up with what's going on regarding environmental matters in Delaware important to me. It helps to support common goals and have a good time, too.



DSWA and Delaware Waste Updates

Marlene Rayner

Progress in waste handling in Delaware and control of the public/private partnership managing it for us (DSWA) has been poor. Following waste issues in Delaware is a many pronged effort of conflicting and colliding groups. These past three months has seen me attend a second hearing of the Sunset Committee in Wilmington, three Recycling Public Advisory Committee (RPAC) meetings, who are charged by the governor to increase the recycling rate in Delaware, and a Rosehill Community Center meeting for citizens who live near Cherry Island and Pigeon Point Landfills.

At the recent (May 12) Rosehill Community Meeting members of these communities were especially worried about the landfill increase proposals and any possible activity to do with incinerators. The group was told that DSWA will be proposing a limited increase of the height of Cherry Island landfill to 190 feet limit from its present 170 foot limit. The old incinerator near Rosehill will be the new recycling area. Any new incinerator was not possible, because of the earlier McBride legislation. Before that meeting closed I asked about incinerators again with specific reassurance requested that incineration would n't appear under some other guise - like "thermal depolymerization" or "waste to energy" etc. Canzano then publicly stated that incineration, under any name, was not in their plans.

Theoretically the sunset committee is examining whether the DSWA did their job over the last 10 years. From my perspective the resounding message from participants at the city hearing was 'NO' - confirmed by the recent fines by the EPA and DNREC. However at that hearing I was told by the chairperson that their job was not to choose a means of waste disposal (recycling, incineration etc) nor decide how DSWA should be run - only to decide if DSWA needs 'modification' or 'direction'. They have finally realized that the payment by tipping fees has not been supportive of recycling efforts. My comments in earlier columns in this paper suggested this was the flaw. However, DSWA and other people in charge of waste (e.g. DNREC) should have seen this long ago, and been far more proactive!

Through RPAC's efforts, pressure from environmental and community groups has caused DSWA to 'accept' that recycling should take place. Under the Memorandum of Agreement (MOA, reached with RPAC, DSWA and DNREC 1/2004), DSWA is pulling together needed information for a state-wide recycling program in the same manner as the report (10/03) did for New Castle County. However, delays are noted from the original 120 day deadline imposed in January (already gone!) and another year will pass before any legislation is even possible.

Out of that same effort with RPAC has come Senator McBride's (plus many other supporters) Senate Bill 245 mandating recycling for the state with graduated and doable (agreed by all parties) levels of recycling. However, DSWA, being an equal party in RPAC and the MOA, voted against the bill at an RPAC meeting and has written to the governor. They say the bill doesn't include financing and enforcement provisions. Re

I say the DSWA stalling should stop. We, the citizens, are the boss here. The legislative forces need to be sped up and the governor can no longer pass waste issues off to another governor. It is time for action.

Conservation UpDate: Is that what it is like?

Debbie Heaton, Conservation Director

I had the chance recently to participate in a horseshoe crab count. I always wondered what it was like to go out at night, to walk the beaches counting the crabs as they mate. An opportunity to join a Nature Conservancy crew presented itself in early May - at the beginning of the spawning season - so I figured out my footwear and signed up.

The footwear ended up being very important as we were counting at Bennett's Beach, east of Milford along the Delaware Bay. We worked this isolated spot on a beautiful evening with a threat of thunderstorms in the forecast. The wind was balmy, the water warmer than I expected, and the sand underfoot was soft. Each step caused your foot to sink several inches deep into the sand, and long slogging along the beach was an unexpected work-out. I found out that you can lose or ruin your shoes if you don't have the right type on.

Three of us divided the chores and measured as we walked the beach north, saving the counting for our return slog south. A long rope served as a measuring device, we had PVC pipe shaped in the outline of square to help with the counting, and a trusty pencil with clip-board to collect our tallies.

The sun set as we started the count so our headlamps were useful and fun. Because we were so early in the horseshoe crab mating season we only found two individuals (one male and one female) separated by many yards of beach sand. As the counting hour passed the number of zeros recorded dulled our expectations and caused us to get a little silly - thinking we should have provided date matching services for the two we had passed a while back. We heard reports from others that beaches to the south had more horseshoe crab visitors - which made us hopeful.

During our walk we saw few humans and periodically disturbed some shore birds as they poked around the debris that had washed up on the beach. They were probably seeking food but it hadn't arrived yet. One of the more experienced counters in my group said that she had seen the reduction in the number of horseshoe crabs coming ashore since she had started as a volunteer counter some 6 to 8 years ago. I am glad I went, as I understand a bit more of what is involved with a count.

What will it really be like?

Another type of counting that is happening in Delaware is the counting of the number of bacteria colonies in a water sample. As part of the Chapter's Clean Water Act lawsuit settlement (1996, with the American Littoral Society/Delaware Riverkeeper) the state has started the work leading up to setting loadings (Total Maximum Daily Loads) for bacteria in each stream, pond, lake and river. All of the water bodies in Delaware have designated uses that help the state determine how clean each needs to be, or how much pollution can be absorbed/diluted by that water body and still be clean enough for the swimming, fishing, recreational, agricultural or industrial, etc. use it is listed for. The water bodies north of the city of Wilmington are proving to have particularly high bacteria levels. These numbers are causing state and federal environmental agencies to wonder if the costs of clean-up, to meet the required water quality standards, may prove to be too expensive. A study is underway at this time to collect additional information.

Apparently water companies are able to treat drinking water with chemicals to kill the bacteria but what they can not as easily do, is remove the naturally occurring bacteria (from local birds and animals) and the human bacteria that local residential development has introduced.

Brandywine State Park, numerous other communities and businesses count on the healthy flow of the Christina and Brandywine Rivers for their recreational use and livelihoods. We are finding out what it is like to be restricted in the amount of fish we eat. What will it be like when we realize that we can no longer wade safely in many of our streams and rivers?

Special Note: The Chapter would like to recognize the efforts of Jim May and Jim Stuhltrager of the Mid-Atlantic Environmental Law Center (MAELC) and give thanks for their help, education and astute legal advice over the years. Jim May is returning to full-time teaching at Widener University School of Law. He is stepping down from Directorship of the Environmental and Natural Resources Law Clinic at Widener University and has turned over the reins of MAELC to David Bookbinder the Washington Litigation Director of the Sierra Club. We will miss his direct involvement in our work, but know he will still be involved and not far away.

Jim Stuhltrager on the other hand will be further away as he takes up an exciting opportunity to lead the legal efforts of the Pennsylvania National Guard. Their humor, patience and ability to deal with the numerous styles of the many Sierra Club volunteers has been greatly appreciated. We will miss them!

Sierra Club Praises Bipartisan Coalition of Senators For Demanding Strong Mercury Protections

Senators Demand Bush Administration Clean Up Mercury Pollution from Power Plants

The Sierra Club in April thanked a bipartisan coalition of Senators for urging the Bush administration to protect communities from mercury pollution. The Bush administration's proposal falls far short of what the law requires and leaves communities at risk for mercury pollution.

In the process of creating the proposal, longtime EPA (Environmental Protection Agency) staff charge the Bush administration ordered them to scrap the usual scientific and economic studies when drafting the mercury plan. Instead, the EPA proposed a new mercury plan that copies language from a report written by West Associates, an industry organization representing 23 large Western utility companies. In March 2003, West Associates presented the EPA with recommendations about mercury regulations and described the results of an analysis of possible mercury emission reduction scenarios. This all ended up in the Bush administration's final proposal.

In response to the Bush administration's bad mercury proposal, a bipartisan group of Senators sent a letter to Mike Leavitt, EPA's administrator, urging him to reduce mercury pollution coming from power plants with technology that is available and affordable.

Our thanks to Senators Biden and Carper who joined and supported this effort as signers.

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power plants was possible with available technology and strong enforcement of the current Clean Air Act. Instead of requiring powerplants to use modern technology that could start reducing mercury pollution within four years, the Bush administration's ill-conceived plan would delay cleaning up this dangerous pollutant for decades.

Visit www.sierraclub.org/mercury to take action today!
Or send a letter directly to:

EPA Docket Center (Air Docket)
U.S. EPA West (6102T) Room B-108
1200 Pennsylvania Ave. NW.
Washington, DC 20460,
Attention:
Docket ID No. OAR-2002-0056

Book Review:

Hard Right Policies Propel Pattern of Special Favors, Secrecy, and Bad Science

It's no secret that the Bush administration has spent the last three years dismantling America's environmental protections. Now the nation will find out why. Sierra Club Executive Director Carl Pope released his new book, *Strategic Ignorance: Why the Bush Administration Is Recklessly Destroying a Century of Environmental Progress*, on Earth Day in Washington, DC. The book is co-authored by Paul Rauber, senior editor of the award-winning *Sierra* magazine.

"[President] Bush has done his best, in only three years, to break our national compact on environmental progress and turn the clock back -- not years or decades but a full century," Pope explains in the book. "This is what the American people do not know: The Bush administration is full of officials who believe -- from the bottom of their hearts, not just their wallets -- that weaker laws on clean air, less funding to clean up toxic waste dumps, and national parks and forests run for private profit are actually good for the country."

In addition to chronicling the Bush administration's record on the environment, *Strategic Ignorance* uncovers the logic behind that record, revealing a pattern of ideological extremism that is out of step with previous Republican and Democratic administrations, not to mention the American public. The book also explains what happens when the administration's radical agenda contradicts public opinion, sound science, and even the law.

Publishers Weekly recently raved, "The real energy from the book comes from its accumulation of small facts to paint the picture of obsessive secrecy, crony capitalism and the administration's conscious, unabashed commitment to economic exploitation of the air America breathes, the water it drinks and the earth it walks on." Pope and Rauber peel the layers off the big environmental stories of the last three years, from the Bush administration's misguided efforts to let polluters rewrite clean air laws to its attempt to allow more arsenic in America's drinking water. The book also offers up smaller yet equally disturbing examples of special treatment for a host of polluting industries.

Readers, for example, learn how Karl Rove, the President's chief political advisor, directly involved himself to remove protections for endangered fish on the Klamath River, resulting in the largest fish kill in the river's history. The book also reveals how the Bush administration fired its top mining safety official after he recommended enforcement actions against a coal company responsible for an accident that spilled 250 million gallons of slurry into two Kentucky creeks.

Other highlights of the book include:

- * "Ten Commonsense Solutions for the Next Twenty Years," which would restore common sense to the public environmental agenda.
 - * "Ten Commandments for the Hard Right," simple unwavering principles consistently applied by the Bush administration to roll back social and environmental progress;
 - * The Bush administration's "Romance with Risk," where caution is thrown to the wind under the guise of cost-benefit analysis;
 - * "Why not sell the Grand Canyon?" and other stories about how anti-government extremists with the administration have removed protections from an area the size of Texas and Oklahoma as part of a scheme to privatize public lands;
 - * The "Scientific Method" according to the Bush administration, where scientific findings are "the raw material of spin to be dribbled out, manipulated, or suppressed as suits the political needs of the moment;" and
- "The Bush administration's assault on the environment has been breathtaking in its swiftness, scope, and severity," commented U.S. Senator Barbara Boxer, D-CA. "In *Strategic Ignorance*, Carl Pope and Paul Rauber clearly dissect the administration's agenda and methods. More than a wake-up call, this book is a call to arms for defenders of America's priceless natural heritage."

For additional notes and updates not in the book visit www.strategicignorance.com

Gotta Happen, -- but where and how?

DuPont Treatment and VX-hydrolysate

By Al Denio

Our country made a huge supply of nasty chemical weapons during the Cold War. We have since signed a treaty agreeing to destroy these weapons by 2007. It is reported that 31,500 tons of chemical weapons were in this stockpile. (The Russians have a similar problem and most agree that they will not be able to meet the established deadline.)

The nerve agent called VX is reported to be the most deadly of our chemical weapons. 1,269 tons of VX are stored in Newport, Indiana, a storage site not having facilities to completely destroy this chemical weapon. Also, a plan to have work done near Dayton, Ohio met great public opposition. So the Army approached duPont for them to treat the waste at Chambers Works in Deepwater, New Jersey. (The News Journal had an interesting article on this on Sunday, April 4, 2004.)

The plan is to begin treatment of the oily organic liquid at Newport, Indiana with a hot aqueous solution of sodium hydroxide, destroying the VX molecule, forming a water solution with dangerous byproducts. This dangerous solution is then to be trucked to Chambers Works to continue treatment. Here, hydrogen peroxide would be added to carry out oxidation and eliminate a nasty smelling sulfur compound, then bacterial degradation and treatment with activated carbon to adsorb organic molecules, and finally a settling tank where the carbon falls to the bottom. This last is repeated, and the remaining water dumped into the Delaware River.

While duPont claims that the waste leaving the Newport, Indiana plant will contain less than 20 ppb (parts per billion) of Vx, serious questions remain about the accuracy and reproducibility of the analytical method. Also of great concern is safety of truck shipment on busy highways. Police and emergency responders along the 900-mile route will need to be alerted for each of the estimated 900 truckloads. What would be the cost? Add all -- specialized trucks, each

with two drivers, gas, oil, tolls, permits, insurance, maintenance, etc. and my estimate is \$10 per mile. Multiply by 900 trips at 1,800 miles per round trip and you get \$16,200,000, assuming no accidents! Also consider the health of the bacteria used to treat the waste. How sensitive are they to metal ions present in the waste

The Sierra Club supports treating the VX completely in Indiana rather than exposing thousands of citizens to shipments of VX waste on highways, exposing duPont employees at Chambers Works to great hazards, and to using the Delaware River - or any river, as a sewer for the treated weapon.

solution? What compounds will be in the waste dumped into our Delaware River, at what concentrations, and with what effect on aquatic life? And carbon used to adsorb the organics will be placed in a landfill at Chambers Works. Will this waste be odor free during long, hot summers?

The Sierra Club supports treating the VX completely in Indiana rather than exposing thousands of citizens to shipments of VX waste on highways, and duPont employees at Chambers Works to great hazards, and to using the Delaware River as a sewer for the treated weapon. Would it not be cheaper — your tax dollars — and safer to build a treatment plant in Indiana?

Citizens had until April 19 to submit their com-

ments to the Army. The Delaware Chapter did submit objections and I did also. I hope that many of you also sent letters of protest.

When will we know the outcome? The Army must wait for the response of the EPA and the Centers for Disease Control and Prevention. Project Manager Col. Jesse L. Barber has, however, stated he feels duPont "already has all approvals needed to treat the material," referring to the fact that duPont has a permit to discharge waste into the Delaware River from the state of New Jersey. But the pipe that discharges waste does so at a point that belongs to Delaware, so how does Delaware not have jurisdiction? This sounds like a lawsuit to me, especially considering our state suffers no shortage of lawyers.

In Public Relations, both the Delaware House and Senate approved resolutions against duPont's proposal, Governor Minner and New Jersey Governor McGreevey both signing a letter opposing duPont's plan. Every environmental group in this area has expressed opposition. In light of duPont's most recent sale of Invista and further downsizing, it seems to me that the folks running duPont are hoping for another "miracle of science" to save the day. Maybe the miracle needed here is more one of social wisdom.



Preserve the Future

Not everyone can make a large gift to protect the environment during their lifetime, but you can preserve the environment for generations to come by remembering the Sierra Club in your will.

There are many gift options available. We can even help you plan a gift for your local Chapter. For more information and confidential assistance contact: John Calaway, Director, Gift Giving, Sierra Club, 85 Second St, 2nd Floor, San Francisco CA 94105 (415) 977-5639 or e-mail: planned.giving@sierraclub.org

Cleanup progress at Delaware's Metachem superfund site?

Yasemin Kor-Sebeczek

Metachem Products LLC, formerly known as Standard Chlorine of Delaware Inc., declared bankruptcy and stopped operations in May 2002, leaving behind more than \$60 million in debts and 43 million pounds of toxic chemicals. The plant is located in New Castle County, Delaware, three miles northeast of Delaware City. Among others, the factory produced chlorinated benzene and Agent Orange (a banned herbicide). Parts of the plant and its chemical inventories contain high levels of polychlorinated biphenyls (PCBs) and dioxins, which are linked to cancer and developmental disorders.

Former owners of the company had a poor history of pollution control and environmental safety. Over the years, millions of pounds of highly hazardous chemicals were spilled and contaminated Red Lion Creek and local groundwater. Standard Chlorine of Delaware had two significant spills in 1981 and 1986. With the second spill, nearly 400,000 gallons of pDCB and about 170,000 gallons of TCB were released, causing significant contamination in Red Lion Creek and in the uppermost aquifer beneath the site.

Standard Chlorine of Delaware was assigned to the list of top-priority federal toxic cleanups in 1987; however serious sampling of the Potomac aquifer only began in 2003. This is a serious matter because upper part of Potomac aquifer supplies northern Delaware with 30% of its water. About 152,000 people draw groundwater from public and private wells within three-mile radius of the site. Approximately, 30 people reside within a mile of the site.

It has been 18 years since the 1986 spill; however, the area has still not been cleaned up. Initial tests indicated that benzene levels in the upper part of the Potomac aquifer underneath the plant are at more than three times the level allowed in drinking water. As a remedy, the U.S. Environmental Protection Agency (EPA) is considering surrounding the contaminated shallow groundwater with a buried wall up to 70 feet deep and more than a mile long.

Governor's Task Force Report

A report prepared by the Governor's Metachem Task Force (May 30, 2003) explains that, when Metachem was formed, it was set up to limit investor's total liability. Therefore, Metachem has no affiliated or parent corporate entity to which liability can be transferred. When Metachem went under, there was no financially strong business entity to pay for cleanup. Out of 39 chemical companies that operate in Delaware, all but six have parent companies that appear to be able to provide resources to fund an orderly cleanup. For the independent firms, none appears to have the quantities of hazardous materials or contamination on site that Metachem has. This report also explains that Metachem and its predecessor employed environmental managers who had formerly worked as senior managers at State of Delaware Department

of Natural Resources and Environmental Control (DNREC). This close relationships between the regulated and regulators appears to have adversely influenced the company's approach to compliance and softened DNREC's approach to rigorous enforcement.

Disposal options



In addition to the contaminations of the plant grounds, ground water, and Red Lion Creek, the plant had 43 million pounds of hazardous chemicals left on site. Since EPA and DNREC took over the site in 2002 approximately 400,000 gallons of liquid chemicals were sold, and 150,000 gallons of liquid chemicals were disposed. However, efforts to solidify the remaining 1.3 million gallons of hazardous liquid chemicals have largely failed, making it impossible to send them to landfill. As a result, EPA has been considering alternative ways to dispose of them. The EPA's recent public meeting (May 4, 2004) focused on this topic. EPA identified six disposal alternatives such as land filling, on-site incineration, off-site incineration, chemical oxidation, limited separation/incineration, and expanded separation/incineration. The first four methods were eliminated for the following reasons. Though a cost effective method, landfilling is not a safe method of disposal due to the hazardous and liquid nature of the chemicals. EPA also considered off-site (out of the state of Delaware) incineration of the chemicals because on-site incineration is prohibited by Delaware's Coastal Zone Management Act. However, EPA does not prefer off-site incineration of all liquids because it costs more than the partial incineration alternatives. Another expensive method was chemical oxidation. This method seems to be a highly effec-

tive and clean method of disposal, producing nontoxic residuals and reduction in waste; however, its estimated costs are 20 times higher than the cost of incineration. Thus, this option was eliminated as well.

The remaining two options involved partial separation of the liquid chemicals using Metachem's facilities and off-site incineration of the remaining liquids. These two options (limited versus expanded separation) differ by the degree of separation to be carried out at the Metachem site. EPA favors the limited separation-off site incineration option as it is the cheaper of the two (\$9.3 million), and it allows the disposal to be completed about four months earlier. However, the expanded separation option may allow approximately 40% of the 1.3 million gallon liquids to be returned to commerce, hence significantly reducing the amount of liquid chemicals to be incinerated.

Public comment at meeting

At the May 4, 2004 EPA public meeting, many citizens expressed concern about the negative effects of incineration on human health and the environment regardless of where incineration takes place. While the expanded separation is approximately \$0.8 million more expensive (or about 8.5% more costly), achieving a 40% reduction in the amount of liquids to be incinerated may be worth this additional investment because incinerating smaller amount of hazardous chemicals may be a cleaner and safer approach for human health in the long run. The limited separation/incineration option that EPA favors is the least costly and the easiest to implement; however, it does not result in waste reduction. The expanded separation/incineration option is the only alternative that allows some waste minimization. The detailed information about all options is given in the Focused Feasibility Study (February 27, 2004).

Unfortunately, the participants at the public meeting did not have easy access to this document, which made it quite difficult for them to study disposal options before the meeting. Participants expressed disappointment about not having access to this essential information either prior to or during the public meeting. To access this study, (1) go to <http://www.epa.gov/reg3hwmd/super/DE/standard-chlorine-de/> (2) click on the Administrative Record, (3) click on Advanced Search, and (4) identify the state (Delaware), site name (Standard Chlorine), and the date of the study (February 27, 2004). Here you can download the Focused Feasibility Study.

Finally, while the focus of this meeting was disposal of the liquid chemicals, participants were very concerned about the contamination of the ground water. However, EPA officials did not have any major news or new progress announcements about ground water contamination and cleanup plans.

Challenge: how renewable energy sources fit in

By Wilson Rickerson Research Associate, Center for Energy & Environmental Policy and not DE State Senate?

It is increasingly difficult to take our energy supply for granted: air pollution from power plants claims over 30,000 lives each year, asthma rates are rising, and carbon dioxide emissions are heating up our climate. Our reliance on imported fossil fuels has been linked to a range of troubling issues from price volatility to war in the Middle East. Our system of large generating plants has been identified as a significant national security risk. And, as the multi-billion dollar price tag from the August 2003 blackout clearly demonstrates, our centralized electricity grid is congested and vulnerable to failure.

In response to these concerns, many States around the country are turning to a new generation of renewable energy technologies as alternatives to traditional fuels. Wind energy, for example, is the fastest growing energy sector in the world and is now cost-competitive with natural gas in some parts of the US. The market for solar energy, meanwhile, has grown exponentially in the last five years. While solar panels were formerly relegated to remote power applications, they are now appearing on building rooftops across the country.

Domestic renewable energy technologies like these take advantage of local resources, improve local economies, and reduce our need for overseas fuel. Since they are distributed, rather than centralized, they improve grid reliability, and make unlikely terrorist targets. Perhaps most significantly, renewable energies offset greenhouse gas and air pollution emissions and mitigate the environmental impacts of our energy supply.

So why aren't renewable energies catching on? The fact is that they are. Renewable energy already plays a significant role in

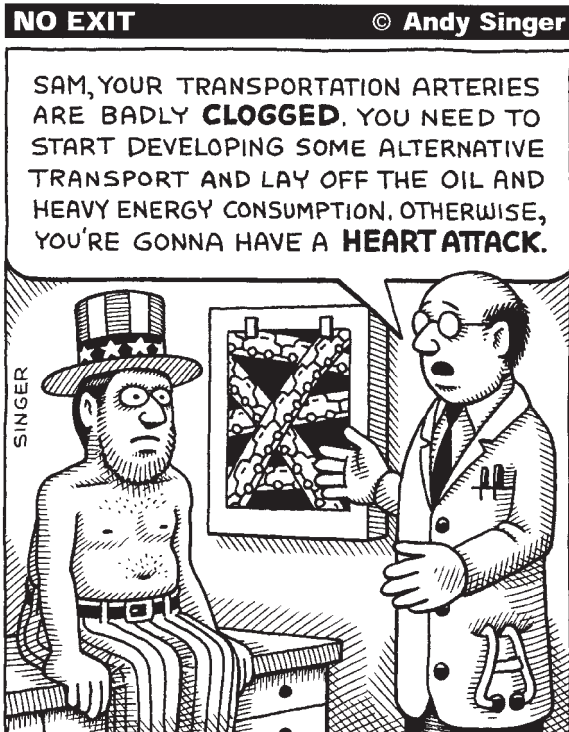
Europe. Denmark, for example, gets 20% of its electricity from wind power. Germany, a country with 4% of the US landmass, has installed 14,000 megawatts of wind energy in the past 15 years - more than double what the US has installed in the last 25.

The US, however, is beginning to catch up. Sixteen states have enacted laws, known as Renewable Portfolio Standards (RPS), that require a certain percentage of their electricity to come from renewable resources.

But what about Delaware? According to a comprehensive energy report commissioned by Governor Minner, the State of Delaware is a good candidate for renewable energy.

We rely almost entirely on fossil fuels for our electricity supply, and our local transmission system is congested. We have badly polluted air, and, as a coastal state, we would be particularly vulnerable to the rising sea levels associated with climate change. But wouldn't renewables be difficult and expensive in our region? The answer is no. Most of the states in our region have already paved the way by enacting RPS laws that do not significantly impact electricity rates: New Jersey has a target of 6.5% by 2008, and is considering ramping up to 20% by 2020; Maryland has a target of 7.5% by 2014; and while some Pennsylvania utilities have various targets in place, legislators there are currently considering 3 different bills for a single statewide standard.

Against this backdrop, the Delaware State Senate will consider an RPS in June that sets a mandatory target of 10% by 2017. While certainly not a complete solution to our current energy crisis, the RPS is a positive step that will accelerate our transition to a clean and responsible energy future.



State revokes permit: Assawoman Canal Dredging project stopped

The Sierra Club and The Mid-Atlantic Environmental Law Center claimed a brief victory on April 26th upon learning that the DNREC had revoked its own permit to allow the dredging of the Assawoman Canal. The second phase of the Appeals Board hearing, where the state was to present their side was cancelled.

"Testimony presented at the first phase of the Environmental Appeals Board hearing on April 13th brought to light that DNREC did not make available any economic study of the project until after the close of the public comment period," said Jim Stuhltrager, staff attorney with the Mid-Atlantic Environmental Law Center that is representing the Sierra Club in its appeal. "Our economic expert further indicated that DNREC's belated economic justification, which is mandatory to support a project receiving state funds, is not up to standards."

This dredging project has been in contention over ten years through the many steps of the administrative process that dictates how these types of projects are weighed and considered. Sierra Club members have attended public meetings, taken folks on kayak trips through the canal, written letters, collected signatures in opposition to the project and attended many hearings. The issuance in June of 2003 of the subaqueous permit allowed the Sierra Club their final opportunity to bring to light their many concerns.

"We have been seeking to protect the unique quality of life that has evolved in the canal for nature, local landowners and visitors since the canal was originally dug in the late 1890's," said Steve Callanen, Ocean View resident and Southern Delaware Group chairman. "There are very few places left in the Inland Bays ideal for the quieter recreational sports, including hiking, and this four mile long canal is one of these special places."

At the hearing Sierra Club presented testimony seeking to clarify details surrounding the rumor that the dredging would lead to improved water quality in the dead-end lagoons in South Bethany. Michele Adams from Cahill and Associates testified to the "slushing" motion of the water in the canal and that full flushing of the lagoons by the canal was unlikely. She also indicated that more studies and information was needed to fully understand the water flow in the canal.

"The Sierra Club is also concerned about the effects the project would have on water quality, habitat for juvenile summer flounder and other fish species, and safety of those continuing to use the canal for more passive sports," said Debbie Heaton, conservation director of the Delaware Chapter. "Our concerns were heard and work thus far has paid off. We also want to thank the many homeowners and businesses in the canal area for their support. We don't anticipate that this is the end of the story."

BE PART OF THE ACTION!!!

Keep in touch with what is happening locally and nationally as well as get involved by participating in sharing the environmental viewpoint!

1. Sign up for Delaware Chapter's e-mail alert list - The Delaware Environmental Alert List! Send an email to Debbie.heaton@sierraclub.org to be included. This list will key you into state and national issues of interest to Delaware.
2. Visit the Sierra Club's Web site at www.sierraclub.org/takeaction, where you can sign up for the Take Action Network to send free messages to your elected officials.
3. For the inside story about Club conservation campaigns and how you can help, ask for a free subscription to the bimonthly print newsletter the Planet. Send an e-mail to activist.desk@sierraclub.org or write the office of Volunteer and Activist Services, 85 Second Street, San Francisco, CA 94105-3441.

Did You Forget?



We've looked everywhere for your response to our March appeal.

In March we sent out an appeal to each of our members, asking for contributions directly to your Chapter. These contributions really do make a difference to us, and are an important part of our Chapter's budget. When you make a donation to the Chapter, you support the Sierra Club's work in your own backyard. You allow us to continue our work to protect wilderness and wildlife, to improve the quality of life in our cities, and to promote the enjoyment of nature. Please be as generous as you are able—remember, these funds directly affect your way of life in your neighborhood. Thank you.



Explore, enjoy and protect the planet

Delaware Guardian Society

Our spring fundraising letter went out in March and we have been heartened to see the response it has generated. It is one of the primary ways we ask you, our members, for your support and we really count on everyone doing their part by making a contribution. The Chapter Executive Committee would like to thank the many members listed below, from across the state, who have made their contribution to the Chapter over the last six months

Bald Eagle

(donation over \$1,000)

Pete Okie

Peregrine Falcon

(donation of \$500 - \$999)

Rob Mayer

Piping Plover

(donation of \$250 - 499)

Anonymous

Terri Tipping & John Enderle

Charlie and Rosemary Haines

Fox Squirrel

(donation of \$125-249)

Mike Casale

Debbie & Clay Heaton

Kenneth Mulholland

Ed Yalisove

Contributors

Anonymous

Jennifer Adkins

Scott and Melanie Arnold

Suzanne R. Baker

Robert Barrett, Jr.

Kathryn Q. Blair

Sue Bogan

James Brophy

Robert Brown

Carol E. Clapham

Bill Copley

Craig D. Cox

Alan and Bernadette Dages

Rebecca & Jorge Del Fabbro

Charlotte E. Desaulniers

Kathryne Everts & Mark J. Vangessel

David Felice

Blair Q. Ferguson

Karen Filmont

Dick and Lorraine Fleming

Courtney D. Fry

F. Gregory Gause, Jr.

Gregory & Margaret Goff

Donald L. Gouge, Jr.

Carole K. Hall

Charles W. Harris, III

Steve & Debbie Hegedus

Ann and Dave Jaeger

G.F. Jahn

Vincent and Phyllis Kane

Elise Kidd

Lorri Fencer and Gerald Maier, Jr.

Augusto V. Marianiello

James and Barbara Markham

Steve and Michelle McCann

Bruce McFarland

John and Anita Muir

Gail B. Murray-Seitz

Eugenia Nichols

Bill Nottingham

Carol Reid-Grandfield

Chris Rizzo

Elizabeth B. Pertzoff

Sandra Proctor

Skip and Til Purnell

A. Tyler Rigby

Stephen Ross

John Speer

Ralph Stahl

Carol A. Stewart

Peter Townsend

Eve and Per Thyrum

Pat M. Torelli

Peter Tuhy

Gary Turton

David Vineburg

Carol and Bill Walsh

Roseanne & Fred Wiedmann

Amy & Bruce Wilburn

Bill & Kit Zak

William V. Zimmerman

REGISTER and VOTE IN 2004!!

<<https://www.workingforchange.com/vote/index.cfm?>>

(forms/info for anywhere in the USA)

Help a friend, relative, co-worker, or neighbor!

Sierra Club announces Board of Directors election results

San Francisco, CA - Sierra Club members turned out in unprecedented numbers this year to elect five new members to the 112-year-old environmental organization's Board of Directors. A record 22.7 percent of the Club's membership returned 171,616 ballots, compared to the previous high voter turnout of 15 percent in the 1998 board election.

Incumbent directors elected to a second consecutive term were Jan O'Connell of Grand Rapids, Michigan and Nick Aumen of Loxahatchee, Florida. Lisa Renstrom, who served on the board from 2001-2003, was elected to a new term, while Sanjay Ranchod of San Francisco and David Karpf of Philadelphia were elected to a first term.

Sierra Club President Larry Fahn said the grassroots organization's membership sent a clear message through its record voter turnout.

"Nearly a quarter of the Sierra Club's members have indicated they love the Club the way it is," Fahn said. "They have elected people who have been active leaders in the Sierra Club and who support our core agenda to protect the environment and to educate Americans about the destructive environmental practices of the Bush administration."

For more information about the Board of Directors election, visit the Sierra Club's website at <http://www.sierraclub.org/bod/2004election/>

"Never give up. Even if you don't win in your lifetime, you can blaze a trail for others to follow."

--Dr. Edgar Wayburn, environmental defender whose conservation achievements over 50 years of activism include the creation of the Golden Gate National Recreation Area and a leading role in the passage of the Alaska National Interest Lands Conservation Act.