

ENVIRONMENTAL SYNOPSIS

The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



In the space of a week, the Joint Committee went from the ridiculous to the sublime when it comes to the recycling and reuse of waste tires. First the ridiculous. Remember the child's refrain about the bear that went over the mountain and what do you think he saw? Well, last

week, I joined the committee staff in climbing a pristine, snow-covered Greenwood Township, Columbia County mountain, and we saw another mountain as well – a mountain of scrap tires! Maybe six million of them, maybe 10 million. No one really knows.

It was Pennsylvania's largest scrap tire pile, known as the Starr tire pile and it has been a dark and dangerous blot on the horizon for 20 or more years. Ever since the Joint Committee helped to enact 1996's Waste Tire Recycling Act, the Starr pile has been looming as the 800-pound gorilla. While the Commonwealth has made progress in cleaning up waste tire piles, reducing a 36 million tire backlog to fewer than 12.7 million (give or take, depending in part on how many tires there really are at the Starr site), the sheer size of the Starr pile has proven to be problematic.

The committee visited the site at the invitation of Rep. David Millard and Sen. John Gordner of Columbia County, both of whom have expended untold hours seeking to alleviate this eyesore and potential health and safety hazard. Thanks to their efforts, remediation efforts

at last seem to be moving forward. Of \$6.8 million in the state budget for waste tire cleanup, \$2 million is earmarked for the Starr pile. The Department of Environmental Protection (DEP) is inviting proposals for a new grant program to help fund projects aimed at creating markets for the use of Starr tires. And, DEP is going after 51 responsible parties whose tires ended up in the Starr pile. Ten are already cooperating and have moved 136,000 tires. DEP has also taken control of the pile from the Starrs (the owners), have frozen their assets and put in place civil penalties against them until cleanup is assured.

Seeing a site like the massive Starr tire pile only adds emphasis to what the Joint Committee has been preaching for years – that new markets for waste tires are desperately needed. We need to find more ways to move tires from mountains to highways, playgrounds, synthetic running tracks, sound barriers and playing fields, to stabilize embankments and to manufacture new products.

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NOTES FROM THE DIRECTOR



CRAIG D. BROOKS, DIRECTOR

Michigan recently notched an important victory in the battle to stop the importation of trash into the state. A federal judge has refused a waste industry's request to block the implementation of the state regulation which says that trash shipments from out-of-state must adhere to state disposal standards. This means that shipments cannot contain beer and soda cans, whole tires and lead-acid batteries, among other materials.

However, the controversial rules are not out of the woods just yet. They are still facing a lawsuit and potential appeals by the National Solid Waste Management Association (NSWMA).

Michigan regulations also stipulate that Michigan landfills can only accept trash that comes from jurisdictions that have certified that they in fact, prohibit the same items that Michigan prohibits from landfill disposal. Or, the importer must certify that a shipment has passed through a processing facility and removed banned items and documented the inspection.

The waste import rules were a part of a package of laws that clarified the items banned from landfills and were perceived by the waste industry as an attempt to stem the importation of Canadian trash, particularly from Toronto. However, the Michigan Department of Environmental Quality claims that the regulations were intended to control the content, not the amount of trash shipments.

The original lawsuit against the state alleged that the rules violated the U.S. Constitution's Commerce Clause because it discriminated against out-of-state trash by hampering free flow into Michigan while not doing so for in-state solid waste. This past fall, a U. S. district judge had determined the state had not sufficiently devel-

oped the necessary procedures to implement the rules and temporarily suspended the law until the state could prove adequacy. The judge later wrote that he did not detect the laws were crafted with discriminatory intent and that the laws "contain no overt distinction between in-state and out-of-state waste, nor do they expressly bar the entry of out-of-state-waste into Michigan". The jurist added that the state has the constitutional right to limit the composition of solid waste disposed of in Michigan landfills so long as the limitations are uniformly applied to in-state and out-of-state waste.

A federal judge has "trashed" a challenge to trash importation regulations in Michigan, but the case may still be "recycled" to the next level

NSWMA says that it will not appeal the decision but will proceed with the next phase of the lawsuit. The wording of the court's decision suggests that the judge is deferential to what the state is doing and sees the state as crafting these rules carefully. Meanwhile, trash from Canada and other states

has met the new requirements and is entering the state.

However, in Kentucky, a federal judge has ruled that a law mandating where trash collected in the county can be disposed of does not pass constitutional muster. The ordinance was struck down because it was determined that it violated the Commerce Clause by discriminating against the interstate flow of waste.

The ordinance would have required that trash collectors register with the county and dispose of their waste in county-owned landfills or use county-owned transfer stations. The ordinance was said to create low cost disposal services that prevented dumping problems. The landmark 1994 *Carbone vs Clarkstown* decision says that all waste must be treated evenhandedly.

RESEARCH BRIEFS

Each month, the committee's staff researches and prepares a number of "briefs" on several topics relevant to the Joint Conservation Committee's mission. Very often, these briefs include references to reports and further research on the topics so that readers may pursue issues on their own.

Worker Survey Reveals Gaps in Chemical Plant Safety and Security

— Tony M. Guerrieri, Research Analyst

In the wake of 9/11, many chemical companies, refineries and transporters of chemicals say they have added a mix of security measures to lower the risk of terrorist attack. However, at least one union-backed study finds that facilities that use and store hazardous materials are not prepared for terrorist attacks even though a majority of their employees think they are high profile targets. These are the findings of a survey conducted by the Paper, Allied-Industrial, Chemical & Energy (PACE) International Union of its local unions in the chemical, paper, oil refining and other industries.

The PACE survey, *"Workplace Incident Prevention and Response Since 9/11"*, indicates that the work force has neither been adequately prepared nor involved, and that stronger measures must be taken to protect workers and communities.

There are 15,000 facilities in the United States that produce or store large quantities of 140 highly hazardous chemicals that are regulated by the U.S. Environmental Protection Agency (EPA) under their Risk Management Program (RMP). Tens of millions of people live in the areas surrounding these RMP sites. PACE represents approximately 50,000 workers at 189 RMP sites in 38 states (Texas has 21 RMP sites, Ohio and Pennsylvania each have 12 sites), mostly in the paper, chemical, and oil refining industries.

PACE's survey was sent to the local union officials at each of the 189 PACE-represented RMP sites and had a 70 percent response rate. Of the 133 sites that responded, 125 said they had quantities of chemicals or other hazardous materials large enough to cause a catastrophic event.

The survey results were based on these 125 sites. The majority of the responding worksites were chemical plants, paper mills or oil refineries (32 percent, 26 percent, and 24 percent respectively). The remaining 18 percent of the worksites were from other industries.

Questions in the survey gauged respondents' perceptions of their companies' vulnerability, disaster prevention programs, emergency response plans and training, and involvement in the local union, hourly workers and the community.

The PACE study says preparation and involvement of the work force is inadequate and stronger measures are needed to protect workers and communities

Over half of the 125 sites indicated that they face a high or medium likelihood of a catastrophic event due to terrorist attack (54 percent) or unintentional incident (59 percent). Only 44 percent of the respondents believed that their company's actions in preparing to respond to an event caused by a terrorist attack were effective.

On average, sites that reported a high probability of a catastrophic event felt more negative about the effectiveness of their company's actions in preparing to respond to a terrorist attack. Almost half (45 percent) of the respondents in the high probability group felt their company's actions were ineffective compared to 18 percent for medium probability sites and 11 percent for low probability sites.

While two-thirds of the responding sites had assessed vulnerabilities, less than half had taken preventive actions that could directly reduce the likelihood of a catastrophic event, such as reducing volumes of hazardous substances (only 17 percent).

Almost one-third of the respondents said that since 9/11, their companies have not provided training on preventing (34 percent) or responding to (28 percent) a catastrophic event caused by a terrorist attack. At many other sites, only a small fraction of the work force had been trained. Three-quarters of respondents said that bargaining unit employees at their sites need additional training related to these topics.

A majority of respondents said their companies did not involve the local union or hourly workers in company plans or actions to prevent or respond to a catastrophic event caused by a possible terrorist attack. Fifty-seven percent of the respondents did not know if their companies informed local communities of potential health threats from plant-specific exposures.

The PACE survey recommends expanded training opportunities for PACE members about the prevention and response to hazardous materials emergencies and the roles local unions, hourly workers and community members can play in prevention and response activities.

The PACE survey, *“Workplace Incident Prevention and Response Since 9/11”*, is available at <http://www.pacehealthandsafety.org/chemical%20safety%20survey%2010-19-04.pdf>.

Federal Policies Supporting Biofuels Make Sense

— Craig D. Brooks Executive Director

Federal policies that would support biofuels development and markets could improve air quality, support rural economies, and provide a source of energy that is cost competitive to oil, according to a report by the Biotechnology Industry Organization. The report recommends that the federal government take several actions to promote the use of biofuels, fuels made from renewable resources such as switchgrass or corn stalks.

According to the report, policies that promote biofuels in combination with smart growth development and support hydrogen and electric vehicles would make the United States less vulnerable to oil prices, dependency on oil and the environmental impacts of oil use. Currently the U.S. consumes 25

percent of the world’s total oil production. The report recommends that the federal government:

- Invest about \$1.1 billion between 2006 and 2015 in research, development and demonstration of biofuels;
- Provide \$900 million in incentives to purchase biofuels but phase out subsidies as the industry grows; and
- Adopt renewable fuels standards for cars and trucks so that all vehicles sold by 2015 can use traditional fuels and biofuels.

The report predicts that advanced biofuels production facilities could produce gasoline alternatives at costs ranging between \$0.59 and \$0.91 per gallon by 2015 which would make them more than cost competitive with gasoline and diesel fuel. The report also predicts:

- By 2025, producing crops to make biofuels could provide farmers with profits of more than \$5 billion per year;
- Biofuels will be cheaper than gasoline and diesel, saving us about \$20 billion per year on fuel costs by 2050; and
- Biofuels could reduce our greenhouse gas emissions by 1.7 billion tons per year, equal to more than 80 percent of transportation-related emissions and 22 percent of total emissions in 2002.

The report suggests that using a combination of biofuels, energy efficiency and smart growth, the United States can reduce its oil demand by two-thirds, from more than 30 million barrels a day to about 10 million barrels. In this context, biofuels could provide more than 40 percent of our remaining transportation related energy needs and further reduce our demand for gasoline.

The report, *“Growing Energy; How Biofuels Can Help America’s Oil Dependence”*, is available at <http://bio.org/ind/GrowingEnergy.pdf>.

PA Trivia Question: Where in 1843 was bituminous coal first used to fire a PA blast furnace?
(See p. 6 for the answer)

Hazardous Waste Sites Growing in Number and Cleanup Costs

— Tony M. Guerrieri, Research Analyst

Up to 355,000 contaminated sites will require cleanup over the next 30 years at a projected cost of up to \$253 billion, according to a report by the U.S. Environmental Protection Agency (EPA).

The report, "Cleaning Up the Nation's Waste Sites: Markets and Technology Trends, 2004 Edition", authored by the agency's Office of Solid Waste and Emergency Response, covers all polluted sites in the United States, ranging from the most toxic sites on the Superfund National Priorities List (NPL) to thousands of lightly to moderately contaminated brownfields.

The list includes an estimated 150,000 sites that will require cleanup under state-mandated programs, voluntary cleanup programs, and brownfields programs. Excluded are sites where cleanup work is ongoing or complete.

According to EPA, the estimated cost of the cleanup of 355,000 hazardous waste contaminated sites could be as much as \$253 billion over the next 30 years

The list also includes up to 125,000 leaking underground storage tanks (UST) that are expected to need remediation within the next 10 years. Sites where cleanups already have begun are not included.

Also on the list of sites remaining to be remediated are about 6,400 U.S. Department of Defense (DOD) facilities and 5,000 U.S. Department of Energy (DOE) sites.

About 3,800 "corrective action" sites are waiting to be cleaned up under the Resource Conservation and Recovery Act (RCRA), and 736 of the most highly contaminated sites remain to be cleaned up under the Superfund program, according to the report.

The report, which updates and expands a 1996 analysis, provides a national overview of the market and technology for the cleanup of sites contaminated primarily with hazardous waste and petroleum products.

Under current regulations and practices, the EPA estimates, a total of 235,000 to 355,000 sites will need to be cleaned up over 30 to 35 years, at an estimated cost of \$174 billion to \$253 billion.

The estimated average number of sites needing cleanup in the time period of 2004 – 2033 is 294,000, including 77,000 sites that already have been discovered plus an estimated 217,000 sites that are expected to be discovered in the future. The report estimates the cost of cleaning up 294,000 sites as \$209 billion. The EPA emphasized throughout the report that the numbers are only estimates, and the projections get less reliable the further out they go in years.

More than 90 percent of the sites are in programs that tend to have smaller, less-complex cleanup projects such as USTs and hazardous waste sites managed under state cleanup programs, according to the report. Specifically, USTs account for 43 percent of the total sites and various hazardous waste properties account for 50 percent.

These two categories, however, only account for 22 percent of the costs. The report indicates that the remaining seven percent, including those on the Superfund NPL and DOD and DOE sites, tend to be larger, more complex, and more costly to remediate.

Federal agencies other than DOD and DOE, such as the departments of Interior, Agriculture and Transportation, have been spending about \$200 million annually for site cleanups, but have up to \$21 billion more of cleanup work to be done over the next 30 years.

Groundwater and soil are the most prevalent contaminated media. More than three quarters of

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NPL, RCRA, DOD and DOE sites have contaminated soil or groundwater, or both. Soil and groundwater also are a primary concern for UST sites. Some markets also have more specialized needs arising from wastes that are unique to a particular industrial practice. For example, the DOE has a need for technologies to characterize, treat, and dispose of mixed waste; remediate radioactive tank waste; stabilize landfills; and deactivate facilities. The DOD is concerned with remediating soils contaminated with explosives and unexploded ordnance and perchlorate.

The report was prepared to assist industry and government officials to develop, commercialize and market new cleanup strategies and technologies.

The EPA report, *"Cleaning Up the Nations Waste Sites: Markets and Technology Trends, 2004 Edition"*, is available at: <http://www.clu-in.org/download/market/2004market.pdf>.

Critical Habitat Designations Called Into Question

— Craig D. Brooks, Executive Director

In a case that could have an effect on critical habitat designations across the country, a California group plans to challenge critical habitat designations for nearly 50 endangered or threatened species in the state, claiming that federal agencies overestimated the area's essential for protecting these species and failed to conduct proper economic impact analyses for their decisions. The Pacific Legal Foundation (PLF) notified the U.S. Fish and Wildlife Service (FWS) and NOAA fisheries that it intended to challenge the designations on behalf of the California Chamber of Commerce and the Home Builders Association of Northern California.

The PLF argues that agencies need to amend critical habitat designations for 16 animal species and 32 plant species in light of recent rulings that invalidated about 400,000 acres for the *Alameda whipsnake*, an endangered species. The PLF argues that the FWS did not have adequate survey data to know what land was actually occupied by the snake and did not estimate the impact the critical habitat would have on large portions of private lands slated for new residential development.

The Endangered Species Act requires agencies to designate critical habitat at the same time a species is listed as endangered or threatened. The critical habitat must contain physical and biological features that are essential to the conservation of the species and which may require special management considerations for protection. The agencies must prepare detailed maps of such areas, conduct scientific and economic analyses and solicit public comment. The designations affect federal lands or federally funded or permitted activities on private lands.

Development cannot occur unless the FWS first ensures that it is not likely to jeopardize the continued existence of the endangered or threatened species or to harm its critical habitat. Because critical habitat designations cover millions of acres in California and throughout the country, the PLF argues that they affect a wide range of business activities including road building, timber, logging and agricultural activities. These designations have had an effect on the state's economy.

Environmental organizations suggest that critical habitats are essential to the recovery of species and rarely stop or divert projects outright. In order for construction and other land development to proceed in critical habitat areas, businesses must apply for a permit from FWS, which requires the development of a Habitat Conservation Plan that minimizes the effects on a species. The plan must also include mitigation measures to preserve or enhance existing habitat, create new habitat, or restrict certain land uses.

It has been argued that critical habitat designation is not necessary for species recovery in most cases and that listing a species is far more important because it triggers a number of regulatory controls. To date, the federal government has designated critical habitat for less than one-third of the 1,200 species listed as endangered or threatened.

A copy of the PLF notice is available at http://www.pacificlegal.org/critical_habitat/60%20day.pdf. A list of the 48 endangered or threatened species can be found at http://www.pacificlegal.org/critical_habitat/Appendix%20A.pdf.

(Answer to PA Trivia Question: Sharon, Mercer County)

(Source: Pennsylvania Trivia compiled by Ernie and Jill Couch, Rutledge Hill Press)

ON THE HORIZON . . .

A LOOK AT UPCOMING EVENTS



- ✓ **Monday, March 14, 12 noon, Room 205, Matthew J. Ryan Building – Environmental Issues Forum.** Harold H. Schobert, director of The Energy Institute at Penn State University, will speak about the institute's project to turn coal into jet fuel and the related impacts of the coal by-products on other industries.
- ✓ **Thursday, March 17, 10 a.m., Penn Stater Conference Center Hotel, 215 Innovation Boulevard, State College, Conference Room 206 – JCC Forestry Task Force Meeting.** Discussion will center around forest bioreserves. (Rescheduled from February 24).
- ✓ **Monday, April 4, 2005, 12 noon, Room 205, Matthew J. Ryan Building – Environmental Issues Forum.** Celebrate Earth Day early as Julia Marano, executive director of Keep Pennsylvania Beautiful, speaks about the organization's and Pennsylvania's anti-litter campaign and the Great Pennsylvania Clean-up.

**Environmental Issues Forums are open to the public.
Please call the committee office at (717) 787-7570 if you would like to attend.**

COMMITTEE CHRONICLES . . .

REVIEW OF SOME COMMITTEE MEMORABLE EVENTS



Surrounded by tire mountains at the Starr tire pile, Rep. Dave Millard (2nd from left), Sen. John Gordner (2nd from right) and Committee chairman Rep. Scott Hutchinson (right) discuss remediation plans with DEP Regional director Robert Yowell (left).

Waste tires as far as the eye can see at the Starr tire pile.



The heart of the Lafarge Whitehall Cement Plant, which uses waste tires as part of its fuel source.



Committee members pose with Lafarge plant officials following the committee's tour of the plant. From left to right: plant Manager Mike Klenk, Rep. Julie Harhart, the committee's host at Lafarge's cement operation, committee member Rep. Thomas Petrone, committee chairman Rep. Scott Hutchinson and plant Environmental and Public Relations Manager Vince Martin.



We need to increase the use of tire chips and crumb rubber, to use more tires for energy and to develop new technologies that use waste tires for new purposes.

In short, there must be a continuing commitment to rid the landscape of waste tire piles once and for all. It is a solvable problem if a consistent effort and support for that effort is maintained.

Which brings me to the sublime part of the committee's week. After visiting the disturbing Starr tire pile, the committee paid a visit to the Lafarge Whitehall Cement Plant in the village of Cementon, Whitehall Township, Lehigh County. The committee visited at the invitation of Rep. Julie Harhart, a committee member in whose district Lafarge is located, and who has worked for years to assist Lafarge in developing safe, effective alternative fuel sources.

The company is a valued part of its community. It employs about 100 people, has about a \$7.5 million payroll, supports well over 100 contractors with their 11 different products, and pays well over \$200,000 in taxes to its community. In addition, the company is an active participant in environmental and wildlife conservation efforts with organizations like the Wildlands Conservancy and the World Wildlife Federation.

Lafarge has been using waste tires as tire-derived-fuel (TDF) since 1993, and does it in a clean, efficient, non-offensive manner. Over the years, Lafarge has consumed about 21 million tires, burning about 1.5 to 2 million annually. Not only does the use of tires increase the BTU's of Lafarge's kilns, but it reduces the burning of non-renewable fossil fuels like coal and coke, and rids the environment of the unsightly tires that would otherwise have to be disposed of. The company even collects the dust and ash from the cement making process and reuses that to make cement.

The other thing Lafarge does right is to communicate with its neighbors, sending out newsletters to thousands of local folks and keeping them informed of changes, improvements and developments at the plant. That's what Lafarge has done and is doing in regard to a new fuel plan currently before DEP for permitting. The company would like to add plastic-derived-fuel (PDF) to its mix. The company would take non-recyclable plastic items (numbers 4-7, presently thrown in the garbage by many households and then landfilled), shred them and burn the shredded material in its kilns. This saves landfill space, reuses plastic products that are otherwise thrown away, saves more fossil fuel and would mean some new jobs in the Lehigh Valley.

Such innovation and willingness to invest in Pennsylvania is what is needed at places like the Starr tire pile as well. We need to take a page from Lafarge's book and combine product ingenuity, clean energy efficiency and the good neighbor policy to create the sublime - new jobs, new business and sustainable energy.

The Joint Committee will continue to seek out and support examples that do that.



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