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ADMINISTRATOR JACKSON
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EPA's Jackson defends Gulf response (*Aspen Times*)

Aaron Hedge
The Aspen Times
Aspen, CO Colorado,
ASPEN — As speculation remains on whether the Obama administration and BP are properly handling the oil spill in the Gulf of Mexico, the director of the U.S. Environmental Protection Agency said Sunday in Aspen that the government has acted appropriately.

“I absolutely do” think the administration acted in the best way possible, said Lisa Jackson, the director of the EPA, in response to Tulane President Scott Cowen.

Both were on a panel that attracted a full house in the Greenwald Pavilion on the first day of The Aspen Institute's Environment Forum.

At the beginning of the crisis, BP didn't even know that oil was leaking from the well, Jackson said.

But as news organizations slowly started reporting the full extent of the danger of the spill, she said the EPA realized it had to step into the fray of what is now the worst manmade environmental crisis in U.S. history.

“We are a guardpost,” Jackson said of the organization.

The Obama administration has come under sharp criticism by right-wing pundits for not taking the helm of the cleanup effort sooner than it did.

Oil was pumping into the ocean for nine days before the administration publicly acknowledged the gravity of the spill.

Moving forward from the disaster after the massive cleanup, “preparedness” will be the most important consideration for oil companies and the government to prevent a similar disaster, Jackson said.

Fellow panelists Joel Bourne, an environmental reporter for National Geographic, and former Shell Oil president John Hofmeister readily agreed with that sentiment.

Bourne said the commonplace quality of oil disasters is the impetus for a vast knowledge of how spills work, but should also serve as incentive for government to impose stricter operating guidelines on the industry.

“We know a lot about oil spills because we've been spilling it pretty much since we started drilling,” Bourne said.

He stressed the catastrophic nature of the crises, not only on the environment, but on the industries that rely on a healthy ecosystem.

Especially in the case of the Gulf spill, Bourne said, its unclear how long it will take for the ecosystem to recover. He said oxygen is an integral component of recovery because it breaks down the chemical makeup of oil. In past oil spills, the surface of the water usually churns until the circulated oxygen depletes the oil.

But because of the low level of oxygen in deep places of the ocean, which until now were free from such a disaster, he said the oil in the Gulf will take longer than usual to disperse. He alluded that it could take multiple decades for the Gulf to return to normal.

“When you don't have oxygen ... it hangs around forever,” Bourne said.

And when that oil lingers, it continues killing the ecosystem, which has the double effect of killing the economies that rely on it — like the robust seafood industry that supplies the Gulf Coast with much of its livelihood. Still, though, most people turn a blind eye after a few short months, Bourne said.

“The public — the American public, especially — has a very short attention span,” he said. “As soon as they don't see oil, it's all good.”

Hofmeister agreed that there should be a high level of government oversight of the oil industry, but said Shell, which produces 400,000 barrels of oil a day and supplies 170,000 people with jobs, already complies with its own rigorous safety guidelines.

“I think the standards we operate by in the Gulf of Mexico would be in concert with the regulations that are becoming,” he said in response to an audience member's question.

Jackson told the audience that the only way to fix the problem is to gradually wean the United States from its fossil-fuel addiction. The nation should replace that reliance with clean energy and, in the meantime, impose strict, enforceable guidelines on oil companies to hold them accountable to those rules, she said.

For that to happen, though, the private sector must jump on board, Jackson said.

“There's only so much public-sector investment that we can do,” she said before expressing confidence that the private sector will follow through with that call to accountability.

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EDITORIAL / OP-ED / COMMENTARY / LETTERS
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Technophobes' hurtful harvest (*Washington Times*)

July 26, 2010 Monday
B, COMMENTARY; Pg. 3
Technophobes' hurtful harvest;
A renewed EPA assault on herbicide could uproot farm jobs
By Bill Horan SPECIAL TO THE WASHINGTON TIMES
In his latest weekly radio address, President Obama talked about jobs. "Too many Americans whose livelihoods have fallen prey to the worst recession in our lifetimes - a recession that cost our economy 8 million jobs - still wonder how they'll make ends meet," he said. Then Mr. Obama called for special measures to create more employment.

If the president means what he says, he may want to take a second look at the recent behavior of his own Environmental Protection Agency (EPA).

Several months ago, the EPA startled farmers with its decision to conduct an unplanned review of atrazine, a crop-protection herbicide we've been using for a half-century. Not only did the EPA jump the schedule to institute this year's review (in 2006, the EPA finished a 12-year reapproval process and review, reporting that atrazine posed "no harm"), one top agency official recently announced that the EPA would be reaching a decision in September, many months ahead of schedule.

It's been said that no molecule has received more intensive study than atrazine. Regulators have allowed it on the market because it's a safe product that does an excellent job of killing harmful weeds that would have reduced yields of field crops.

There has been increased concern that the EPA is taking its marching orders from special-interest groups such as the Natural Resources Defense Council (NRDC), which has called for a complete ban of atrazine. This activist organization doesn't have any scientific data to suggest that atrazine is unsafe. It's just a radical outfit that despises modern technology.

What would happen if the EPA were to accept the demands of the NRDC and outlaw atrazine? Don Coursey of the University of Chicago studied the question from an economic perspective. Using an economic model, he estimated that farming costs would increase so much that as many as 48,000 workers could lose their jobs in the corn industry alone. Additional losses would rip through the sorghum and sugar cane sectors.

It makes you wonder if anyone at the EPA has taken a look at the unemployment rate. This year, it has hovered around 10 percent. That doesn't count the number of people who have stopped searching for work. And it's even higher in many of the rural areas that depend on agriculture for their economic survival.

Mr. Obama discusses the jobs crisis at almost every opportunity - not just in his weekly radio address. "To every American who is looking for work, I promise you, we are going to keep on doing everything that we can. I will do everything in my power to help our economy create jobs and opportunity for all people," he said recently.

Yet a significant byproduct of an ideological crusade against atrazine would be the destruction of thousands of jobs.

None of this is to say that we should ignore safety or conservation. Quite the opposite. We need a regulatory process based on sound science - one that investigates every possible avenue of inquiry, no matter where it leads. If a product hurts human health or places an undue burden on the environment, it should not be approved for commercial use.

At the same time, our regulatory system must resist political mischief. If it doesn't, American farmers will find themselves in the sorry position of many of our European friends - watching the rest of the world adopt technologies that we reject because special-interest groups have applied pressure.

One of the great ironies of the push to demonize atrazine is that it's conducted in the name of environmentalism. Yet the loss of this product would hurt the environment. Without atrazine, farmers would have to find new ways to control weeds. Most would begin to till their land more intensely, producing additional soil erosion. It also would require a lot more time behind the wheels of tractors - and that would generate more so-called greenhouse gases.

This isn't a tough call. Atrazine is a thoroughly vetted product. It has been endorsed by scientific and regulatory agencies in the United States and all over the world. Banning it would toss thousands of Americans out of work and place more stress on the environment - and not produce even a tiny bit of good in return.

If the White House cares about farmers and workers, it will put a quick end to this foolish attack on crop protection.

Bill Horan grows corn, soybeans and grains in northwestern Iowa and is a member of the Truth About Trade & Technology Global Farmer Network.

Four Ways to Kill a Climate Bill (*New York Times*)

July 26, 2010 Monday
Late Edition - Final
Section A; Column 0; Editorial Desk; OP-ED CONTRIBUTOR; Pg. 23
By LEE WASSERMAN.
Lee Wasserman is the director of the Rockefeller Family Fund.
IF President Obama and Congress had announced that no financial reform legislation would pass unless Goldman Sachs agreed to the bill, we would conclude our leaders had been standing in the Washington sun too long. Yet when it came to addressing climate change, that is precisely the course the president and Congress took. Lacking support from those most responsible for the problem, they have given up on passing a major climate bill this year.

It's true that passing legislation to rebuild our fossil fuel-based economy was always going to be a momentous challenge. Senators and representatives feel in their bones (and campaign accounts) the interests of utilities and the coal and oil industries. Even well-intentioned members of Congress struggle to balance the competing needs of energy-intensive industries, coal workers and American families.

But with climate change a stated priority for President Obama and Congress, how did they fall so short? By weaving four coordinated threads into a shroud of inaction. This began long before President Obama took office, but rather than rip up the old pattern -- as he advocated during the campaign -- the president quickly took his place at the loom.

Thread No. 1:Climate is out; green jobs are in. Despite climate change being the greatest challenge of our time, with millions of people facing inundation, starvation and conflicts over scarce resources, the White House directed advocates not to discuss it. At a meeting in April 2009 led by Carol Browner, the White House coordinator of energy and climate policy, administration message mavens told climate bill advocates that, given the polling, they should avoid talking about climate change and focus on green jobs and energy independence.

Had Lyndon Johnson likewise relied on polling, he would have told the Rev. Dr. Martin Luther King Jr. to talk only about the expanded industry and jobs that Southerners would realize after passage of a federal civil rights act. I could imagine Dr. King's response.

The urge to avoid the topic of climate change is not new. While Bill Clinton and Al Gore have done noble work on climate since leaving office, when they had the presidential megaphone they did little to educate the public about the wolf at our door. President Obama has followed suit, and our national comprehension of climate change continues to stagnate. Virtually the only public officials working to shape opinion on this over the past two years have been those committed to misrepresenting the science.

Thread No. 2: Devising a bill for historic polluters, not the American people. Remember the president's campaign pledge to represent the people, not the lobbyists? That's not what he's done on this issue.

For several years the Beltway wisdom has been that it is impossible to pass a bill without the approval of historic polluters, particularly the utilities, which run coal-burning power plants, the nation's single largest source of climate-changing pollution. The administration and Congress did their best to get the industry's permission for new regulations. They proposed handing power companies hundreds of billions of dollars worth of allowances to pollute, additional billions to subsidize the development of technology to sequester carbon from coal-fired plants, and evisceration of federal authority under the Clean Air Act to regulate carbon. Peter Orszag, the budget director, said giving away pollution permits would be "the largest corporate welfare program that has ever been enacted in the history of the United States." But no matter -- it wasn't enough.

Thread No. 3: A Rube Goldberg-policy construction. Because Congress built a policy machine designed for special interests, most proposals were chockablock with policy contraptions impossible to even explain, much less put into effect. Provisions included pollution allowances for favored corporations, carbon credit-default swaps, complicated worldwide offset provisions to enable avoidance of actual pollution reductions at home and loopholes to extend the life of the dirtiest coal plants. By the end of the process, even Campbell Soup demanded a special deal for the carbon-intensive job of making chicken noodle soup.

This rush to the trough was inevitable once President Obama ditched his plan to push a simple market-based bill that would have required polluters, rather than citizens, to pay for switching from fossil fuels to renewable forms of energy.

Thread No. 4: The public sits it out. American history has few examples of presidents or Congresses upending entrenched interests without public pressure forcing their hand. Teddy Roosevelt is on Mount Rushmore for a reason.

Citizens wouldn't support an approach they couldn't understand to solve a problem our leaders refused to acknowledge. Even the earth's flagging ability to support life as we know it couldn't stir a public outcry. The loudest voices insisted that leaders in Washington do nothing.

They obliged.

Who Cooked The Planet? (*New York Times*)

July 26, 2010 Monday
Late Edition - Final
Section A; Column 0; Editorial Desk; OP-ED COLUMNIST; Pg. 23
By PAUL KRUGMAN
Never say that the gods lack a sense of humor. I bet they're still chuckling on Olympus over the decision to make the first half of 2010 -- the year in which all hope of action to limit climate change died -- the hottest such stretch on record.

Of course, you can't infer trends in global temperatures from one year's experience. But ignoring that fact has long been one of the favorite tricks of climate-change deniers: they point to an unusually warm year in the past, and say "See, the planet has been cooling, not warming, since 1998!" Actually, 2005, not 1998, was the warmest year to date -- but the point is that the record-breaking temperatures we're currently experiencing have made a nonsense argument even more nonsensical; at this point it doesn't work even on its own terms.

But will any of the deniers say "O.K., I guess I was wrong," and support climate action? No. And the planet will continue to cook.

So why didn't climate-change legislation get through the Senate? Let's talk first about what didn't cause the failure, because there have been many attempts to blame the wrong people.

First of all, we didn't fail to act because of legitimate doubts about the science. Every piece of valid evidence -- long-term temperature averages that smooth out year-to-year fluctuations, Arctic sea ice volume, melting of glaciers, the ratio of record highs to record lows -- points to a continuing, and quite possibly accelerating, rise in global temperatures.

Nor is this evidence tainted by scientific misbehavior. You've probably heard about the accusations leveled against climate researchers -- allegations of fabricated data, the supposedly damning e-mail messages of "Climategate," and so on. What you may not have heard, because it has received much less publicity, is that every one of these supposed scandals was eventually unmasked as a fraud concocted by opponents of climate action, then bought into by many in the news media. You don't believe such things can happen? Think Shirley Sherrod.

Did reasonable concerns about the economic impact of climate legislation block action? No. It has always been funny, in a gallows humor sort of way, to watch conservatives who laud the limitless power and flexibility of markets turn around and insist that the economy would collapse if we were to put a price on carbon. All serious estimates suggest that we could phase in limits on greenhouse gas emissions with at most a small impact on the economy's growth rate.

So it wasn't the science, the scientists, or the economics that killed action on climate change. What was it?

The answer is, the usual suspects: greed and cowardice.

If you want to understand opposition to climate action, follow the money. The economy as a whole wouldn't be significantly hurt if we put a price on carbon, but certain industries -- above all, the coal and oil industries -- would. And those industries have mounted a huge disinformation campaign to protect their bottom lines.

Look at the scientists who question the consensus on climate change; look at the organizations pushing fake scandals; look at the think tanks claiming that any effort to limit emissions would cripple the economy. Again and again, you'll find that they're on the receiving end of a pipeline of funding that starts with big energy companies, like Exxon Mobil, which has spent tens of millions of dollars promoting climate-change denial, or Koch Industries, which has been sponsoring anti-environmental organizations for two decades.

Or look at the politicians who have been most vociferously opposed to climate action. Where do they get much of their campaign money? You already know the answer.

By itself, however, greed wouldn't have triumphed. It needed the aid of cowardice -- above all, the cowardice of politicians who know how big a threat global warming poses, who supported action in the past, but who deserted their posts at the crucial moment.

There are a number of such climate cowards, but let me single out one in particular: Senator John McCain.

There was a time when Mr. McCain was considered a friend of the environment. Back in 2003 he burnished his maverick image by co-sponsoring legislation that would have created a cap-and-trade system for greenhouse gas emissions. He reaffirmed support for such a system during his presidential campaign, and things might look very different now if he had continued to back climate action once his opponent was in the White House. But he didn't -- and it's hard to see his switch as anything other than the act of a man willing to sacrifice his principles, and humanity's future, for the sake of a few years added to his political career.

Alas, Mr. McCain wasn't alone; and there will be no climate bill. Greed, aided by cowardice, has triumphed. And the whole world will pay the price.

URL: http://www.nytimes.com

Curbing EPA A Necessity (*Intelligencer Wheeling News-Register*)

By The Intelligencer POSTED: July 26, 2010

Senate Majority Leader Harry Reid's admission last week that he cannot find enough votes to enact the newest incarnation of "cap and trade" was welcome news - but not entirely candid.

Reid told reporters an energy bill in the House will be limited to provisions regarding energy efficiency and offshore oil and gas drilling, in response to the disaster in the Gulf of Mexico. New limits on coal-fired power plants will not be included in the bill.

Here is how Reid explained it to reporters:

"It's easy to count to 60 ... My point is this: We know where we are. We don't have the votes."

Reid's comment about not being able to convince 60 senators to vote in favor of cap and trade was a clear attempt to make it sound as if Republicans are blocking the measure. It takes 60 senators to cut off debate on a bill and move to a vote on it. There are 41 Republicans in the Senate - able, if they vote together, to block bills supported by the 57 Democrats and two Independents.

But cap and trade is not a mere partisan dispute. While most Republicans oppose it, a substantial number of Democrats do, too.

Despite what Reid, President Barack Obama and House Speaker Nancy Pelosi want Americans to believe, cap and trade is not just a Democrats vs. Republicans controversy. Thoughtful Democrats worry about the economic devastation it would wreak in states such as West Virginia and Ohio. Those from states without their own coal industries worry about the reaction of voters to much higher electric bills; slightly less than 50 percent of the nation's power is generated in coal-fired plants.

The death - at least for now - of cap and trade means Obama's administration will move forward with plans to cripple the coal industry through Environmental Protection Agency mandates.

That makes it vital for Sen. Jay Rockefeller, D-W.Va., to advance a bill he has sponsored to restrict the EPA's power for a two-year period. We urge Rockefeller to make the bill a priority - and to enlist reasonable senators on both sides of the political aisle to support the measure.

Reid, Pelosi and Obama will not be happy about their defeat in the Senate. They will push the EPA to accelerate its anti-coal campaign. Only a bill such as Rockefeller's can stop it.

Climate change plan collapses (*San Francisco Chronicle*)

California
July 26, 2010 Monday
FINAL Edition
Op-Ed; EDITORIALS; Pg. A9
Climate change plan collapses;
On the Demise of Senate Legislation
There is plenty of blame to share for the political demise of climate change legislation in Washington. Timid Democrats, obstinate Republicans, a risk-averse White House and a sour public outlook that green groups couldn't counter. Each played a role.

Following a health care fight, a $1 trillion stimulus package and new financial regulations, there was neither the will nor patience for another major showdown. The doomed plan was built on the much-mocked cap and trade approach that set limits on carbon emissions think mainly coal-fired power plants and allowed polluters to buy and sell credits to stay within the caps.

The House approved a significant plan last year and gave way to the Senate, which softened the plan and then gave up. "We know we don't have the votes," said the Senate's top Democrat, Harry Reid of Nevada, who called off the fight.

How did it happen, especially when the huge gulf oil spill became a poster-child for environmental destruction? The causes are many.

Republicans opposed the plan from the start, meaning a likely GOP filibuster required a 60-vote margin to win. Majority Democrats in the Senate weren't united, with southern and coal-state members cool to the controls. President Obama, largely AWOL in the fight, didn't speak up in the final innings, though his run for the White House was partly built on environmental appeals.

The result is an undeniable defeat in stemming climate change in this country. It echoes overseas also with other countries wondering about American resolve on a global issue. The high-wire deal struck in a climate change conference last year in Copenhagen to reduce emissions by 17 percent by 2020 looks very far away.

But the wreckage isn't complete. California will face a challenge to its AB32 law cutting greenhouse emissions on the ballot in November. Also, GOP gubernatorial candidate Meg Whitman wants to hit the pause button on the law if elected. Keeping this law on the books becomes a higher priority than ever.

The Obama administration may also take an extra step in the battle by using existing federal laws to crack down on carbon emissions, a regulatory showdown it wanted to avoid with the legislative package that's now dead. Whether it has the will to do so, after

the Senate defeat, remains in doubt.

There are other options that will test this country's ingenuity and seriousness on the topic. Green tech research must continue, a particular strength for California. A relatively mild Senate bill calling for more efficient appliances and wider use of natural gas in the nation's trucking fleet is taking shape. Federal rules requiring higher mileage in cars and small trucks can make a difference.

Each is a serious step. But none would match what the Senate just passed up: a national policy to greatly reduce the human contribution to climate change.
The Hometown Opinion
By Katherine Frankel 6:00am
Opinion

Harrison's 'Top 10' ListTen reasons why it's 'Great to Live in Harrison.' (*Harrison Patch)*

David Letterman has his weekly 'Top 10' list. So here are my current top 10 reasons I'm happy to live in Harrison.

1. The country town feel: Incredible to think that only a 40 minute drive from one of the world's most vibrant cities you can feel as if you are in a country setting. I'm thankful for our winding country-type streets that residents run along and push strollers along on sunny days, our large property lots that make for lush greenery everywhere you look, and for the lack of high density building that keeps the rural rather than urban aesthetic we all value.

2. Trees, trees and more trees: Everyone knows Westchester is famous for its greenery but that still doesn't give the right amount of recognition for the full glory of our hundreds-of-years-old trees that are on nearly every property and street. They were here before we were and will be here long after and remain an integral part of the character of our town.

3. Resident involvement: Harrison is outstanding for the number of resident groups and associations and its interest and attendance at town hall meetings. There is the Purchase Environmental Protection Agency, the Harrison Residents Committee, the West Harrison Association, the Winfield Area Preservation Association, and many more. It is a testament to the value we all place on our town, and is the backbone to its preservation and future well-being.

4. Our town's characters: Everyone knows Lucille Held, who well into her senior citizenship years, when many would be sitting at home on the sofa, remains an ardent campaigner at town hall. Councilman Pat Vetere remembers her dressed in a red dress, lying on the floor of town hall in protest—and to this day calls her the 'lady in red'. My own personal favorite town character is Roy Aletti who, in addition to owning and

running Harrison's hardware store, does such spectacular over-the-top Christmas decorations around his house and yard that it literally brings tourist buses in. He has a letters to Santa program where he responds to each letter, and even better, looks just like Santa year-round, with a rosy grin, bushy beard and suspenders. I'm still not convinced that he really isn't Santa and just moved here to get away from the North Pole's harsh winters.

5. The town's boards' members: For all that I may not sometimes agree with all their decisions, I remain in awe of the time and energy these individuals donate on our town's behalf. Many are completely unpaid positions, such as our Architectural review board, and even the Town Council members, with the exception of the Mayor who is salaried, are only paid a small stipend which nowhere near covers the amount of their personal lives they volunteer and the energy and passion they put into town business. I appreciate all the work and personal hours they put into keeping our town running and operating in good times and bad.

6. Location, location, location: Close to the Hutch and a 30 to 40 minute drive to New York city just can't be beat. It's an easy evening out to attend the world's best shows, musical performances, clubs and restaurants. The availability of the airport right here in town also allows straight hops to Florida and other vacation destinations with none of the hassle of JFK or La Guardia to deal with, and only a 10 to 15 minute drive upon arrival back home.

7. Low taxes: All right, maybe not low taxes; just lower taxes. Compared to Scarsdale, Greenburgh, Hartsdale and even Mamaroneck we are doing much better at keeping taxes down, thanks to our corporate residents such as Morgan Stanley, Mastercard and Pepsico. Even with the recent increase in our tax rate, we still maintain a considerably lower tax rate than most surrounding townships.

8. The changing seasons: I confess I love our visits to Florida and the Caribbean in the middle of our harsh winter months, but I am also happy to come home again and see the seasons as they come and go throughout the year. There is nothing like watching the garden come alive in spring, the magnificent fall colors, our summer pool days and the first winter snowfall. It is a magnificent kaleidoscope of nature in its all its changing glory, and I wouldn't miss that show for all the summer days Florida has to offer.

9. Our visual history: Driving down many of the streets in Harrison is a history lesson in itself. Many of our houses date back to the 18th or very early 19th centuries. Enter many Harrison homes and you will see the original beams or original old cooking fireplaces. Civil war battles were fought on our town land and there are plaques and sites detailing their historical significance. In summer, Manhattanville College offers a historical walking tour of its campus that details the historic areas of importance within the campus grounds. Reading Harrison's rich and interesting history—a Cliff Notes-like version is available on the Harrison Patch site—is an interesting project that every Harrison resident should take the time to do.

10. The varied meld of people, cultures and backgrounds: Our census figures indicate an unusually high mix of ethnic backgrounds, income levels, employment arenas, education and religions. We have Catholic churches, synogogues, and even a Quaker meeting house. Go to the supermarket, walk along our main street or eat at one of our local restaurants and you will mingle with people who are second and third generation Harrison residents, immigrants from a multitude of nations and New Yorkers who have just moved up from the city in search for 'greener pastures'. It is a mix that is evident everywhere you look and adds to our rich town character and life.

So let Letterman have his lists.

I also have a constantly evolving 'top ten' list and with each of new list I write, comes to the recognition that it is indeed 'Great to Live in Harrison.'

What's on your Top 10? Tell us in the comments.
About this column:Some thoughts from the perspective of a Harrison resident.

Posted: July 26, 2010

Hotspots with bad air need far more attention (*Detroit Free Press*)

It's a conundrum: While Michigan's air quality has been gradually improving, apparent hotspots
remain -- most particularly in southwest Detroit, where a study recently proclaimed one ZIP code as the most polluted in the state.

There are no simple solutions, especially given that Michigan needs every job it can muster and
certainly does not want to chase away new businesses or discourage expansions. Still, it is
clear that the air quality staff at the Michigan Department of Natural Resources and Environment is hard-pressed to keep up with some of its most basic duties, such as ensuring
compliance with the air permits it issues, and that even in a well-monitored area the averages
may not tell the whole story.

That makes continued attention welcome. The U.S. Environmental Protection Agency, along with the state, has asked for a federal study evaluating health concerns in southwest Detroit
-- an effort that the state's congressional delegation should also press for. The larger issue, of whether the EPA should take back air permitting and compliance oversight in

Michigan, also deserves close examination, given the state's anemic financial support for those activities.

But at the heart of the matter is the question of cumulative and combined exposure to a variety of emissions. Anecdotal evidence certainly suggests that cancers and breathing problems such as asthma have occurred with abnormal frequency in the neighborhood, a potential indicator of emissions overload even though no single pollutant may be out of compliance according to the standards for issuing each permit. Several states have taken steps to assess and minimize cumulative impacts. Another alternative is to require buy-outs of home owners -- at a price that allows them to buy comparable housing elsewhere -- as a condition of permits that would increase the pollutant load. Shorter term steps could include landscaping throughout the area with trees and shrubs that would help absorb and buffer the emissions.

The study by University of Michigan researchers that pointed to the pollutants found in the 48217 ZIP code is an important first cut of data that should set far more gears in motion, and not just for more research. Better, more continuous monitoring is also essential. Lawmakers should take up the cumulative impact issue -- a step that could protect many other neighborhoods around the state, some of them far afield from Detroit-area hotspots.

Overarching all this is the need for Michigan's elected officials to stop pretending they can ensure healthy air and water for all the state's residents while refusing to find enough dollars to do the job properly. The experience of residents in southwest Detroit shows that no one should take clean, breathable air for granted.

McDonnell: Welcome to Virginia, just don't drink the water (*Culpeper Star Exponent*)

By James Clements
Published: July 26, 2010
If Gov. Bob McDonnell were to ban state government from buying $500 hammers, he would be lauded as a hero by fiscal conservatives. So where is the outrage now that he's written a blank check for his staff and agencies to waste thousands of dollars on bottled water?

Even if McDonnell got a sweetheart deal — I mean on the water purchase price, of course — Virginia taxpayers will now be asked to foot the bill on a product that sells for at least $2 to $3 a gallon when the same quantity of tap water is available for a few pennies. And why? Because, according to McDonnell, saving money by drinking tap water will hurt the bottled water industry.

But back to the water itself. Sure, tap water doesn't always taste great, but it's EPA regulated and safe. Asking a staffer or committee to drink it isn't like you're putting a cyanide capsule on their desk.
And, lest we forget, bottled water is a luxury — one I'd say the state shouldn't be splurging on this year.

All we hear in the hinterlands is that times are tough in Richmond. Our state agencies must downsize and consolidate; our road projects will have to be left in limbo. And over this backdrop, we hear from the governor's office that 3,700 jobs in the bottled water biz must be saved. What about the jobs this move will cost? Jobs that actually provide real, necessary products and services like municipal water.

And where is the outrage over this fiscal irresponsibility? Where are the tea partiers with plastic bottles stapled to their tri-corners? Where are the images of protestors dumping bottled water into the James River? Apparently big business trumps fiscal responsibility, even among the "true believers."

And while the message McDonnell is sending statewide may be that his friends in business are more important than you, he's also sending a very local message to the Richmond residents. The governor is saying his government is too good to drink the water you're asked to drink every day.

I'll come down off the mountain for a minute to acknowledge that many, if not most, of us have been trained by marketing to reach for bottled water. It seems the old business expression that "a consultant is just you and me from out of town," applies to water as well. We buy someone else's tap water, spend extra in fuel costs to both make a plastic bottle and ship it on a truck, and then we give it the old Coca-Cola "Ahh!" after we take the first gulp.

Here are the facts: Bottled water is more expensive, more wasteful, increases our dependence on foreign oil (so it's pro-terrorist?) and in many cases is just tap from out of town. You're paying for a privilege that a decade ago was still considered a pretentious habit of the hoity-toity.

If the water from the taps in the capital area is not drinkable, I have a better answer for our governor than outsourcing: Fix it.

And if McDonnell insists that his offices must drink bottled water at wide profit margins to "save" the industry, then I have one more question: What's next, required chain smoking at committee meetings?

I’m sure Philip Morris could make him a sweetheart deal on cigarettes.

Clements’ column runs every Monday. He lives in downtown Culpeper.

AIR
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What is ozone? (*News & Observer*)

Raleigh, North Carolina
July 26, 2010 Monday
SECTION: B
By MARLA VACEK BROADFOOT; Correspondent
Dr. David Peden is director of the Center for Environmental Medicine, Asthma and Lung Biology at the UNC School of Medicine and deputy director of Child Health Research at the N.C. Translational and Clinical Sciences Institute. He explains the basics of ozone and what his research shows about the effects of ozone pollution on health. Questions and answers have been edited.

Q: This is the time of year when we see ozone alerts. What exactly is ozone?

Ozone is a form of oxygen in which three oxygen molecules interact with each other, as opposed to the gas we breathe, which is made up of two oxygen molecules. Because of its molecular structure, it is very easy for ozone to oxidize and to cause oxidative stress to a variety of things. Ozone could roughly be grouped with other oxidants like bleach and hydrogen peroxide.

Q: Is ozone always bad?

In the upper atmosphere it is actually a good thing, because it is one of the barriers that prevent too much ultraviolet light from making its way to the planet's surface, where it can cause melanoma and skin cancer. In the lower atmosphere, in the air that creatures breathe, ozone is not typically present unless there is a reaction between precursors of ozone such as volatile organic compounds and ultraviolet light. Then it is associated not just with respiratory issues but also with systemic issues like heart attack and stroke.

Q: Why do we have to worry about ozone in the summer?

It has to do with summertime weather patterns. When you see weather alerts about ozone that the weather service puts out, they are really looking for the likelihood of air being stagnant in an area for a while. When pollutants like nitric oxide and other organic compounds, which result from burning fossil fuels, are released into an atmosphere that

is relatively stagnant, those compounds are trapped. That allows time for ultraviolet light to interact with those precursors in the atmosphere and result in ozone.

Q: What level of ozone is safe?

We and our EPA colleagues recently completed a study looking at the effects of 0.6parts per million of ozone on healthy volunteers. Our preliminary assessment suggests that even at that level of ozone, which is below the current standard of 0.8 parts per million, we can identify changes in lung function and airway inflammation. Where the rubber will meet the road is the administrator of the EPA will have to decide how big of a problem this is, how big of a public health threat this will be and whether the current ozone standard as outlined in the Clean Air Act will need to be changed.

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The Pollution-IQ Equation (*E : the Environmental Magazine*)

July 2010 - August 2010
SECTION: Pg. 15 Vol. 21 No. 4 ISSN: 1046-8021
ACC-NO: 11525
By: Evans, Hilary.
HILARY EVANS is a freelance journalist living in North Central Iowa.
Their results showed that mothers exposed to higher levels of traffic- related polycyclic aromatic hydrocarbons - or PAHs - gave birth to infants whose blood contained a DNA sequence associated with asthma. New evidence shows that efforts to reduce smog may in fact accelerate global warming, because when you reduce nitrogen oxides in the air it has the unfortunate side effect of increasing the amount of methane - and methane is a potent global warming gas.

Smog Is Affecting More than Asthma Rates - It's a Factor in Falling IQ Scores

Smog is more than just a health hazard for the elderly and asthmatic. |The latest research suggests living near a busy roadway with higherthan-average smog may be linked to lower IQ scores and other health impacts in developing newborns.

Smog occurs when ground-level pollution mixes with pollutants like those released from car and truck tailpipes and from coal-burning power plants' smokestacks, creating a dense haze. A 2007 study from the Harvard School of Public Health found the first link between smog and falling IQ scores in children. Researchers conducted two intelligence tests - the Kaufman Brief Intelligence Test and the Wide Range Assessment of Memory and Learning - at ages 8 and 1 1 for 202 Boston-area children. After controlling for other factors, the numbers showed children living and attending school in areas with higher levels of traffic pollutants scored an average of 3.7 points lower than children living in less polluted areas.

Lead researcher Shakir Franco Suglia reported that smog particles could be reaching, and impacting, the brain. It's well established that exposure to lead and high levels of fluoride can inhibit intelligence. But a number of studies published in 2009 suggest that the problem starts before birth. Evidence suggests a correlation not only between smog and IQ, but also between smog and other health problems affecting the growing infant pre- and post-birth, including preclampsia, low birth weight, small head circumference and miscarriage.

In the April 9, 2009, edition of the Journal of Epidemiology and Community Health, a study linked high concentrations of traffic pollution with slow fetal development. In particular, the study noted, exposure to fine particle matter in the first and third trimesters, and nitrogen dioxide throughout pregnancy. Led by professor David Rich, the research team from the University of Medicine and Dentistry in New Jersey collected data from 336,000 birth records from babies born over a span of five years. They then compared that information to levels of smog recorded by the Environmental Protection Agency's pollution monitoring sites in the area.

Controlling for other risk factors such as smoking and drug use, a link was discovered between women living in areas with high traffic pollutants and smaller-thanaverage babies. When published, Rich and his team stressed that just living near a welltraveled roadway might be enough to affect fetal growth.

In January 2010, a study was published in the Environmental Health Journal with similar findings. In that trial, a Spanish research team followed 785 women and their newborns in and around Valencia. They collected samples looking for levels of nitrogen dioxide near the women's homes, and conducted interviews with participants to help rule out other risk factors. Again scientists found that women living in areas with high levels of smog gave birth to smaller babies with smaller head sizes.

Some researchers believe that traffic pollution acts like secondhand smoke or marijuana use, restricting oxygen and nutrients delivered to the fetus. Others, like Dr. Shukmei Ho, chair of the Environmental Health Department at the University of Cincinnati in Ohio, believe prenatal exposure to pollutants changes human cell development and causes problems later in life.

Published in 2009 in PlaS ONE, a study by researchers from the University of Cincinnati and Columbia University in New York delved into the specific reasons that inner city kids were prone to higher asthma rates. Along with looking at pollutant exposure after birth, researchers monitored pregnant mothers and analyzed umbilical cord blood. Their results showed that mothers exposed to higher levels of traffic- related polycyclic aromatic hydrocarbons - or PAHs - gave birth to infants whose blood contained a DNA sequence associated with asthma. And recent studies in the U.S. and Brazil attribute high-pollution conditions to higher rates of miscarriage.

We often think of smog as an environmental ill - a side effect of higher temperatures brought on by global warming. New evidence shows that efforts to reduce smog may in

fact accelerate global warming, because when you reduce nitrogen oxides in the air it has the unfortunate side effect of increasing the amount of methane - and methane is a potent global warming gas. Simultaneously reducing methane - a byproduct of coal mines and animal farms - is one way to reduce that eventuality. But beyond smogs environmental problems are its very real and immediate public health ones.

Not only does traffic pollution make it harder for people to breathe on days when the smog alerts are high, it impacts the health and development of children exposed pre- and post-birth, and can lead to serious, lifelong problems.

The Kansas City, Missouri, Ground-Level Ozone (GLO) Project: A Community-Based Air Pollution Field Experiment (*Journal of Environmental Health)*

July 2010 - August 2010

SECTION: ADVANCEMENT OF THE SCIENCE; Pg. 8 Vol. 73 No. 1 ISSN: 0022-0892
The Kansas City, Missouri, Ground-Level Ozone (GLO) Project: A Community-Based Air Pollution Field Experiment
By: Steurer, Joan F; Green, Christopher M; Willoughby, M Tyler; Joerke, James; Adegoke, Jimmy O.

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Tropospheric ozone concentrations for Kansas City are well known on a regional scale. The Kansas City, Missouri, ground-level ozone (GLO) project measured outdoor ozone concentrations using passive sensing devices (PSDs) on a neighborhood scale. Highly resolved exposure maps were made based on the detailed air quality observations collected during the seven week sampling study during the summer of 2005. Data analysis demonstated that ozone concentration levels were higher in urban core neighborhoods compared to the surrounding surbuban areas. The results have negative implications for the respiratory health of residents of urban Kansas City.
Tropospheric ozone concentrations for Kansas City are well known on a regional scale. The Kansas City, Missouri, ground-level ozone (GLO) project measured outdoor ozone concentrations using passive sensing devices (PSDs) on a neighborhood scale. Highly resolved exposure maps were made based on the detailed air quality observations collected during the seven week sampling study during the summer of 2005. Data analysis demonstated that ozone concentration levels were higher in urban core neighborhoods compared to the surrounding surbuban areas. The results have negative implications for the respiratory health of residents of urban Kansas City.

Introduction

Ground-level ozone (GLO) is a secondary air pollutant formed by photochemical reactions involving oxides of nitrogen (NO) and volatile organic compounds (VOCs), mainly hydrocarbons. Sources of nitrogen dioxide (NO2) and VOCs are primarily anthropogenic, generally produced during combustion processes from automobile emissions and industrial activities. High levels of ozone are known to increase breathing difficulty for people that suffer from asthma, heart disease, and emphysema. Ozone increases the number of cases of bronchitis in children and senior citizens. Long-term exposure can even cause healthy young adults to experience breathing difficulty, especially if they exercise or work outdoors. Average ozone concentrations and the related negative health impacts are expected to increase with climate change (Bell et al., 2007).

Ozone is the result of the emissions of the precursors, the reactions and their rates that change the precursors to ozone, and meteorology, which determines dispersion (Banta et al., 2005). The peak in ozone is expected to occur upwind of the source area. A network of strategically placed continuous monitors provides high-resolution temporal data across a wide regional area. The upwind sites are designed to measure the baseline ozone levels, unaffected by the metropolitan air conditions. The downwind sites are located to capture the peak ozone concentration, given the hourslong formation time for ozone. The urban site is designed to measure maximum population exposure. The U.S. Environmental Protection Agency (U.S. EPA) recommends that the maximum population exposure monitor location be in a suburb in the urban fringe slightly downwind of the urban area (U.S. Environmental Protection Agency [U.S. EPA], 1998).

The density of an ozone network is based on the purpose of the network. Ozone is most frequently measured at the urban or regional scale, which can be used to determine trends and design area-wide control strategies. The regional scale represents ozone concentrations over an area of up to hundreds of kilometers and includes measurements of upwind and downwind ozone. The regional scale may include not only a metropolitan area but also the surrounding rural area. The neighborhood scale has dimensions of a few kilometers. This scale is most useful for assessing the health affects of ozone because these are the conditions in which people live and work.

Siting protocols recommend that it is not necessary to monitor small-scale variability of ozone (U.S. EPA, 1998). The Code of Federal Regulations, however, suggests that ozone at the neighborhood scale may experience peak conditions during stagnation periods. Furthermore, neighborhood-scale monitoring may be useful in understanding the mixing and patterns of ozone precursors (Network Design for SLAMS, NAMS, and PAMS, 1997). In examining various spatial scales of the eight-hour ground-level ozone concentration using passive samplers, Lin and co-authors (2001) noted significant spatial variability at a scale of 400 ? 600 m2, as well as larger scales. This implies that neighborhood-scale effects should be considered when determining the extent of population exposure.

Ground-level ozone monitoring is routinely carried out in Kansas City from a network of

stations operated by the Missouri Department of Natural Resources and the Kansas Department of Health and the Environment (KDHE). Only one of these stations is located in the urban core, which has the highest population density of residents and where most minorities live. Clearly, the spatial detail of the existing network is insufficient to establish differential exposures across communities in the metro area. Moreover, there are concerns about the potential for disproportionate exposures to air pollution among disadvantaged or minority populations in the urban area due to the proximity of polluting sources such as high-traffic roads and point sources.

The five-county area encompassing the Kansas City metropolitan area has been classified as a maintenance area for ground-level ozone by U.S. EPA (Figure 1). Violations of the one-hour standard occurred in the mid-1990s, and control measures were implemented to bring the area into compliance (Mid- America Regional Council, 2005). Nonetheless, exceedances of the U. S EPA eight-hour standard occur frequently, including 24 exceedances in 15 days during 2005, plus six exceedances in six days in adjacent downwind counties (Mid- America Research Council, 2005).

Methods

Passive sensing devices (PSDs) have been widely used to determine cumulative concentrations of air pollutants. The benefits of passive sampling devices to detect ozone concentrations include low operational cost, high correlation results as compared to continuous ozone monitors, ease of use, and deployment in remote areas (Krupa & Legge, 2000). In addition, research has shown that when using passive samplers to determine ozone concentrations, measurements are not affected by temperature and humidity, and under ambient conditions, copollutant interference is negligible (Koutrakis et al., 1993). The feasibility of using PSDs to characterize urban ozone concentrations was demonstrated in a U.S. EPA-sponsored study in Dallas, Texas (Varns, Mulik, Sather, Glen, & Stallings, 2001). PSDs have also been used to characterize the ozone distribution in such areas as Toronto, Canada (Liu, Koutrakis, Leech, & Broder, 1998), South Carolina (Campbell, Salmon, Wolfson, & Christoforou, 2004), and filling in gaps between continuous monitors in U.S. EPA regions 6 and 7 (Sather, Lister, & Peters, 2003; Sather, & Lister, 2004).

The PSD is a cylindrical device, 2 cm x 3 cm, which contains two nitrate-coated filter pads. Ozone diffuses into the PSD and oxidizes the nitrite to nitrate on an equimolar basis (Koutrakis et al., 1993). The PSDs were each mounted on a 2 m pole that was then pressed into the ground so that the height of the sampler would approximate the nose and mouth height of the average adult. The poles were carefully sited in the volunteers' locations to be away from sources of constant exhaust and vertical surfaces.

Volunteers were recruited from local government, organizations, and businesses to monitor ozone sampling stations and collect samples. Sampling stations were placed in the volunteers' yards or places of business. After training, these community partners collected their samples at the appointed time and prepared them for pickup at the end of each week. They also permitted researchers access to their yards for deployment of

new samples at the beginning of each week, and they kept control samples in safe locations.

Twenty sites within the urban core of Kansas City, Missouri, were selected for sampling (Figure 2). Sampling sites were placed where there was approximately one per ZIP code area, and the major land use types of highdensity residential, low-density residential, and industrial/transportation were represented. We also co-located one sampling site with a continuous monitor maintained by KDHE in Kansas City, Kansas.

The sample period was July 3-August 18, 2005. Weekly samples were collected for all seven weeks of the study, and daily samples were additionally collected during weeks 4 and 6. The data for the daily samples and for week 7 will be reported in a future publication. Weekly sampling was limited to four days for practical deployment and in order to conveniently fit with the volunteers' schedule.

More importantly, it was necessary to avoid potential complexities due to the weekend ozone effect. In VOC-limited areas, reducing NO^sub x^ has been demonstrated to cause an increase in ozone, whereas in NO-limited areas, reducing NO^sub x^ has shown a reduction in ozone. This leads to an increase in ozone levels in VOClimited areas despite substantial decreases in NO^sub x^ emissions on the weekends (Heuss, Kahlb?um, & Wolff, 2003). The Kansas City area has a mix of VOC- and NO^sub x^-limited sites and has been demonstrated to show a weekend increase in ozone at some monitor locations but a decrease at others (Heuss et al., 2003). Since the PSDs give an integrated ozone concentration over the exposure time, a weekend effect would have made the data more difficult to interpret.

Filter pads were removed from the PSDs by researchers and placed in an extract vial for shipment to a laboratory contracted for ion chromatography analysis. Each week's control samples showed small amounts of ozone, approximately 7 ppb (parts per billion). This error was most likely due to a combination of the natural transition of nitrite to nitrate and brief exposure in the lab during the PSD loading and unloading process. Each week, the amount of ozone from the unexposed control samples was subtracted from the rest of the samples to yield a corrected value.

Data for the region's continuous monitors was supplied by the Mid-America Regional Council, a partner in this research, and hourly data from the monitor at the one Kansas site was provided by KDHE. Hourly readings from the continuous monitor were averaged during the time each sample was exposed.

Results

In all weeks of the study, the central core of the city and northern sites experienced elevated levels of GLO relative to the southern and eastern areas. Ground-level ozone remained high in the central portion of the city and declined toward the suburban areas. Sites which were particularly affected by elevated GLO were locations at which commercial areas and residential areas are closely juxtaposed. The sites along the

eastern border of the study area typically experienced lower ozone levels relative to the others. Two out of three of these sites are in suburban locations.

Ozone concentrations peaked from July 31st to August 11th, weeks five and six of the study period. Temperatures averaged in the mid-80s (3O°C) and winds were from the southwest. Within the study area during week five, the central portion of the downtown area experienced a peak in the four-day ozone concentration, with the highest peak at 59 ppb (Figure 3). Even though the four-day average concentration peak in the urban core was 6 ppb higher than the highest average concentration recorded by the continuous monitors during the same time period, there were exceedances at three area continuous monitors.

During week six, the familiar pattern of four-day ozone concentration peaks emerged in the downtown area, with a peak of 54 ppb (Figure 4). Areas surrounding the urban core had relatively lower concentrations. The greatest peak in the urban core is 2 ppb less than the greatest four-day average measured by the continuous monitors. Seven exceedances were recorded during this time period by the region's continuous monitors; week six proved to be the end of the 2005 ozone season for Kansas City.

Discussion

Because our measurements are four-day averages, fine temporal detail cannot be resolved in the data. Some general observations can still be made, however, regarding the relationship between temperature, wind direction, wind speed, and ozone concentration. Temperature and wind exert a strong control over the absolute concentrations of ozone throughout the urban area. Four-day averages were higher both in the urban core "hotspots" and the expected locations of regional highs at downwind continuous monitoring stations during warmer, calm weeks. Wind direction exerts control over the locations of regional highs; the typical northward-flowing winds were associated with high four-day averages and more exceedances at northern continuous monitors, and vice-versa for southward-flowing winds. With the exception of week one, the presence of the downtown ozone hotspot is insensitive to temperature, wind direction, and wind speed.

The typical model of ozone formation is that peak ozone levels will be reached distant from the area of precursor emission because of the hours-long formation time of ozone. The ozone forms during transport. Our data demonstrate, however, that a high ozone peak with a much steeper grathent also forms in the area of precursor emission. One possible explanation for this persistent urban core ozone peak is the persistent lowflow surface wind conditions. Not only did the study period experience low-flow conditions almost 80% of the time throughout the metropolitan area, but local wind flow data demonstrates that the air was calm over three times as frequently. One possibility is that the ozone forms in place due to the low- flow and frequently stagnant conditions.

Ozone production rate can be enhanced by the ratio of VOCs to NOx, as well as the volatility of the VOCs. Although we have not performed an evaluation of the proportions

of VOCs to NOx in the Kansas City downtown air, it is clear that this area contains a concentration of mobile sources in the form of the convergence of several major highways as well as many of the major VOC point sources. An enhanced ozone production rate in combination with stagnant or low- flow wind conditions would make in situ ozone formation even more likely.

Finally, tall buildings and urban canyons increasingly disrupt airflow toward the center of the city. As vehicles, a primary source of NO^sub x^ and VOCs, move between the buildings, the exhaust becomes trapped. The precursor emissions escape slowly even under higherflow wind conditions, giving ozone time to form and preventing already-formed ozone from dispersing. Four-day average ozone concentrations within the urban area grade lower as one moves away from the tall buildings of the downtown area, further suggesting that effect of buildings on dispersion is a key control on the presence of the persistent neighborhood-scale hotspots.

It is important to note that our data are not in conflict with the existing continuous monitor data; rather, these data complement them. The costly nature of continuous monitors virtually prohibits high-density sampling, especially in areas where titration by nitrogen oxides is likely. Rather, the PSD network presents a low-cost alternative network for the specific purposes of urban-scale sampling, filling gaps in more widely-spaced networks, identifying potential important locations for continuous monitors, and addressing health issues.

Also, the response from the volunteers was positive, and they proved to be reliable in collecting samples in a timely manner, demonstrating the feasibility of a community-based air quality study. A significant advantage of this community-based participatory research model is that it lays the foundation for future work in assessing air-pollution related health disparities among urban versus suburban communities.

Conclusion

Our study characterized spatial grathents of outdoor air quality through a multisite, neighborhood-scale air sampling study during summer 2005. We developed highly resolved exposure maps based on the detailed air quality observations collected and demonstated that ozone concentration levels were higher in urban core neighborhoods compared to the sorrounding surbuban areas. Implications of these results for the respiratory health of citizens of the Kansas City area will have to be addressed and we hope that our results provide a starting point for researchers interested in studying the nexus between urban air quality, environmental justice questions implied by disparities in exposure across communities, and the respiratory health of urban residents.

How dangerous was Red Butte spill? Answers may have vanished into thin air (*Salt Lake Tribune*)

By JUDY FAHYS
The Salt Lake Tribune
July 26, 2010 12:00AM
Monica Martell, left, and Ashley Pust look with concern from the hill overlooking Liberty Park Pond on Monday as crews try to clean up the oil. They normally use the park for running but had to stop and take in the scene. Booms contained the oil on the surface of the water as workers continued to deal with the problem. Al Hartmann | The Salt Lake Tribune Neil Vickers would like to know what made him and his wife sick the weekend a Chevron pipeline leak sent tens of thousands of gallons of crude oil down the creek that runs through his east Salt Lake City yard.

What was in those fumes? What will it mean for his family's health? Could it really be as harmless as health and environmental officials said?

"It was clear we were exposed to something," said the University of Utah neuroscientist, who studies the sense of smell. "But it was not clear at what levels."

For Vickers and anyone else with questions about the post-spill air, there might never be answers. The data evaporated in those crucial first days after the June 12 discovery of the Red Butte Canyon leak.

Why? Because during the period when most of the hazardous crude oil components changed from liquid to vapor and vanished, the government agencies coordinating the spill response did not take the type of air-quality measurements that would tell what kind of exposure residents along Red Butte Creek experienced. Agencies acknowledge that in the early days after the spill they didn't perform tests that would show how much toluene, benzene, naphthalene and hundreds of other hazardous components residents might have breathed.

Still, the agencies supervising the spill response and part of the United Command — including the U.S. Environmental Protection Agency, the Salt Lake Valley Health Department and Salt Lake City — insist the air-quality monitoring was sufficient.

The state Division of Air Quality never got involved in any spill monitoring because it does not have the proper equipment.

Nor does the EPA, according to an e-mail from Richard Mylott, of the agency's regional office in Denver. Instead, the EPA relied on Chevron and Salt Lake City to take air samples to keep tabs on the safety of emergency crews shortly after the spill came to light.

"Not to belabor the point, but such organization [as the Unified Command] is a necessity in ensuring an effective, coordinated response," the e-mail said. "In this case, several of the agencies involved in the Unified Command have authorities related to air quality."

Chevron had begun air testing that first morning “to ensure the safety of employees and our contractors,” company spokesman Mickey Driver said. Based on those results, the oil giant decided crews did not need respirators.

Six days later, on June 18, the company also arranged for 24-hour air-quality monitors outside of seven creek-side houses at the request of the homeowners, Driver said, and later added more.

Chevron is deliberating about whether to release its air-sampling data.

Salt Lake City’s earliest efforts focused on checking the explosion risks and ensuring fumes did not endanger response workers, said the capital’s spill czar, Renee Zollinger. The city never saw a total count of volatile organic compounds higher than 75 parts per million, she said, well within the safe range for workers.

Tests begin • By June 14, city officials agreed that more information was needed on the hazardous chemicals likely to be released from the oil. So the city took the initiative to hire an environmental consulting firm, which later that night gathered its first samples at Liberty Park. The next morning, testing began up and down the spill area, and the city started posting daily results online June 18.

“We do know the maximums,” Zollinger said. “We just don’t have the detail about exactly how much there was at every point along the spill.”

Zollinger said the fine points of short-term exposure to crude oil are not well-studied. And, to complicate things, some people suffer profoundly from fumes, while others go unaffected.

For those with “miserable and debilitating symptoms,” she said, the discomfort almost certainly passes when the fumes are gone.

At a community meeting earlier this month , Zollinger and other Unified Command members dwelt on the good news part of what they know. They repeatedly reaffirmed that residents had not been exposed to vapors nearly hazardous enough to cause long-term harm.

A city-hired toxicologist examined the complaints and suggested that whiffs of the fumes might be triggering a memory about the discomfort they felt at the time of the spill — the same way she still gets a stomachache when she smells curry because of a bad experience in college years earlier.

Declarations like that stung like a slap in the face to some residents. If the spill hasn’t harmed them, as the officials said, then why are some of them and their children still getting headaches, feeling nauseated, breaking out in rashes and tearing up from eye irritation?

Regulators' role • Cherise Udell, founder of Utah Moms for Clean Air, criticized the government agencies for not collecting crucial data in the spill's early hours. She said it was "like the fox watching the henhouse" to rely on Chevron's information when the responsibility for public health and safety rests with regulators.

"Our public agencies are not doing their jobs," she said, "because they are too cozy with Chevron."

Udell's husband, it turns out, is a petroleum engineer, and he said the only way to understand the hazard was to perform certain tests promptly. Oil leaking from Chevron's pipeline should have been sampled immediately and compared with oil sampled downstream at Liberty Park. A clearer picture of what creek-side residents were breathing could be determined by examining the chemical constituents and their volumes.

The data had to be collected as the spill was happening because so much of the vaporization takes place as soon as the oil is exposed to air. "It's time-critical," Kent Udell said, "because the exposures are probably happening very quickly and at extremely high exposures."

Miriam Rotkin-Ellman, a specialist in public health and environmental science for the Natural Resources Defense Council, agreed that launching the in-depth air-quality tests four days after the spill began on June 11 is unlikely to prove informative for residents concerned about their exposure.

Rotkin-Ellman, who is part of a team looking at the health impacts of the Deepwater Horizon spill in the Gulf of Mexico, is not surprised about the low levels of hazardous air pollutants now being detected in Salt Lake City after the Red Butte Creek spill.

"They are monitoring for something that was already released into the air and something people were already exposed to," Rotkin-Ellman said. "[Immediate] monitoring is the only way to tell what the health threats were."

'Don't worry' • Another creek-side resident, who asked that her name not be used because of fear of reprisal, said it was frustrating to sort through the advice given her in the early post-spill days, when she was plagued with rashes and eye irritation. Response workers urged her not to worry and told her to keep the air in her house circulating.

"They were like, 'We've got it under control. Don't worry about it.' "

As long as the spill team denies the vapor problem, she said, it won't be looking for solutions.

For Udell, who remains unconvinced that adequate monitoring was done, "the damage is already done." Still, she would like to see studies of the spill's long-term impacts on

the health of nearby children and women who are pregnant. She also would like the state Division of Air Quality to get the equipment it needs to play a meaningful role the next time there is a hazardous-chemical emergency.

“They were completely absent,” she said, “which I found shocking.”

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AWARDS

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Boeing HQ Building Awarded ENERGY STAR by EPA (*AZoCleantech)*

The ENERGY STAR represents the national symbol towards environment protection by way of superior energy efficiency. The rating also indicates that the headquarter building of Boeing performs among the top 25% of such similar facilities for energy efficiency nationwide.

Boeing, a global leader in aviation, is an aerospace company that is the biggest producer of commercial jetliners as well as military aircraft. The company’s Chicago building has made improvements to its lighting and automation systems while increasing awareness for improving the environmental performance of the building by way of reducing the energy costs and energy consumption.

ENERGY STAR-rated commercial buildings use approximately 35% less energy in comparison with conventional buildings while releasing 35% less CO2 into the atmosphere.

CLIMATE CHANGE

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Fair and...Carbon Neutral? (*Mother Jones*)

July 2010 - August 2010
RISKY BUSINESS: A CLIMATE DESK SPECIAL REPORT; Pg. 42 Vol. 35 No. 4 ISSN: 0362-8841
By Sheppard, Kate.
Kate Sheppard ("Fair and Carbon Neutral," page 42).
Sudan says, "I would say our initiative overall has benefited the company financially."

Since Palo Alto began using Hara in 2009 to help it cut emissions by 15 percent over the next three years, the city has identified $2.2 million in budget savings.

Inside Rupert Murdoch's unlikely effort to make News Corp. totally green (Fox News included) BY KATE SHEPPARD

IN THE FOX NEWS universe, the world is definitely not warming. Quite the opposite: Climate change is "bunk," a spectacular hoax perpetrated on the rest of us by a cabal of corrupt scientists. But while embracing climate skepticism may be good for ratings, the execs at Fox News' parent company, News Corp., don't see it as good for the long-term bottom line. By the end of this year, News Corp. aims to go carbon neutral-meaning that the home of ?ber-global warming denialists like Sean Hannity and Glenn Beck may soon be one of the greenest multinational corporations around.

News Corp. announced its plan in May 2007 with a groundbreaking speech from chairman Rupert Murdoch. "Climate change poses clear, catastrophic threats," declared Murdoch. "We may not agree on the extent, but we certainly can't afford the risk of inaction." Formerly skeptical about global warming, Murdoch was reportedly converted by a presentation from Al Gorewhom Fox News commentators have described as "nuts" and "off his lithium"and by his green-leaning son James, whom some expect to inherit his business empire. But Murdoch wasn't acting out of altruism. For News Corp., he said, the move was "simply good business." (Fox News barely mentioned the boss' remarks.)

Murdoch's logic was that higher energy costs are inevitable, given coming carbon regulations and dwindling supplies of conventional fuels such as oil. So why not get ahead of the game? "Whatever [going carbon neutral] costs will be minimal compared to our overall revenues," the media mogul has remarked, "and we'll get that back many times over." The company launched its mission by making a movie spin-off of Futurama its first carbon-neutral dvd release in 2007 (carbon savings: an estimated 447.5 metric tons), followed by the production of the seventh season of 24 (approximately 940 metric tons of CO2 saved). News Corp.'s plan, according to manager of energy initiatives Vijay Sudan, was to do the same for the rest of its operations by reducing energy use in its office facilities, moving to renewable energy, and purchasing offsets to take care of the remaining emissions.

So far, so good. But going totally green turned out to be harder than it looked. That's not because News Corp. is a massive emitter-apart from the hot air generated by Fox News, it produces 700,000 metric tons of carbon per year, mostly from printing newspapers, producing films, broadcasting television signals, and operating its 24-hour newsrooms. By comparison, a single coal plant releases millions of tons of emissions annually.

But News Corp. is the second-largest media conglomerate in the world. Its hundreds of interests include film companies like 20th Century Fox, network and cable TV channels like Fox Broadcasting and National Geographic, newspapers like the New York Post

and Wall Street Journal, Dow Jones Newswires, the HarperCollins publishing empire, billboards, a rugby league, MySpace, and those tiny machines that spit out coupons as you walk by the Frosted Flakes at the grocery store.

With such diverse interests spanning continents and markets, simply calculating News Corp.'s carbon footprint became a headache-inducing task Initially, the company tried using what Sudan called "glorified spreadsheets" to tabulate its emissions. But that, he says, was just not enough information. "You can't manage what you don't measure," says Sudan. "There's not necessarily a lot of insight into where your heavy energy use is if you're a company that isn't a heavy energy user."

So in November 2009, News Corp. turned to Hara, a software firm that helps companies evaluate what founder Amit Chatterjee calls their "organizational metabolism." Companies can use the program to assess their resource use, emissions, and overall footprint; develop plans to shrink that footprint; and run cost-benefit analyses on various strategies to cut emissions. Want to cut solid waste? There's an app for that. Want to determine the solar panel that'll give you the best bang for your buck? There's an app for that, too. The goal is to help businesses assess both the risks and the opportunities presented by their energy use.

The global market for carbon-management software and services is expected to expand from $384 million in 2009 to more than $4.3 billion by 2017-an annual growth of 35 percent, according to Pike Research. Hara, whose customers include large, multinational companies like CocaCola and local governments such as the cities of Palo Alto and San Jose, California, thinks it can capture 80 percent ofthat market, says Chatterjee.

The reason for the boom? The process that News Corp. embarked upon voluntarily-figuring out how it uses energy and how that will affect its financial healthwill soon become compulsory for many businesses, as routine as filing taxes. Beginning this year, major emitters are required to report their CO2 output to the Environmental Protection Agency. The Securities and Exchange Commission is starting to require all public companies to disclose their climate risks, just as they would any other physical or fiscal liability. And with good reason: The biggest global warming impacts, like hurricane damage, real estate losses, and rising energy and water costs are expected to cost the economy almost $1.9 trillion annually by 2100.

For businesses, the benefits of scrutinizing emissions aren't purely environmental. Sudan says, "I would say our initiative overall has benefited the company financially." Since Palo Alto began using Hara in 2009 to help it cut emissions by 15 percent over the next three years, the city has identified $2.2 million in budget savings.

True, even if News Corp. manages to go entirely carbon neutral, the effect on global emissions will be small. But, Sudan says, consider the multiplier effect: News Corp.'s empire regularly reaches 1 billion sets of eyeballs. "Our audience's carbon footprint is 10,000 times bigger than ours," Murdoch has said. "That's the carbon footprint we want

to conquer." To that end, News Corp. is exposing the thousands of employees at its various holdings to environmental education and encouraging subsidiaries to run public service announcements on global warming. It's also considering weaving climate-related themes into its entertainment programs.

The glaring exception to all of this is Fox News. The most-watched cable news channel in the US regularly bashes the very initiatives that its parent corporation is championing-carbon offsets, according to Hannity, are a "fraud" and a "crock." Will we soon see Bill O'Reilly extolling the wonders of composting toilets? Probably not, says Sudan: "We're very clear that there's no creative or editorial mandate coming from the corporate level."

Emissions law to face 2 tests on fall ballot (*San Francisco Chronicle*)

California
July 26, 2010 Monday
FINAL Edition

Main News; Pg. A1
Emissions law to face 2 tests on fall ballot;
GLOBAL WARMING
By: Bob Egelko, Chronicle Staff Writer
Californians will vote twice in November on the state's groundbreaking law to reduce emissions that contribute to global warming - once on an oil company-backed initiative to put the law on hold indefinitely, and once in the governor's race, where Republican Meg Whitman has promised to suspend the rules for a year.

Governors are normally required to enforce all state laws, including those they dislike. But AB32, which requires the state to cut emissions of carbon dioxide and other greenhouse gases 25 percent by 2020, has a built-in escape hatch.

The law authorizes a governor to delay some or all of its provisions for up to a year "in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm." The governor can renew the suspension if the conditions still exist after a year.

Citing the "significant economic harm" provision, Whitman said in September that she would suspend AB32 on her first day in office.

Wrong for the times

The law "may have been well-intentioned. But it is wrong for these challenging times," she said in a column in the San Jose Mercury News. AB32, she declared, will drive up energy costs, "will discourage job creation and could kill any recovery."

Gov. Arnold Schwarzenegger, who signed AB32 in 2006, responded that the law would

create jobs, not destroy them. "Why would we want to go back to the Stone Age?" he asked at a "green jobs" exhibit in March.

He stepped up his criticism of AB32's opponents last week in an interview with The Chronicle that appeared to target Whitman, his fellow Republican.

"Everyone who talks about suspending AB32 is actually trying to pull the wool over people's eyes" and "has the intention of eliminating it," the governor said.

Brown backs law

Attorney General Jerry Brown, Whitman's Democratic opponent, is also a fan of AB32.

"Addressing climate change is one of the great challenges of our time, something that California has been a leader on," said Sterling Clifford, Brown's campaign spokesman.

He said Brown's promotion of wind power and other alternative energy sources as governor from 1975 to 1983 showed that "economic growth and environmental protection are not mutually exclusive."

A one-year suspension in 2011 would come at a critical moment for AB32, the first law of its kind in the nation. The state Air Resources Board, whose members were appointed by Schwarzenegger, is scheduled to adopt regulations by Jan. 1, effective a year later, that would give the law its first teeth - binding emissions limits that would affect everything from motor vehicle fuels to power plants and landfills.

Post-primary stance

Whitman assailed AB32 as a job-killer during the Republican primary campaign. Asked at a debate May 2 whether humans cause climate change, she said, "I don't know. I'm not a scientist."

She has toned down her criticism of the law since winning the primary. Campaign spokeswoman Sarah Pompei said last week that Whitman, during her one-year moratorium, would "bring accountability and strong leadership to the AB32 process so the regulations effectively reduce our emissions while strengthening our economy."

Pompei didn't say how Whitman would accomplish those goals, which the candidate had previously suggested were in conflict. And she left the door open to a renewed suspension after the first year, saying Whitman would invoke her authority to delay regulations "until a comprehensive review of AB32's effects on the economy and jobs can be fully understood."

The candidate put it more bluntly in March when asked by a reporter if AB32 should be restored once the economy improves. "My thought is no," she said.

Any suspension is tantamount to a repeal of the law, argued its legislative sponsor, state Sen. Fran Pavley, D-Agoura Hills Los Angeles County, who introduced AB32 as an assemblywoman.

"People engaged in clean technology, alternate fuels and renewable energy need a signal that there's a market for investment," she said. "Suspension of AB32 would mean disaster."

Lawmaker might sue

Pavley also said she would consider a lawsuit if Whitman was elected and carried out her pledge.

She said she had negotiated the escape clause with Schwarzenegger so a governor could suspend the law "in the most extraordinary circumstances ... from wars to significant natural disasters." The "significant economic harm" provision, Pavley said, was aimed at severe and long-lasting financial disruption, not at economic fluctuations.

But the text of the law contains no such limitations and appears to give the governor free rein to order a suspension. Michael Wara, a Stanford law professor who supports AB32, said a legal challenge would probably fail.

"If Whitman wants to roll this back, she can," he said. "She has to provide a reasoned basis for doing so," such as the unemployment rate and other signs of economic distress, Wara said.

The voters could take the issue out of the governor's hands by passing Proposition 23, which would suspend AB32 until California's unemployment rate, now 12.3 percent, dropped to 5.5 percent for four consecutive quarters. The Legislative Analyst's Office says that's happened three times in the last 40 years.

Brown opposes Prop. 23. So does Schwarzenegger, who describes its sponsors as "greedy oil companies who want to keep polluting in our state and making profits." Whitman has not taken a stand on the measure.

FUEL

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Exploring Algae as Fuel (*Ocla*)

ANDREW POLLACK
Published: Monday, July 26, 2010 at 6:30 a.m.

SAN DIEGO — In a laboratory where almost all the test tubes look green, the tools of modern biotechnology are being applied to lowly pond scum.

Foreign genes are being spliced into algae and native genes are being tweaked.

Different strains of algae are pitted against one another in survival-of-the-fittest contests in an effort to accelerate the evolution of fast-growing, hardy strains.

The goal is nothing less than to create superalgae, highly efficient at converting sunlight and carbon dioxide into lipids and oils that can be sent to a refinery and made into diesel or jet fuel.

“We’ve probably engineered over 4,000 strains,” said Mike Mendez, a co-founder and vice president for technology at Sapphire Energy, the owner of the laboratory. “My whole goal here at Sapphire is to domesticate algae, to make it a crop.”

Dozens of companies, as well as many academic laboratories, are pursuing the same goal — to produce algae as a source of, literally, green energy. And many of them are using genetic engineering or other biological techniques, like chemically induced mutations, to improve how algae functions.

There are probably well over 100 academic efforts to use genetic engineering to optimize biofuel production from algae,” said Matthew C. Posewitz, an assistant professor of chemistry at the Colorado School of Mines, who has written a review of the field. “There’s just intense interest globally.”

Algae are attracting attention because the strains can potentially produce 10 or more times more fuel per acre than the corn used to make ethanol or the soybeans used to make biodiesel. Moreover, algae might be grown on arid land and brackish water, so that fuel production would not compete with food production. And algae are voracious consumers of carbon dioxide, potentially helping to keep some of this greenhouse gas from contributing to global warming.

But efforts to genetically engineer algae, which usually means to splice in genes from other organisms, worry some experts because algae play a vital role in the environment. The single-celled photosynthetic organisms produce much of the oxygen on earth and are the base of the marine food chain.

“We are not saying don’t do this,” said Gerald H. Groenewold, director of the University of North Dakota’s Energy and Environmental Research Center, who is trying to organize a study of the risks. “We say do this with the knowledge of the implications and how to safeguard what you are doing.”

At a meeting this month of President Obama’s new bioethics commission, Allison A. Snow, an ecologist at Ohio State University, testified that a “worst-case hypothetical scenario” would be that algae engineered to be extremely hardy might escape into the

environment, displace other species and cause algal overgrowths that deprive waters of oxygen, killing fish.

A week earlier, at an industry-sponsored bioenergy conference, David Haberman, an engineer who has worked on an algae project, gave a talk warning of risks. Many scientists, particularly those in the algae business, say the fears are overblown. Just as food crops cannot thrive without a farmer to nourish them and fend off pests, algae modified to be energy crops would be uncompetitive against wild algae if they were to escape, and even inside their own ponds.

“Everything we do to engineer an organism makes it weaker,” said Stephen Mayfield, a professor of biology at the University of California, San Diego, and a co-founder of Sapphire. “This idea that we can make Frankenfood or Frankenalgae is just absurd.”

Dr. Mayfield and other scientists say there have been no known environmental problems in the 35 years that scientists have been genetically engineering bacteria, although some organisms have undoubtedly escaped from laboratories.

Even Margaret Mellon of the Union of Concerned Scientists, who has been critical of biotech crops, said that if genetically engineered algae were to escape, “I would not lose sleep over it at all.”

Still, some algae researchers worry they will be engulfed by the same backlash aimed at biotech foods and say care must be exercised. “About 40 percent of the oxygen that you and I are breathing right now comes from the algae in the oceans,” the genetic scientist J. Craig Venter said at a Congressional hearing in May. “We don’t want to mess up that process.”

Dr. Venter’s company, Synthetic Genomics, is getting $300 million from Exxon Mobil to create fuel-producing algae, in part by using synthetic genes. When the two companies cut the ribbon on a new greenhouse here earlier this month, Dr. Venter assured local dignitaries in attendance that no algae would escape. “Nothing will go into the drains, Mr. Mayor,” Dr. Venter said, only half-jokingly. “San Diego is safe.”

In the long run, Dr. Venter said, the algae should be given “suicide genes” that would kill them if they escaped the lab or fuel production facility. Some companies are sticking with searching for and breeding natural strains. “Re-engineering algae seems driven more by patent law and investor desire for protection than any real requirement,” said Stan Barnes, chief executive of Bioalgene, which is one of those companies. But Dr. Venter and Mr. Mendez argue that there are huge obstacles to making algae competitive as an energy source and that every tool will be needed to optimize the strains.

Sapphire Energy seems one of the best-positioned companies to do that. The company, which is three years old, has raised $100 million from prominent investors, including Bill

Gates. Sapphire is also getting $100 million in federal financing to build a demonstration project containing 300 acres of open ponds in the New Mexico desert.

The company has inserted a gene into algae that allows the organisms to make a hydrocarbon they would not naturally produce, one that would help make fuel. “You don’t want to take what algae gives you,” said Mr. Mendez, who previously worked for medical biotechnology companies. “You want to make the best product.”

The company is also developing algae that can thrive in extremely salty and exceedingly alkaline water.

It has even developed what might be called Roundup Ready algae. Like the widely grown Roundup Ready soybeans, these algae are resistant to the herbicide Roundup. That would allow the herbicide to be sprayed on a pond to kill invading wild algae while leaving the fuel-producing strain unhurt.

Not all these traits are being developed by genetic engineering, because in many cases scientists do not know what genes to use. Instead, the company screens thousands of strains each day, looking for organisms with the right properties. Those desirable traits can be further enhanced by breeding or accelerated evolution.

In one room at Sapphire’s lab, parallel tubes contain algae with identical traits growing under identical conditions. But each strain is slightly different, and only the fastest growing one — determined by which tube turns the darkest green — will be chosen for further development.

“If you can’t outcompete your wild cousin, it doesn’t make it out of this room,” said Mr. Mendez. Algae can reproduce rapidly, doubling in as little as a few hours. And they can be carried long distances by the wind. “They have the potential to blow all over the world,” said Richard Sayre of the Donald Danforth Plant Science Center in St. Louis.

Dr. Sayre, who is also chief technology officer of Phycal, an algae company, is using genetic engineering to develop algae that capture less light. Right now, he explained, algae capture more light than they need and waste a lot of it as heat. If each organism captured less, then a given amount of light could be shared by more organisms, increasing biomass production.

Instead of using open ponds, some companies are using bioreactors, which typically contain the algae in tubes. Some experts say, however, that these would not totally prevent escapes. “The idea that you can contain these things and have a large-scale system is not credible,” said John R. Benemann, an industry consultant in Walnut Creek, Calif. He said, however, that he saw absolutely no risk from genetically engineered algae.

Sapphire says it is not growing any genetically engineered algae in open ponds yet. When it is ready, it says, it will comply with all regulations.

Genetically engineered algae, whether in open ponds or enclosed bioreactors, are likely to be regulated by the Environmental Protection Agency, which now regulates genetically engineered microbes under the Toxic Substances Control Act.

Still, there has been at least one case in which genetically modified algae seem to have fallen between the regulatory cracks. When Mera Pharmaceuticals, which is based in Hawaii, wanted to test the feasibility of producing human pharmaceuticals in genetically engineered algae in 2005, none of the three federal agencies that regulate the various areas of biotechnology — E.P.A., the Food and Drug Administration and the Agriculture Department — claimed jurisdiction.

Steven G. Chalk, acting deputy assistant secretary for renewable energy at the Energy Department, said any federally financed project, like Sapphire's New Mexico demonstration, would have to undergo an environmental assessment. But risks would be assessed case by case, he said, not for all conceivable genetically modified algae.

GENERAL
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Wonkbook: Obama protects EPA option; deficit tops $1.4 trillion; deportations surge (*Washington Post*)

Ezra Klein
Monday, July 26, 2010; 7:07 AM
Following the apparent death of cap and trade, a White House aide says that President Barack Obama will veto any bill limiting the EPA's ability to regulate greenhouse gas emissions. That means that for now, the response to climate change will be located in the executive branch, where 60 votes aren't needed to act, but where action comes in the form of blunt regulations rather than a price on carbon.

Meanwhile, revised estimates show the budget deficit topping $1.4 trillion this year. The reason? The economy is still bad, and when the economy is bad, tax revenues fall. Which is why it's very difficult to see the deficit substantially shrinking until the economy has recovered, or at least is doing a faster job of recovering. This year's deficit was projected to be lower because the Obama administration -- and many others -- thought the recovery would have taken more of a hold by now.

It's Monday, bloody Monday. Welcome to Wonkbook.

The White House will likely veto a bill stripping the the EPA of its power to regulate greenhouse gases, reports Darren Samuelsohn: "EPA already has promulgated climate

rules for motor vehicles, the result of closed-door negotiations with the auto industry, environmentalists and California officials. Next up are rules due early next year dealing with coal-fired power plants. A number of other petitions from states and environmentalists are on EPA's doorstep that press for climate-focused limits on petroleum refiners and other major industrial sources."

Obama has pushed deportations to record highs since taking office, reports Peter Slevin: "The Immigration and Customs Enforcement agency expects to deport about 400,000 people this fiscal year, nearly 10 percent above the Bush administration's 2008 total and 25 percent more than were deported in 2007. The pace of company audits has roughly quadrupled since President George W. Bush's final year in office."

Lower than expected tax revenues put the budget deficit over $1.4 trillion in 2010 and 2011, reports Lori Montgomery: "The latest forecast from the White House budget office shows the deficit rising to $1.47 trillion this year, forcing the government to borrow 41 cents of every dollar it spends. Contrary to official projections, the budget gap will not begin to narrow much in 2011, because of an unexpectedly big drop in tax receipts. White House budget director Peter Orszag said in a conference call with reporters that Obama is still on track to cut the deficit in half by the end of his first term."

Fuzz-pop interlude: The Fresh and Onlys play "Peacock and Wing".

Still to come: Geithner defends the principle behind Fannie and Freddie; BP CEO Tony Hayward is set to resign; Arizona's immigration law is about to take effect; a robot learns to flip pancakes; and the blame game over cap-and-trade.

Economy/ FinReg

Treasury Secretary Tim Geithner defended the idea of Fannie Mae/Freddie Mac-style housing guarantees Sunday, report Nick Timiraos and Damian Paletta: Mr. Geithner promised the administration would "bring fundamental change" and said it wouldn't "preserve Fannie and Freddie in anything like their current form" during a Sunday appearance on NBC's "Meet the Press." But, he added, "there's going to be a good case for taking a look at preserving or putting in place a carefully designed guarantee so, again, homeowners have the ability to borrow to finance a home even in a very difficult recession."

A new study suggests European labor laws hurt profits relative to the US: http://bit.ly/czqYMU

Economics hasn't caught up to the realities of deflation, reports Jon Hilsenrath: "Economists don't have good answers. 'We don't know how deflation works,' says Adam Posen, a member of the Bank of England's monetary policy committee who has been studying Japan since 1997. 'We don't have a way of rationalizing steady, several-year flat deflation,' he says. This is a pressing issue for the U.S. Federal Reserve and other central banks. Ireland is already experiencing deflation. Spain has flirted with it. The

Fed's preferred inflation gauge was up 1.3% in June from a year earlier, below its informal target of 1.5% to 2%. Some officials worry prices could go negative if the recovery falters."

Bailouts have resulted in a dramatic gap in pay between new and old workers at auto plants: http://bit.ly/aWdksP

Senate Democrats will be as happy to run on a partial Bush tax cuts extension as to pass it, reports John McKinnon: "'The Senate will move first, and it will be a test to see whether Republicans filibuster' to block the bill in a bid to also win tax cuts for higher earners, said Rep. Chris Van Hollen of Maryland, head of the House Democrats' re-election effort. 'If you can't get it out of the Senate, then you take it to the election," Mr. Van Hollen said in a recent interview. 'You say to the American people that Republicans want to continue to hold middle-class tax relief hostage for an extension of tax breaks for [the well-to-do]. That will be the debate.'"

Tim Geithner has become the administration spokesperson on tax cut extension: http://bit.ly/ciUHZl

A bill that cleared the Senate would provide $30 billion for small businesses, reports Naftali Bendavid: "The program would authorize the Treasury Department to lend money to banks with less than $10 billion in assets at 5% interest. That interest rate would go down to 1% if a bank significantly increased its loans to small firms...In addition to the lending program, it would allow certain small businesses to apply tax credits to the previous five years, instead of the current one year, and let investors avoid capital gains taxes on certain small business stocks. The legislation also would increase the limits on a variety of Small Business Administration loans."

Robert Samuelson wonders why corporate profits have rebounded so much quicker than jobs: "The most obvious explanation is that the relationship between labor and capital (to borrow Marxist vocabulary) has changed. Capital has gotten stronger; labor has weakened. Economist Robert J. Gordon of Northwestern University argues that the "shift of executive compensation towards much greater use of stock options" has made corporate managers more zealous cost-cutters in recessions and more reluctant hirers early in recoveries. Lowering the head count is the quickest way to restore profits and, from there, a company's stock price."

A Fed insider in charge of consumer protection could be a disaster, writes Mike Konczal: http://bit.ly/cVDEwe

Robotics interlude: A robotic arm learns to flip pancakes.

Energy

Paul Krugman blames greed and cowardice for the climate bill's fate: "There was a time when Mr. McCain was considered a friend of the environment. Back in 2003 he

burnished his maverick image by co-sponsoring legislation that would have created a cap-and-trade system for greenhouse gas emissions. He reaffirmed support for such a system during his presidential campaign, and things might look very different now if he had continued to back climate action once his opponent was in the White House. But he didn't -- and it's hard to see his switch as anything other than the act of a man willing to sacrifice his principles, and humanity's future, for the sake of a few years added to his political career."

Ross Douthat laments the conservative movement's role in denying climate change: http://nyti.ms/cMhkXV

An unwillingness of advocates to talk about climate change helped kill cap and trade, writes Lee Wasserman: "The urge to avoid the topic of climate change is not new. While Bill Clinton and Al Gore have done noble work on climate since leaving office, when they had the presidential megaphone they did little to educate the public about the wolf at our door. President Obama has followed suit, and our national comprehension of climate change continues to stagnate. Virtually the only public officials working to shape opinion on this over the past two years have been those committed to misrepresenting the science."

BP CEO Tony Hayward will resign, reports Steven Mufson: "Hayward reshuffled the middle management ranks. And he vowed to focus "like a laser beam" on safety, a phrase that members of the House Energy and Commerce Committee threw in his face during a June 17 hearing. Yet interviews with consultants and with former and current BP employees suggest that Hayward failed. The firm stressed, often to a comic extent, personal safety while not paying enough attention to safe processes."

A stimulus "smart grid" project is stalling, reports Melanie Trottman: "The government's Smart Grid program is supposed to create tens of thousands of jobs nationwide as the projects move forward. So far, only $107.5 million of the $3.4 billion has been spent, as measured by the Energy Department's reimbursements to recipients for their work. An Energy Department spokeswoman said the agency expected to see big increases in spending over the summer and into the fall. More than half of the 100 groups awarded grants have either cleared regulatory hurdles or didn't require approval from a public utility commission, she said."

An absence of public chargers is causing problems for electric car manufacturers: http://bit.ly/bHteWn

The fate of marsh grasses will determine how fast the Gulf recovers from the BP spill, reports David Fahrenthold: "They are cordgrass and wiregrass, common species that wave in the winds in south Louisiana's coastal marshes. Except, in some places, they aren't waving anymore: Where oil has sloshed into the marshes, their stalks are matted and gooey and on their way to death. What happens next -- whether these two grasses rebound or vanish -- will be a very important piece of the gulf's larger environmental story. "

Toy nostalgia interlude: The latest Nerf guns are fully automatic, have replaceable magazines, and come with tripods.

Domestic Policy

The Arizona immigration law takes effect Thursday and is already having an impact, reports Miriam Jordan: "Thousands of illegal-immigrant families have left for other states. Boarded-up houses, shuttered stores and vacated used-car lots are ubiquitous in Hispanic enclaves. St. Margaret's has lost about 20% of its parishioners in recent months. At Park Village Apartments in Mesa, 30 of 120 units have been vacated since the law passed in late April."

The DC school district is firing hundreds of teachers over poor test scores, reports Bill Turque: "The dismissals also represent the second game-changing development this year in Rhee's efforts to assert more control over how D.C. teachers are managed, compensated and removed from their jobs. They also place the school system at the head of a national movement -- fostered in part by the Obama administration's $4.3 billion 'Race to the Top' grant competition -- to more rigorously assess teachers' effectiveness."

The Roberts Court is the most conservative in decades: http://nyti.ms/b5Rm41

Health care reform is reversing the direction of transfers between young and old, reports Janet Adamy: "Since the creation of Social Security and Medicare, younger workers have funded programs for the elderly. It's a compact in which workers paid for retirees with the understanding that they'd be looked after by the generation behind them. The health overhaul diverges by tapping a program for the elderly to help provide insurance to 32 million Americans of younger generations. Nearly half the funding for the law is supposed to come from paying lower fees to hospitals, insurers and other health-care providers that participate in Medicare, the federal insurance program for Americans age 65 and older, as well as younger disabled people."

The Department of Education has issued new for-profit college regulations: http://bit.ly/8XwkFh

Government agencies should be placed around the country, not in DC, argues Alec MacGillis: "With Washington burgeoning in a time of general economic gloom, why not address the imbalance by dispersing the government more broadly? Such a move would spread more evenly the benefits of federal employment (and its contractor hangers-on). It would make the federal bureaucracy more attuned to regional issues. And it just might help dissipate some of the anti-Washington venom that's coursing through the country."

Harry Reid reiterated his support for filibuster reform: http://bit.ly/db9nTW

Closing credits: Wonkbook compiled with the help of Dylan Matthews and Mike Shepard.

HAZARDOUS WASTE
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EPA May Have Suppressed Landfill Records (*Information Management Journal*)

July 2010 - August 2010
Pg. 19 Vol. 44 No. 4 ISSN: 1535-2897
An Environmental Protection Agency (EPA) Inspector General (IG) report found that EPA officials intentionally stopped keeping records related to potentially hazardous landfills in New Mexico in order to prevent the information from being released through the Freedom of Information Act. According to the IG report, failure to document agency activities is a violation of EPA policy and federal law, which require the preparation and preservation of adequate and proper records of agency functions, decisions, and transactions. In a reply to the IG report, the regional EPA office stated that it did not agree with the IG's findings or the recommendations, and that local EPA officials had done nothing wrong.
GOVERNMENT RECORDS
An Environmental Protection Agency (EPA) Inspector General (IG) report found that EPA officials intentionally stopped keeping records related to potentially hazardous landfills in New Mexico in order to prevent the information from being released through the Freedom of Information Act (FOIA).

Citizens Action New Mexico, a public interest group, had filed FOIA requests seeking information related to an investigation of possible contamination of Albuquerque's groundwater. One EPA official told the IG that "her section discontinued recordkeeping in favor of undocumented phone calls and conversations... to prevent the production of documents ... [She] informed us that her section had discontinued record keeping ... because of ... requests for information under the Freedom of Information Act."

The report, first reported by the Albuquerque Journal, also found that the officials marked unclassified records as "confidential" so that they would not be widely distributed. Officials said they only meant to indicate that the document was a deliberative draft, not that it was classified.

According to the IG report, failure to document agency activities is a violation of EPA policy and federal law, which require the preparation and preservation of "adequate and proper" records of agency functions, decisions, and transactions.

Because of the deficient recordkeeping, the IG said it could not determine whether the

EPA oversight of the New Mexico landfills was acceptable. In response to the IG report, the regional EPA office firmly "denied its staff took inappropriate steps to withhold information from the public." But the response did not refute evidence that showed EPA "staff intentionally stopped documenting discussions to avoid responding to the public's FOIA requests," the IG said.

In a reply to the IG report, the regional EPA office stated that it did not agree with the IG's findings or the recommendations, and that local EPA officials had done nothing wrong. The case has been passed on to the EPA deputy administrator for resolution.

PESTICIDES
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Farmers across state, U.S. face crackdown on pesticide use (*News Tribune*)

agriculture: Restrictions are meant to help wildlife
LES BLUMENTHAL; Staff writer
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WASHINGTON – Farmers in Washington and across the nation could face severe restrictions on the use of pesticides as environmentalists, spurred by a favorable legal ruling, want the courts to force federal regulators to protect endangered species from the effects of agricultural chemicals.

An eight-year-old ruling by a federal judge in Seattle required the National Marine Fisheries Service and the Environmental Protection Agency to review whether 54 pesticides, herbicides and fungicides were jeopardizing troubled West Coast salmon runs.

The agencies recently moved to restrict the use of three of the chemicals near any bodies of water that flow into salmon-bearing streams, and regulators are now considering restrictions on 12 additional chemicals. The Washington State Department of Agriculture says such restrictions would prevent pesticide use on 75 percent of the state’s farmlands.

A federal judge in California has issued a similar ruling involving 11 endangered and threatened species and 75 pesticides in the San Francisco Bay Area.

Rather than continuing to file piecemeal lawsuits, the Center for Biological Diversity says it will file a broader suit this summer involving nearly 400 pesticides and almost 900 species currently protected under the Endangered Species Act.

Washington state officials said restrictions that might result from that lawsuit could "significantly" affect agricultural production in at least 48 states.

Dan Newhouse, the director of the state Department of Agriculture, said if the courts ordered far-reaching restrictions "farmers across the country will have significantly fewer tools at their disposal to manage plant pests and disease."

The Endangered Species Act, signed into law in 1973, requires federal agencies contemplating an action that could "jeopardize" listed species consult with either the Fish & Wildlife Service or the National Marine Fisheries Service and come up with a plan to alleviate or lessen the effects. The fisheries service has jurisdiction over some fish species such as salmon, and the Fish and Wildlife Service covers everything else.

EPA has jurisdiction over pesticides.

Over the years, environmentalists said the EPA pretty much ignored the endangered species requirements.

That began to change in 1992 when U.S. District Court Judge John Coughenour in Seattle ruled that the EPA had violated provisions of the Endangered Species Act by not consulting with the fisheries services over how the use of pesticides and other chemicals could affect the more than two dozen salmon runs protected under the act in Washington, Oregon, California and Idaho.

"Such consultation is mandatory and not subject to unbridled agency discretion," Coughenour wrote.

After years of study, the fisheries service in 2009 found that three pesticides – carbaryl, carbofuran and methomyl – were jeopardizing salmon runs and suggested the EPA change the registrations on the chemicals to ban using them within 1,000 feet of salmon habitats and impose other technical restrictions involving aerial spraying, wind speed and weather.

The EPA essentially agreed, but the manufacturers of the three chemicals say they won't voluntarily adopt new labeling requirements and have threatened their own lawsuit.

The EPA has a 2012 deadline to finish studying the other chemicals and adopt use restrictions on those that threaten salmon.

"For years and years and years, EPA didn't do these consultations on pesticides," said Steve Mashuda of Earthjustice's Seattle office, the law firm that brought the 2002 suit on behalf of the Washington Toxics Coalition. "Those days are over."

Agriculture is a $40 billion-a-year business in Washington state, employing 160,000 people.

Newhouse said state agriculture directors across the country are increasingly worried.

The consultation process for chemicals between the EPA and the fisheries service and U.S. Fish & Wildlife Service needs to be overhauled, and that might entail changes in the Endangered Species Act and the Federal Insecticide, Fungicide and Rodenticide Act, Newhouse said.

In addition, Newhouse said, the EPA needs to look at recent studies including one conducted by Washington state that showed only low levels of pesticides in five watersheds – Thornton Creek in Seattle, the Skagit Delta, the lower Yakima Valley, and the Wenatchee and Entiat basins. The study said the pesticide levels were not expected to affect salmon, though concentrations at some sites could harm aquatic species that salmon eat.

The U.N.'s Food and Agriculture Organization has estimated that between 20 percent and 40 percent of global crop production is lost annually because of weeds, pests and disease.

The companies that manufacture the three pesticides currently at the heart of the controversy told the EPA they won't go along with voluntary labeling restrictions on their products, arguing that if the chemicals are properly used they will not jeopardize endangered or threatened species.

EPA officials were unavailable for comment despite e-mail and telephone requests. But they have notified the manufacturers that if they don't voluntarily agree to the new labeling restrictions, the agency will pursue "administrative procedures" against them.

Rep. Doc Hastings, R-Pasco, whose district includes some of the state's richest farm lands, said in a letter to EPA Administrator Lisa Jackson that it was "deeply troubling" her agency was moving ahead with restrictions despite studies that found salmon weren't being impacted.

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Read more: http://www.thenewstribune.com/2010/07/26/v-printerfriendly/1277006/farmers-across-state-us-face-crackdown.html#ixzz0umChvdAX

RECYCLING

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Ripple's reason for recent recycling success is as clear as glass (*Kansas City Star*)

By TIM ENGLE; The Kansas City Star
July 26 2010
Peer in one of the two purple, bigger-than-a-minivan Ripple Glass bins in a parking lot south of the Plaza and you might conclude that Kansas City has a drinking problem.

The mound is mostly beer bottles, but there's the occasional mineral water bottle or pasta-sauce jar. Clearly, not everyone follows the glass-only rules: Two paper bags are bursting with wine bottles; a plastic shopping bag holds a (presumably) empty 12-pack of St. Pauli Girl beer.

What Kansas City really has is a glass problem.

But thanks to all the people who have been schlepping their pickle jars, glass juice jugs and, yes, beer bottles to receptacles at this spot — 51st and Main streets — and others, it's a problem that's getting better.

In fact, Ripple Glass is on track to exceed its first-year collection goals. Not only that, it's already planning upgrades to its new glass processing plant, so before long beer bottles will be recycled into beer bottles.

The company is also preparing to launch an initiative to collect bottles from bars and restaurants. To do that, it will work with trash hauler Deffenbaugh Industries to place Dumpster-size bins behind eateries and watering holes.

Ripple hopes to start a pilot program Sept. 1 that concentrates on the corridor between the Missouri River and 75th Street. Once the bugs are worked out, the program would expand.

"About half the glass in the area comes out of bars and restaurants," said Jeff Krum, Ripple principal and co-founder. "That's a big, untapped market for us."

But back to the giant purple bins, which started appearing last November. In December, local recyclers dumped 400 tons of glass food and beverage containers. By June, the monthly amount had increased almost threefold — to 1,150 tons.

With the exception of a slight dip in May, "it's just been a steady uptick," Krum said.

Local recycling guru Matt Riggs said he's impressed with Ripple's numbers — but not surprised.

"It was a service that was in such high demand and that was so sorely lacking," said Riggs, outreach coordinator for the Mid-America Regional Council's Solid Waste Management District. "At a number of their locations, the bins filled up within a couple of days."

Ripple's success is MARC's success as well. The nonprofit association of city and

county governments paid for Ripple's Missouri-side bins and also contributed money for a public awareness campaign.

The most popular collection site at the moment is 119th and Hardy streets in Overland Park. No. 2 is that parking lot at 51st and Main. No. 3: Corinth Square shopping center, Prairie Village. Ripple has about 70 collection points around town, with a list at www.rippleglass .com.

The original goal for Ripple's first year was 6,500 tons of glass, but the company now hopes that number will be in the 8,000- to 10,000-ton range.

That sounds like a whole lot, but 8,000 tons would be only about 10 percent of the glass containers in Kansas City that could be recycled.

Before Ripple, less than 6 percent (about 5,000 tons) of the metro area's potentially recyclable glass was collected in a year. That compares with 28 percent of glass containers recycled nationally in 2008, according to the Environmental Protection Agency. The Glass Packaging Institute, an industry group, says 35 percent of beer and soft drink containers were recycled in 2008.

Why have Kansas City's numbers been so low?

Probably because, pre-Ripple, fewer than half a dozen drop-off centers would accept glass recyclables, which then had to be shipped out of town to St. Louis or Tulsa, Okla., for processing.

Kansas City and some other metro communities used to accept glass in their curbside recycling programs. But glass breaks, so it would not only contaminate other recyclables but injure workers.

Convenience is a major factor that influences recycling rates, Riggs at MARC said. And no doubt about it, curbside is most convenient.

Another likely reason glass recycling numbers are higher elsewhere: Eleven states — but not Missouri or Kansas — have passed "bottle bills." They encourage the return of bottles to stores, where buyers can get their deposit back.

Bridging the Gap drop-off sites continue to accept glass, but now that glass is sent to Ripple.

"Environmentally speaking, it's definitely better to have a local processor," said Sadie Gardner, Bridging the Gap's recycling operations manager. "We're superexcited that Ripple is as successful as they are."

Ripple, an offshoot of Boulevard Brewing Co., is planning to double production capacity at its glass processing plant near Interstate 435 and Truman Road by the end of the

year. An equipment upgrade will give the plant the ability to separate output by glass color.

When that happens, the company can sell its crushed glass product to manufacturers of glass containers — making it possible for “Boulevard beer bottles to turn back into Boulevard beer bottles,” said Krum, also Boulevard’s chief financial officer.

Ripple already has an agreement in principle with the maker of Boulevard beer bottles, Saint-Gobain Containers, to do just that. The microbrewery produces about 30 million bottles of beer annually.

For now, all colors of glass are fed in together and get spit out together, looking like yellow sand. But amber glass — again, think beer bottles — can’t be made from recycled clear or green glass.

So far, almost all the processed glass is being sold to Owens Corning. That company’s Kansas City, Kan., plant turns it into pink fiberglass insulation.

Ripple hopes to break even by late 2011. To do that, the company will need to collect between 15,000 and 20,000 tons of glass annually.

To help reach that goal, it has started taking glass from other cities, including Lawrence, Springfield and Jefferson City.

By the end of this year, Ripple will have invested more than $6 million into the glass recycling venture, Krum said. The processing plant is operating eight hours a day, five days a week.

“We didn’t go into this with a profit motive first and foremost,” Krum said.

Boulevard, after all, realized that its beer bottles were part of the problem — some 10 million were going into local dumps each year.

“I think that everybody will be happy if we can just achieve solvency and sustainability,” Krum said.

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SUPERFUND

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Officials discuss asbestos figures at BoRit site (*Lansdale Reporter*)

Published: Monday, July 26, 2010
By Thomas Celona

AMBER - Preliminary data is in from the first stage of the remedial investigation at the BoRit asbestos site in Ambler, Upper Dublin and Whitpain.

Representatives from the federal Environmental Protection Agency presented the findings recently to the Community Advisory Group.

The BoRit site, located between Butler Avenue, North Maple Street and the Wissahickon Creek, was placed on the EPA's Superfund National Priorities List last spring.

The agency has begun a Remedial Investigation/Feasibility Study at the site, a three- to five-year process to analyze site conditions and assess potential remedial actions before the EPA selects a final plan for addressing on-site contaminants.

"The purpose is to find out what's out there, where it is, where it may be going, what threats it might pose — what is the nature and extent of the disposed waste at the BoRit site," said Stacie Pratt, the EPA's remedial project manager.

The first phase of the remedial investigation occurred from November 2009 to January.

Crews collected soil borings, surface soil samples and sediment samples, along with using piezometers to collect groundwater samples.

All samples were tested for the presence of asbestos, volatile organic compounds, semi-volatile organic compounds, metals and other potentially harmful materials.

Crews observed different types of waste across the site's three parcels: the former Whitpain Park, the reservoir and the asbestos waste piles.

"(At Whitpain Park) what we saw was a mix of materials," Pratt said. "Some was just asbestos-containing material; some was mixed with soil. At the reservoir, crews observed mostly asbestos-containing material mixed with soil, while at the piles, crews found some mixed samples, some asbestos shingles and some 'paste-like material,'" according to Pratt.

Ninety-eight, 75 and 92 percent of borings had visible asbestos-containing material at the park, the reservoir and the piles,

respectively.

The layer of asbestos averaged 13, 3 and 17 feet at the park, along the reservoir berm and at the piles, respectively. The asbestos reached a peak of 40 feet at the piles.

In addition to work in the three parcels, crews took samples from along the three on-site creeks — the Rose Valley, the Tannery Run and the Wissahickon — and in the surrounding floodplain.

Some sampling also occurred on the opposite side on the Wissahickon near the Mercer Hill neighborhood.

Once the samples were sent to the lab, they were compared to human health screening levels. If a sample is below the screening level, no further study is needed, while if a sample exceeds the screening level, further study is needed but cleanup is not necessarily required, according to EPA guidelines.

For asbestos, the screening level is 0.01 fibers per cubic centimeter, according to the EPA's Web site.

Sixty-eight, 35 and 73 percent of soil samples exceeded the screening level at the park, the reservoir and the piles, respectively.

Meanwhile, all groundwater samples exceeded the level at the park and the piles, while 60 percent of samples at the reservoir did so.

At all three parcels, all soil samples exceeded the screening levels for both inorganic and organic compounds.

Groundwater samples also exceeded these two screening levels at the park and the piles, while only inorganic compounds exceeded the screening level at the reservoir.

The EPA's full report is available online at the agency's BoRit website, www.epaosc.org/site/site_profile.aspx?site_id=2475.

After reviewing the results of phase one, Pratt discussed how the remedial investigation will proceed.

A second phase of the investigation will involve more in-depth and expanded testing, but the exact details have yet to be planned.

"Nothing's been finalized yet," Pratt said. "We know this will be extremely challenging, and we need to plan out what we're going to be doing next."

Pratt said phase two will likely include a geotechnical analysis, the installation of four to six wells to monitor groundwater activity, sampling at off-site runoff areas and on-site activity-based sampling.

Another aspect of phase two is off-site air and soil sampling in the nearby communities, which the CAG has long been asking for.

"We're working in that direction to do some level of community stationary air monitoring," Pratt said, noting the extent of the monitoring will depend on whether or not nearby homeowners will allow it. "I'm thinking of doing sampling at houses along Maple Street and at Mercer Hill."

Pratt said she hopes the process will start in late August or early September.

TOXICS
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Not Just Pond Scum (*New York Times*)

July 26, 2010 Monday
Late Edition - Final
Section B; Column 0; Business/Financial Desk; Pg. 1
By ANDREW POLLACK
SAN DIEGO -- In a laboratory where almost all the test tubes look green, the tools of modern biotechnology are being applied to lowly pond scum.

Foreign genes are being spliced into algae and native genes are being tweaked.

Different strains of algae are pitted against one another in survival-of-the-fittest contests in an effort to accelerate the evolution of fast-growing, hardy strains.

The goal is nothing less than to create superalgae, highly efficient at converting sunlight and carbon dioxide into lipids and oils that can be sent to a refinery and made into diesel or jet fuel.

"We've probably engineered over 4,000 strains," said Mike Mendez, a co-founder and vice president for technology at Sapphire Energy, the owner of the laboratory. "My whole goal here at Sapphire is to domesticate algae, to make it a crop."

Dozens of companies, as well as many academic laboratories, are pursuing the same goal -- to produce algae as a source of, literally, green energy. And many of them are using genetic engineering or other biological techniques, like chemically induced mutations, to improve how algae functions.

"There are probably well over 100 academic efforts to use genetic engineering to optimize biofuel production from algae," said Matthew C. Posewitz, an assistant professor of chemistry at the Colorado School of Mines, who has written a review of the field. "There's just intense interest globally."

Algae are attracting attention because the strains can potentially produce 10 or more times more fuel per acre than the corn used to make ethanol or the soybeans used to

make biodiesel. Moreover, algae might be grown on arid land and brackish water, so that fuel production would not compete with food production. And algae are voracious consumers of carbon dioxide, potentially helping to keep some of this greenhouse gas from contributing to global warming.

But efforts to genetically engineer algae, which usually means to splice in genes from other organisms, worry some experts because algae play a vital role in the environment. The single-celled photosynthetic organisms produce much of the oxygen on earth and are the base of the marine food chain.

"We are not saying don't do this," said Gerald H. Groenewold, director of the University of North Dakota's Energy and Environmental Research Center, who is trying to organize a study of the risks. "We say do this with the knowledge of the implications and how to safeguard what you are doing."

At a meeting this month of President Obama's new bioethics commission, Allison A. Snow, an ecologist at Ohio State University, testified that a "worst-case hypothetical scenario" would be that algae engineered to be extremely hardy might escape into the environment, displace other species and cause algal overgrowths that deprive waters of oxygen, killing fish.

A week earlier, at an industry-sponsored bioenergy conference, David Haberman, an engineer who has worked on an algae project, gave a talk warning of risks. Many scientists, particularly those in the algae business, say the fears are overblown. Just as food crops cannot thrive without a farmer to nourish them and fend off pests, algae modified to be energy crops would be uncompetitive against wild algae if they were to escape, and even inside their own ponds.

"Everything we do to engineer an organism makes it weaker," said Stephen Mayfield, a professor of biology at the University of California, San Diego, and a co-founder of Sapphire. "This idea that we can make Frankenfood or Frankenalgae is just absurd."

Dr. Mayfield and other scientists say there have been no known environmental problems in the 35 years that scientists have been genetically engineering bacteria, although some organisms have undoubtedly escaped from laboratories.

Even Margaret Mellon of the Union of Concerned Scientists, who has been critical of biotech crops, said that if genetically engineered algae were to escape, "I would not lose sleep over it at all."

Still, some algae researchers worry they will be engulfed by the same backlash aimed at biotech foods and say care must be exercised. "About 40 percent of the oxygen that you and I are breathing right now comes from the algae in the oceans," the genetic scientist J. Craig Venter said at a Congressional hearing in May. "We don't want to mess up that process."

Dr. Venter's company, Synthetic Genomics, is getting $300 million from Exxon Mobil to create fuel-producing algae, in part by using synthetic genes. When the two companies cut the ribbon on a new greenhouse here earlier this month, Dr. Venter assured local dignitaries in attendance that no algae would escape. "Nothing will go into the drains, Mr. Mayor," Dr. Venter said, only half-jokingly. "San Diego is safe."

In the long run, Dr. Venter said, the algae should be given "suicide genes" that would kill them if they escaped the lab or fuel production facility. Some companies are sticking with searching for and breeding natural strains. "Re-engineering algae seems driven more by patent law and investor desire for protection than any real requirement," said Stan Barnes, chief executive of Bioalgene, which is one of those companies. But Dr. Venter and Mr. Mendez argue that there are huge obstacles to making algae competitive as an energy source and that every tool will be needed to optimize the strains.

Sapphire Energy seems one of the best-positioned companies to do that. The company, which is three years old, has raised $100 million from prominent investors, including Bill Gates. Sapphire is also getting $100 million in federal financing to build a demonstration project containing 300 acres of open ponds in the New Mexico desert.

The company has inserted a gene into algae that allows the organisms to make a hydrocarbon they would not naturally produce, one that would help make fuel. "You don't want to take what algae gives you," said Mr. Mendez, who previously worked for medical biotechnology companies. "You want to make the best product."

The company is also developing algae that can thrive in extremely salty and exceedingly alkaline water.

It has even developed what might be called Roundup Ready algae. Like the widely grown Roundup Ready soybeans, these algae are resistant to the herbicide Roundup. That would allow the herbicide to be sprayed on a pond to kill invading wild algae while leaving the fuel-producing strain unhurt.

Not all these traits are being developed by genetic engineering, because in many cases scientists do not know what genes to use. Instead, the company screens thousands of strains each day, looking for organisms with the right properties. Those desirable traits can be further enhanced by breeding or accelerated evolution.

In one room at Sapphire's lab, parallel tubes contain algae with identical traits growing under identical conditions. But each strain is slightly different, and only the fastest growing one -- determined by which tube turns the darkest green -- will be chosen for further development.

"If you can't outcompete your wild cousin, it doesn't make it out of this room," said Mr. Mendez. Algae can reproduce rapidly, doubling in as little as a few hours. And they can be carried long distances by the wind. "They have the potential to blow all over the

world," said Richard Sayre of the Donald Danforth Plant Science Center in St. Louis.

Dr. Sayre, who is also chief technology officer of Phycal, an algae company, is using genetic engineering to develop algae that capture less light. Right now, he explained, algae capture more light than they need and waste a lot of it as heat. If each organism captured less, then a given amount of light could be shared by more organisms, increasing biomass production.

Instead of using open ponds, some companies are using bioreactors, which typically contain the algae in tubes. Some experts say, however, that these would not totally prevent escapes. "The idea that you can contain these things and have a large-scale system is not credible," said John R. Benemann, an industry consultant in Walnut Creek, Calif. He said, however, that he saw absolutely no risk from genetically engineered algae.

Sapphire says it is not growing any genetically engineered algae in open ponds yet. When it is ready, it says, it will comply with all regulations.

Genetically engineered algae, whether in open ponds or enclosed bioreactors, are likely to be regulated by the Environmental Protection Agency, which now regulates genetically engineered microbes under the Toxic Substances Control Act.

Still, there has been at least one case in which genetically modified algae seem to have fallen between the regulatory cracks. When Mera Pharmaceuticals, which is based in Hawaii, wanted to test the feasibility of producing human pharmaceuticals in genetically engineered algae in 2005, none of the three federal agencies that regulate the various areas of biotechnology -- E.P.A., the Food and Drug Administration and the Agriculture Department -- claimed jurisdiction.

Steven G. Chalk, acting deputy assistant secretary for renewable energy at the Energy Department, said any federally financed project, like Sapphire's New Mexico demonstration, would have to undergo an environmental assessment. But risks would be assessed case by case, he said, not for all conceivable genetically modified algae.

Monday, July 26, 2010 - Page updated at 12:01 AM

ERIKA SCHULTZ / THE SEATTLE TIMES
"Even if the fish is poisonous ... we're still going to eat it. Our spirit demands it."

State takes new look at how much fish is safe to eat (*Seattle Times*)

By Cassandra Brooks
Seattle Times staff reporter

From the shores of Lake Washington to the Duwamish River and other state waters, signs alert locals about toxic fish:

Warning: Fish from these waters contain high levels of mercury.

Caution: Trout contain high levels of DDT.

Advisory: Shellfish contain high PCBs, do not eat!

Under state law, Washington's lakes, streams, estuaries and nearshore coastal waters only need to be clean enough for residents to safely consume one serving of fish a month.

Yet, for many state residents, local fish and shellfish are a much bigger part of their diet than that, whether it's bass caught from the dock of a lake, a dozen oysters served up at a waterfront restaurant or salmon grilled on a backyard barbecue.

And for many tribes across Washington, fish are not just central to their diet but a core part of their cultural and spiritual lives as well.

After years of prodding by tribes and other parties, the state Department of Ecology will begin taking a new look this fall at the state's water-quality standards.

Using Oregon as a model, the department hopes to turn what could be an impossibly long, hard and hugely expensive battle into a more amicable process, one that produces results acceptable to all the key players.

Recognizing the vital importance of clean water and fish, Oregon's Department of Water Quality has been working closely with state, federal and tribal governments and with industries to set a stricter water-quality standard, one that would allow people to safely eat not just one serving of fish or shellfish a month, but one serving a day.

Just agreeing on the numbers has taken years, and the job of making sure industries can meet the new standards is still ahead. But the process has gone smoothly thus far, and other states have been watching, hoping to follow Oregon's lead.

The point has not been to shut down industry or cripple the economy, said Rick George, environmental planning manager with the Confederated Tribes of the Umatilla Indian Reservation in Oregon.

"We can't do that, and we don't want to do that," he said. "The goal is to get adequate protection for higher fish consumers but also to make sure it's doable for the industries as well."

In Washington, "we've wanted to change the standard for some time," said Melissa Gildersleeve, policy manager at the Ecology Department. "It's a huge and costly project that may take a decade, but even so, it's the right thing to do."

Food for the spirit

For the Swinomish of La Conner and other tribes in Washington, local game and seafood are an integral part of every funeral, birthday celebration or other family gathering.

"We were at a clambake one time eating mussels, and I saw this one elder who was just shoveling mussels into her mouth," said Larry Campbell, Swinomish tribal historian.

When he asked friends why she was eating so fast, they told him she was allergic to shellfish and wanted to eat as many as she could before she broke out in hives.

"Even if the fish is poisonous to our bodies, we're still going to eat it," Campbell said. "Our spirit demands it."

But high levels of toxins have limited fishing and shellfish harvesting for the Swinomish in recent decades.

The tribe in 2002 received a large grant from the Environmental Protection Agency (EPA) to put local shellfish and crabs under the microscope and found flesh riddled with hazardous levels of suspected carcinogens such as dioxins and PCBs. Other tribes throughout the state have found similar toxins in their food.

The Ecology Department now is poised to invite the key stakeholders â€” tribal leaders, regional EPA officials and representatives of industry â€” to share their concerns and desires in hope of reaching a timely agreement.

"It's gratifying that Oregon is out front and we're going to learn from what they're doing," said Cheryl Niemi, environmental scientist with the Ecology Department. "And there will definitely be a special focus on tribes, but the conversation will be open to everybody."

Protecting waterways

Because toxic contaminants accumulate in fish tissue, part of the federal Clean Water Act requires that state waters be clean enough for local residents to safely consume certain amounts of fish: The greater the amount eaten, the cleaner the water must be.

The EPA encourages individual states to set standards if they have data showing how much fish people typically eat from state waters. Otherwise, the federal standard applies â€” 6.5 grams of fish per day per person, or about one 7-ounce serving of fish per month. That's been Washington's standard for nearly two decades.

"We know that populations here in Washington, like Asian-Pacific Islanders, local tribes and Russian immigrants, all have much higher consumption rates," said Dale Norton, environmental scientist with the Ecology Department.

And those fish-rich diets can come with a slew of potential health risks.

Paper mills, oil refineries and municipalities all release into the water effluent that often contains such suspected carcinogens as heavy metals, dioxins and hydrocarbons. Runoff from farmland can be rich with chlorinated pesticides, which also may lead to cancer.

Then there are "legacy contaminants" such as DDT and PCBs, which have been banned for decades but persist in the soil, ever leaking out into the food chain.

Local waters also are laden with naturally occurring volcanic products such as arsenic or mercury, while fossil fuels and landfills leach mercury.

When Native American tribes in Oregon found their fish loaded with such toxins, they pushed the state to change its standard. After four years of negotiations, Oregon agreed to the thirtyfold increase in its fish-consumption rate. The standard awaits a final public hearing and EPA approval, but state officials predict it will go into effect next summer.

Once it does, the onus will be on most local businesses â€” including municipalities, pulp and paper mills, oil refineries and farms â€” to come up with safer chemical alternatives or put fewer toxins into the environment.

The new standard also would mean that more historically polluted areas would need to be cleaned up, likely by state or federal agencies.

"We support the tribes' efforts to bring this to everyone's attention, but we want a package and regulation that works," said Llewellyn Matthews, executive director for Northwest Pulp and Paper Association. "When the standard is too strict, then the industry or state might have to clean up naturally occurring substances, which defies common sense."

Oregon's Department of Water Quality and the EPA already have indicated they will work with industries to set realistic timelines and grant exceptions, when necessary.

In Washington, even before the fish-consumption rate review officially begins, the Swinomish have said they will be pushing for historical consumption rates, perhaps as high as a pound of fish per person per day.

But they also have said they are willing to negotiate with the state and local industries.

"Washington state has been reaching out to the tribes and EPA and asking how they can make changes to protect people," said Debra Lekanoff, governmental liaison for the Swinomish.

"And not just tribal people, but people throughout the Northwest because we all eat the salmon, we all use the water and we all eat the shellfish."

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7/26/2010

Toxic sites under watchful eye (*Brunswick News*)

By SHANESSA FAKOUR The Brunswick News
Daniel Parshley keeps a close eye on Glynn County's four Superfund sites.

As project manager of the Glynn Environmental Coalition, his role is to inform the public and local officials of the federal government's cleanup progress.

Twenty years after the county's first declared site - the now inactive Hercules industrial landfill - Parshley said he has seen both significant progress and delays occur.

"The goal is eventual cleanup and containment of sites so they can be put back into productive use," Parshley said. "Our goal is to keep the community involved in the decision-making progress."

By administering federal Environmental Protection Agency grants, Parshley said he hopes to keep the community aware of what is happening with the sites.

The Hercules site on Golden Isles Parkway is the only completed site for physical cleanup. It still receives long term groundwater monitoring after contaminating the soil of residential properties with hazardous wastes in the 1980s, according to the EPA.

"Over the last several years, significant progress has been made at the Brunswick Wood Preserving site," Parshley said.

Located at 150 Perry Lane Road, the building, which closed in 1991, contaminated the land and ground water because of poor housekeeping, open dumping in Burnett Creek and accidental spills, according to the EPA.

Parshley said the government has completed the underground walls surrounding the most contaminated areas and a soil cap covering. Now work is to treat contaminated

groundwater outside the underground wall. He said studies that will tell how to immobilize these areas will be published in the fall.

"At the LCP (Chemicals) site, there have been some significant delays due to reports not being accepted and encountering problems with addressing groundwater," he said.

Parshely said he was disappointed that the LCP site, 4125 Ross Road, Brunswick, has had several stalls in its cleanup efforts.

The site spans about 800 acres, the majority of which is tidal marsh. Manufacturing processes led to the marsh, groundwater and soil becoming contaminated with mercury and PCBs.

An ecological risk assessment of the marsh remains to be completed and accepted by the EPA, he said.

Contaminated groundwater levels continue to rise well above drinking water standards.

Finally, a detailed public health assessment will be completed by the Agency for Toxic Substance and Disease Registry and released for public comment in the fall.

"At the Terry Creek site, the removal of the former toxaphene plant was a long awaited project and now that is done," Parshley said. "Now, the work to cleanup or contain the several million pounds of pesticide in the outfall and marsh can proceed."

The Terry Creek dredge spoil site is located on the north side of the F.J. Torras Causeway, near U.S. 17.

It became contaminated with wastewater containing toxaphene from the Hercules plant, which the EPA discovered in 1995.

WATER

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July 26, 2010

Concord University Hosts Annual Watershed Protection Practicum for Regional Non-Profit (*Huntington News*)

Eastern Coal Regional Roundtable
Special to Huntingtonnews.net
Athens, WV - July 29- August 1, 2010 - This year the Eastern Coal Regional Roundtable (ECRR) is moving their annual Summer Practicum to the campus of

Concord University. This move reflects the growing interest in group capacity building and organizational sustainability of grassroots watershed groups in the eastern coalfields region. Over 100 trainees will be coming to Athens to take advantage of the knowledge and skills of 27 trainers coming from academia, non-profits, governmental organizations and private business.

Participants have the opportunity to select a training track, or choose individual classes throughout the 2-3 day training period from July 29th to August 1st. Once again the Summer Practicum will feature the Save Our Streams (SOS) water monitoring Training program and certification conducted by Tim Craddock and Jessica Dupree of the West Virginia Department of Environmental Protection (DEP). Concord University will also be the site for Wetlands Restoration Training. Under the guidance of National wetland restoration and monitoring experts Tom Biebighauser and John Byrd, participants will learn how to select sites for wetland construction and be involved in a hands-on wetland construction project on Concord University.

Watershed groups will have the opportunity to learn practical skills useful for the administration of the organizations. Mick Gilliam, a Business Development Specialist with the University of Missouri Extension Service, will train participants in the use of QuickBooks to encourage business accounting practices. Professional trainer and research associate at the Rahall Transportation Institute, Amy Blankenship will teach participants the tools of Geographical Information Systems to manage data collection and the visualization and presentation of environmental information through mapping.

Other courses available to participants include grant writing, environmental economics and several other topics relevant to organizational sustainability and watershed protection. Concord Board of Governors Chair Frank Blackwell said of this event: "Watershed protection is more critical today than it has ever been. Getting a handle on all forms of environmental damage and its remediation must happen. This is a turning point in the history of our economy: peoples' lives and jobs depend on the decisions that we make today. Insuring that our children and grandchildren have clean water to drink and clean energy to heat their homes is our responsibility now, and essential to the future of the Eastern coalfield states and our nation."

This new partnership between the Eastern Coal Regional Roundtable and Concord University is indicative of a longer term, mutually beneficial relationship. "Clean energy and clean water go hand-in-hand" said ECRR Executive Director Dvon Duncan. "Should the Watershed and Energy Institute at Concord become a reality, it would be housed in Concord University's Rahall Center and Small Business Incubator. Watershed groups could benefit from organizational training throughout the year, with both undergraduate and graduate programs providing the future energy leaders of America and the world."

Concord University students and volunteers from watershed groups throughout the Eastern coalfield states will have the opportunity to take part in future summer practicums, thereby developing key skills to become the next generation of experts in environmental protection. A Watershed & Energy Institute at Concord would be the site

for the incubation of new ideas in energy generation, including renewable sources of energy and clean technologies such as Carbon Capture and Storage and Clean Coal. Should the Watershed & Energy Institute at Concord University become a reality, Concord would be uniquely positioned to offer its students new avenues in undergraduate education, leading to new strategies and innovative business opportunities, creating jobs in the economically important field of energy technologies. "Concord University is excited about the many varied opportunities this dynamic partnership will create ", states Dr. John David Smith, Concord University's Vice President and Academic Dean.

Anyone interested in more information on this summer's practicum and future training events can go to: www.easterncoal.org. This year's practicum is provided under an EPA Targeted Watershed Grant with additional sponsorship from the Appalachian Community Fund.

July 26, 2010

Polluted water found statewide (*News Journal*)

Toxic plume lurks under Dover's historic Green
By JEFF MONTGOMERY
The News Journal

Three months ago, environmental regulators in Delaware received a blunt warning from the Environmental Protection Agency after workers in Dover drilled a deep test well where federal investigators were tracking shallow groundwater pollution.

Check first before drilling, the EPA said, or pay the price for endangering the public's water.

The letter warned that the drilling might allow the "extensive" contamination to leak into "deeper water-bearing zones used by the City of Dover for drinking water."

At issue are toxic chemicals spreading underneath one of the most iconic spots in Delaware – The Green, a town square where Caesar Rodney and other signers of the Declaration of Independence once gathered and political life in Delaware still thrives.

Today, docents in period costume lead tours on the brick walkways and lush lawns near the General Assembly. Crowds gather on The Green for summer concerts, in some places just 26 feet above soils tainted by the residues of coal, gas and dry-cleaning solvents.

The EPA is testing to see if harmful vapors are seeping into the basements of historic homes.

“This continues to happen, and it’s in areas where people have done business or have lived,” said Scott Andres, a scientist at the University of Delaware-based Delaware Geological Survey. “We’ll continue to find things. That’s kind of frightening to lots of people, because you don’t always know how serious it is.”

The most pervasive poisoning of the state’s groundwater can be found between Old New Castle and Delaware City, in an industrial complex of chemical, oil and gasoline manufacturers.

But no community in Delaware is immune to a legacy of heavy manufacturing, power generation and agriculture.

In a yearlong investigation, The News Journal found groundwater contamination in every corner of the state, much of it recorded by state and federal regulators or corporations but not widely shared with the public except when contaminants are discovered at dangerous levels in drinking water.

•In south Newark, state regulators in May expanded a ban on any new drinking-water wells on properties near the site of a 1986 chemical plant explosion. The change came seven years after the same pollution forced city officials to shut down one of their most productive groundwater supplies, located more than 1,000 feet from the former Helix factory, where spills tainted an underlying aquifer with chlorinated methanes, chlorobenzene, acetone, benzene and chloroform.

•Ninety miles south, in Millsboro, taxpayers are expected to pay $10 million or more to replace public wells contaminated by solvents from an old poultry vaccine factory. Discovery of the problem in 2005 initially forced thousands in Millsboro and Dagsboro to buy bottled water or drive to water tankers pulled into town by the National Guard.

•In Newport, pollution left behind at the former Koppers Co., a closed wood-treatment plant, has forced officials to consider rerouting a narrow stream called Hershey Run to ease threats to deeper groundwater.

•In New Castle, Croda Inc. and ICI Americas are trying to determine how far a chemical called bis (2-chloroethyl) ether has spread in a deep aquifer near Artesian Water's Collins Park neighborhood.

•In Seaford, state and federal officials are reviewing chemical solvent levels in a city-owned well tainted by a DuPont Co. subcontractor in 1992. Cleanup work also is under way in Milford to limit groundwater damage from years of pesticide spills at a former state mosquito control base.

One University of Delaware study -- co-authored by Andres and released in 2008 with little public discussion -- found that 9 percent of more than 34,000 private domestic wells in Delaware are inside zones where pollutants could flow from known contamination sites. Most are at medium to high risk for eventual problems.

"It's dark down there," said Lenny Siegel, who directs the California-based Citizens for Public Environmental Oversight, a group that tracks pollution cleanups. "You're trying to piece together information about the condition of drinking-water supplies from indirect measurements that are infrequent and sparse -- a few samples that are years apart. It's not hard to miss something."

Emergency in Millsboro

Millsboro resident Brittany Kelso still has doubts about her town's water supply and water system after Millsboro endured one of the state's worst cases of drinking-water pollution in 2005. Thousands were advised to rely on bottled or trucked-in water at the height of the emergency.

Even after millions in government spending to install a filter system and dig a new well, Kelso still relies on bottled water for her family's routine drinking.

"You're always a little bit skeptical about it," Kelso said. "They say it's fixed. We use the town water for cooking and washing and we will drink it, but I also still buy bottled water."

Levels of trichloroethylene (TCE), a toxic solvent, were dozens of times higher than federal drinking-water limits in Millsboro by the time periodic testing caught the problem in two out of three wells used to supply the town and neighboring Dagsboro.

TCE ranks among the more common pollutants found in drinking water, and is a public health concern. The chemical can cause cancer, liver and kidney disease and reproductive disorders after long-term exposure to vapors or tainted water.

Although routine testing detected the problem, officials said that residents could have been unknowingly exposed to the pollution for weeks before the problem was found and verified.

Officials kept a health warning on the community's water for six weeks, and eventually had to drill 130 test wells to pin down the source of the problem and map its size.

Tests found TCE concentrations in the worst-hit well at more than 50 times the federal drinking-water limit, although water from a deeper well was routinely mixed with the tainted source and likely limited public exposure, DNREC reported during its investigation. Water in some homes was found to have 14 times more TCE than the federal maximum.

Before the EPA assumed control of the cleanup under the federal "Superfund" program, the $10 million price tag threatened to cripple a Delaware toxic cleanup fund already hard hit by bills for other site cleanups and declining revenues from fuel taxes. The fund

once took in nearly $20 million yearly, but that shrank to $9 million last year, all of it consumed by cleanup projects and programs.

In Millsboro, the EPA took on the job of finding the source of the contamination and seeking damages, an effort that is often time-consuming and futile. Few private assets are expected to be available to help at Millsboro, although investigators have listed two former companies and a poultry-industry health scientist, Hiram Lasher, as possibly responsible.

Lasher has said that he has no recollection of TCE leaks while he controlled the vaccine plant there during the 1950s. A DNREC letter to Lasher in late 2006 said that state contractors removed 209 tons of TCE-contaminated sludge from buried tanks on property Lasker once owned, and found extensive pollution in buried pipes and equipment.

DNREC had cautioned three years before TCE was found in Millsboro's drinking water that the town's shallow wells were "highly vulnerable" to some types of contamination, because of their location and depth. A decade before that, the EPA ordered National Cash Register Co. to clean up and control TCE that escaped from a lagoon at a Millsboro plant about two miles from the more recent TCE contamination sites.

Millsboro's wells also had long been known to have too much nitrate, a pollution tied to fertilizer and sewage.

Nitrate levels in the town's two shallow wells averaged 11 parts per billion, just over the level that triggers warnings about health risks, especially for children and pregnant women. Millsboro managed the problem as many other communities do: by mixing the tainted water from the shallow wells with water from deeper wells to dilute nitrate concentrations.

Plume spreads under Dover

In Dover, groundwater near and under some of the city's oldest buildings carries benzene, toluene, ethylbenzene, xylenes, perchloroethene (a dry-cleaning solvent) and trichloroethene released from the site of the former Dover Gas Light coal-to-gas plant and a dry-cleaning business that was destroyed in a fire.

Initially believed to be limited, the Dover contamination has been mapped under several blocks from an area not far from the landmark Spence's Bazaar, spreading east through The Green to the banks of the St. Jones River.

Several of Dover's 14 drinking-water wells are within one mile of the plume. The closest is about 1,000 feet to the southeast, according to letters on file at DNREC's Site Investigation and Restoration Branch.

Efforts to track the pollution collided with the historic atmosphere in Dover during the summers of 2008 and 2009, when state tour guides in Colonial-era dress steered visitors to The Green around heavy drilling rigs working under contract to the EPA.

The underground pollutants also have complicated state attempts to explore groundwater suitability for a geothermal system that would help heat and cool a new city library. In March, an EPA project manager sent DNREC cleanup managers a letter chiding the state agency for allowing a deep test well in the area.

"The state is obligated not to interfere" with the EPA's investigation, EPA project manager Frederick N. MacMillan wrote to his DNREC counterpart. Problems created by the drilling could make Delaware "solely responsible for any costs."

Federal officials said current public health risks from the water are low. All of the capital's wells take water from aquifers below the 85-foot layer now being probed for contamination. Environmental investigators have cautioned, though, that tainted water could release vapors, called "soil gas," capable of trickling into basements and causing health problems.

The EPA has been quietly conducting "vapor intrusion" studies at homes around The Green. Final results are due later this year, along with a remedy plan.

"I know all about that, and they came through and went into my basement and said that everything was OK, but I don't know what they're going to be able to do about it anyway," said Irene King, who lived about a block from the coal gas site as a child and now lives on one of the streets targeted by the EPA.

"There's no way they're going to get that stuff out of the ground," King said, or keep it from eventually seeping into the waters of the nearby St. Jones River.

A matter of time

The typical response to tainted groundwater in Delaware is to drill deeper.

But full confidence in Delaware's deeper supplies could be short-lived. Around Delaware City, carcinogens from the petrochemical complex have pierced the layer of clay that federal and state regulators said would always protect the Potomac Aquifer, which supplies water to hundreds of thousands in Delaware, New Jersey and Maryland.

In 2008, a DNREC report conceded that some of the state's deepest and best aquifers may be clear today only because "not enough time" has passed for sinking chemicals to reach them.

"I don't think we really understand how many straws we're sticking into the different aquifers, what the pollution loading is, what the rate of transmission is through the

groundwater," said Paul Schwartz, national policy coordinator for Clean Water Action, a water quality and protection advocacy group.

Delaware's list of groundwater woes, already long, is incomplete, researchers say.

University of Delaware scientists concluded in a report for the Delaware Cancer Consortium that state databases and monitoring programs are "not adequate" to judge the effectiveness of pollution testing for private and small-group public water supplies, even near known contamination sites.

The state's testing and recordkeeping practices are "poorly suited" to the job of evaluating toxic and cancer-causing contamination in shallow groundwater used for domestic needs, the study said.

"We went through thousands of records and found that we could go back and reconstruct less than 2 percent," said Andres, deputy director of the Delaware Geological Survey and one of the study's co-authors.

The uncertainty has left residents uneasy.

"I relocated here from New Jersey nine years ago, and I'm hoping I didn't screw up. It's in the back of my mind every day," said Mark Summerfield, who lives just south of the Delaware City Refinery.

Bill Wolfe, a former New Jersey state environmental regulator and national environmental advocate, blamed many chronic pollution threats on the failure by government and industry to make cleanups and control projects a priority.

"Time and delay increases the migration of plumes and makes the environmental situation and the economic situation worse," said Wolfe, who directs New Jersey's chapter of Public Employees for Environmental Responsibility. "There should be no surprises, but you often hear government and companies claim that there's no problem. 'The plume is stable. We're monitoring it' -- and then it shows up somewhere it wasn't supposed to be."

'You cannot clean these things up'

Troubles extend even to the state's farming areas, where Department of Agriculture officials are monitoring dozens of wells for contamination by herbicides and other farm chemicals. Tests a decade ago showed widespread, but low-level, contamination in surface aquifers widely used for private wells.

University of Delaware researchers who surveyed available tests reported in 2008 that contamination from pesticides, gasoline additives and organic compounds is widespread in shallow groundwater.

But until recently, Andres said, most state data collection programs have been unable to verify routine sampling even of at-risk wells, much less aquifers fouled by unreported pollution.

"It automatically is a public policy concern," Andres said. "How it's managed is something that gets negotiated, but in many cases, what's known is that you cannot clean these things up. It's technically impossible."

Pesticides have tainted shallow water across the state, although rarely at levels above safe drinking-water standards. The Department of Agriculture is monitoring levels in selected wells statewide on a long-term basis.

America's and Delaware's addiction to oil and love affair with cars have left other scars.

The banned gasoline additive methyl tert-butyl ether (MTBE) is one of the more common organic chemicals found in groundwater, both shallow and deep.

DNREC and Division of Public Health officials have wrestled with several emergency MTBE well-contamination problems around the state, brought on by leaking service station tanks, traffic accidents and other spills. Hundreds of thousands of gallons were spilled or dumped onto the ground or surface waters at the Delaware City Refinery, where the additive was produced for years.

The University of Delaware labeled MTBE a "significant concern," citing discovery of the contaminant and other gasoline compounds in more than 100 domestic wells in recent years, forcing the replacement of dozens of wells and installation of home water treatment systems.

While the Delaware City petrochemical complex easily ranks as the state's biggest pollution and groundwater headache, no part of Delaware is exempt, said Gerald Kauffman, Delaware's water supply coordinator.

"I think we're fortunate that we're not seeing even more of these organic chemicals in drinking water," Kauffman said. "We have a lot of water in the state, especially groundwater. But we have to protect the quality. There are a lot of risks."

Article published Jul 26, 2010

Rochester Ward 6 volunteers sought to sign up for rain barrel to help Willow Brook stay clean (*Foster's Daily Democrat*)

ROCHESTER — The Cocheco River Watershed Coalition is looking for volunteers in Ward 6 to take on a yearlong experiment using rain barrels to mitigate environmental impacts to Willow Brook.

The coalition has 10 barrels for this pilot project. One is slated to go to School Street School, where grants have already provided for some environmental mitigation and flood relief in the form of tree filters, rain gardens and pervious concrete, according to Lorie Chase, coordinator of the watershed coalition.

That leaves nine barrels for volunteers in Ward 6 who wish to participate in the program. The rain barrels and free installation come at a $175 value, Chase said. The 55-gallon barrels are plastic containers with spigots that catch water from a downspout. Rainfall from roofs is stored until it is needed for watering flower gardens or other landscaping work.

Catching and reusing rain water reduces the amount of tap water used as well as the amount of storm-water runoff that carries pollutants into nearby Willow Brook, Chase said.

"The idea is to get people in the Willow Brook area thinking about gardening and water use," she said.

Willow Brook is in a highly urbanized area of the city but still contains some nice wild areas, Chase said. However, a high bacteria content and garbage threaten the important waterway.

When it rains, the runoff rushes over land, picks up contaminants and drains untreated into the brook. In contrast, when the water is stored in barrels and used for watering plants, it seeps into the ground instead of running into the brook, she said.

"The idea is to get it to infiltrate the land," Chase said.

Chase said it is a relatively easy step that has caught on around the country because it is something people can do to help the environment.

Those who call about participating will be required to fill out an application. Applicants should call 749-4445 or 516-8113. The selection will be made before Aug. 2 and installation will take place in late August.

Those who receive the coalition's barrels will be required to keep a simple log for the year recording how they use it and other observations, Chase said.

The initiative is part of a larger project to prevent nonpoint source pollution in Willow Brook. Funding was provided in part by a Watershed Assistance Grand from the state Department of Environmental Services and Clean Water Act funds from the U.S. Environmental Protection Agency.

In midst of river cleanup, supporters are divided (*Associated Press*)

July 26, 2010, 03:30 AM By BOB SALSBERG Associated Press Writer
LENOX, Mass. — Once a dumping ground for chemicals, a stretch of the Housatonic River that winds near this Berkshires hamlet is being scoured in a lengthy, expensive cleanup. Now, dredging other parts of the riverbed is under consideration, but the fishers, bird watchers and swimmers who would benefit are wondering how much effort is too much.

General Electric Co. used compounds called PCBs, now known to cause cancer, in producing transformers from 1932 to 1977 at its 254-acre plant in Pittsfield, Mass. Under a federal consent decree about two decades after it stopped, the company began cleaning up PCBs that had spewed for years into a residential neighborhood and a 2-mile stretch of the Housatonic.

Now, the $400 million first phase of the cleanup is almost over. The U.S. Environmental Protection Agency must decide in coming months what to do about pollution in the rest of the 149-mile river that flows through rural western Massachusetts and Connecticut and empties into Long Island Sound.

Options presented by GE include extensive dredging and removing up to 2.25 million cubic yards of PCB-tainted sediment and floodplain soil, and “monitored natural recovery,” a euphemism for little more than hopeful watching and waiting.

“Many sportsmen don’t want anything done. They want the river to heal itself,” said Mark Jester, president of the 3,000-member Berkshire County League of Sportsmen.

Jester, who enjoys duck hunting and other activities, said sportsmen worry that dredging could spoil the character of the river and disrupt recreational activity. He’s quick to add, however, that he favors an “ecologically sensitive” compromise in which GE would decontaminate “hot spots” on the river, with limited dredging.

Polychlorinated biphenyls, or PCBs, are chemical compounds once used widely as coolants and lubricants in electrical equipment. The government considers PCBs a probable human carcinogen and studies show they pose a risk to wildlife in the river ecosystem, including fish, frogs, waterfowl and mink.

Though banned in 1977, the compounds remain a problem because they do not readily break down in the environment and persist over long periods of time.

The goal remains a “fishable, swimmable river,” said Tim Gray, executive director of the Housatonic River Initiative.

Advisories against eating fish are posted along the full length of the river, and GE contends that under current EPA standards, even the most aggressive cleanup won't bring down those signs.

Gray and other environmentalists say GE should consider newer technologies such as using chemicals, intense heat or even biological agents to separate the PCBs from soil or sediment and destroy them. The company has said such methods are too untested to be reliable.

"General Electric makes aircraft engines; they are smart engineers. They can figure out how to clean this river," Gray said.

The Housatonic debate echoes an ongoing one involving the Hudson River in New York, where GE is paying for the cleanup of PCBs that were discharged from plants at Fort Edward and Hudson Falls. The company last year dredged sediment from the river about 40 miles north of Albany, but claimed the work actually stirred up PCBs in the water and spread them down river. GE proposed to halt further excavation.

GE has until Oct. 15 to submit revised recommendations for cleaning the river to the EPA. Without giving specifics, the company says it will offer two revised proposals that reflect the concern that dredging can harm the river as much as help it.

"The point with these environmentally sensitive alternatives is to take a less ecologically invasive approach, with less dredging and looking at more targeted extraction of PCBs," said Peter O'Toole, a GE spokesman.

In 2008, GE gave the EPA a 722-page report recommending a 10-year, $184 million plan to remove and dispose of about 250,000 tons of river sediment and about 90,000 tons of floodplain soil. The company said it would reduce by 94 percent the levels of PCBs moving downstream and cut the levels in fish by at least 70 percent.

Under the consent decree, GE must pay for any cleanup.

David Carpenter, a PCBs expert at the State University of New York-Albany, said he advocates dredging because PCBs are so persistent.

"Natural processes are never going to take care of these compounds," he said. "They are only going to spread."

Another issue is how much of the Housatonic to cleanse. It's widely believed that the final order will focus primarily on the most heavily contaminated portion, a roughly 10-mile stretch from Pittsfield to Woods Pond in Lenox.

Created by a nearby dam, the manmade pond sits quietly tucked away at the foot of October Mountain in the picturesque Berkshires. The government says PCBs are embedded in the pond sediment and adjacent floodplain soil.

The Connecticut portion of the river is likely to be subject largely to monitoring only, though state officials have argued that GE should address PCBs that have collected at dams that once helped power mill towns along the river.

Officials must sort through the arguments before making a decision.

“While we all hope we’ll have a clean Housatonic, we have to go through that process to determine exactly how clean that will be,” said Susan Svirsky, the EPA’s Housatonic River project manager.

For Thomas Hoffman, of Washington, Mass., the debate is personal on two levels.

Hoffman said his father worked for GE in Pittsfield for 40 years before dying of pancreatic cancer at age 59. He can’t prove the cancer was linked to PCBs and doesn’t hold the company responsible for his father’s death, but does fault the company for not acting quickly enough when it began to realize the extent of the environmental disaster.

These days, he enjoys catching “trophy-sized” bass and pike and relishes canoe trips down the Housatonic where he can paddle for miles in solitude while catching glimpses of otter, ospreys and even bald eagles.

Hoffman shudders at the thought of “heavy machinery” tearing up the river but also realizes that something must be done.

“Yes, it has to be cleaned up,” said Hoffman. “To not clean it up and pretend (the PCBs) will go away is not the answer.”

Whitefish River to be blocked for toxic cleanup (*KULR-8 News*)

WHITEFISH, Mont. (AP) — Officials in northwestern Montana say the Whitefish River will be blocked and the flow piped downstream so crews can vacuum toxic sludge off the riverbed.

The plan is the second part of a three-part cleanup of old railroad pollution being carried out by Burlington Northern Santa Fe railroad that is being overseen by the Environmental Protection Agency.

Jennifer Chergo of the EPA says work should begin within two weeks.

The EPA ordered the railroad to undertake the river restoration near a fueling facility upstream from Whitefish after finding diesel and other contaminants in the sediment.

Crews plan to use portable dams and reroute the river through several four-foot diameter pipes, leaving the riverbed dry.

Information from: Missoulian, http://www.missoulian.com

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