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The Newsletter of the Great Lakes Regional Pollution Prevention Roundtable (GLRPPR)

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GLRPPR Establishes Regional Measurement Task Force

In late October 2003 Alan Abramson, the newly appointed director of EPA's Office of Pollution Prevention (OPP) in the Pollution Prevention and Toxics (OPPT) branch, presented and discussed with representatives from the EPA regional offices, their draft strategic plans for the next couple of years. A major topic of the meeting was how to measure pollution prevention progress. U.S. EPA feels that we all need to do a much better job.

The recent National Pollution Prevention Roundtable (NPPR) report "A Decade of Progress" (http://www.p2.org/p2results/2418_historyfinal.pdf) is being considered by the U.S. EPA as an example of the type of information it wants the states to provide, and which it would in turn present to Congress. U.S. EPA OPP will be funding the National Pollution Prevention Roundtable (NPPR) to produce an updated progress report based on voluntary submissions from the state pollution prevention (P2) programs. The next report will cover 2001 and 2002 data. U.S. EPA plans to give NPPR \$50,000 in this first year to support the development of a second report. NPPR and EPA are expecting the states to contribute data in a similar process as that used to develop "A Decade of Progress."

At the national level, NPPR is forming a Measurement Task Force. Terri Goldberg from the Northeast Waste Management Officials Association (NEWMOA) and Chris Wiley from Pacific Pollution Prevention Resource Center (PPRC) are heading up this task force. In addition to being NPPR members, both represent Regional Pollution Prevention Resource Exchange (P2Rx) Centers. At the regional level, EPA and NPPR anticipate the P2Rx Centers, which include GLRPPR, will have a data collecting and coordination role in this and future years.

In order to develop a response to U.S.EPA OPP and help with this project, GLRPPR has established a task force of representatives associated with P2 activities in the Great Lakes region. The task force is informally named the Great Lakes Regional Measurement Task Force. The goals of this group include understanding the various measurement options, agreeing on an approach or set of recommendations, and representing all organizations within the Great Lakes states since many have an interest in this effort. The main idea is to share how each organization within the Great Lakes states measures P2 accomplishments now, investigate how others are doing it, and discuss how we can make improvements.

It is anticipated that this task force will have a life span of approximately two years. The task force anticipates meeting monthly via conference calls, while subcommittees may meet more frequently. Over 60 people were suggested to participate in this task force, but the number of individuals asked to participate was narrowed to three or four from each GLRPPR state or province. To review the list of members or contact the representative from your state see

http://www.glrppr.org/docs/GL_Measurement_Task_Force_Members.pdf.

Objective of Great Lakes Measurement Task Force

Gary Miller from the Illinois Waste Management and Research Center (WMRC) and Debra Jacobson from WMRC/GLRPPR will represent the regional measurement task force at the national and state level. They will work to understand and communicate activities and information from the NPPR, U.S. EPA, and all regional programs. They will help identify a representative from the Great Lakes region to serve on the NPPR measurement task force and work group.

The state representatives on this task force will be asked to share opinions and existing activities within their state. They will also help coordinate opinions, collect data, and share regional and national measurement activity information with organizations and representatives within their state.

Goals of the Great Lakes Measurement Task Force:

- Review and evaluate existing methods of reporting pollution prevention progress on a geographic basis (not facility specific).
- Review and evaluate relevant state regulatory frameworks for measuring pollution prevention progress.

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- Explore national approaches to improve P2 measurement such as improved TRI Form R reporting.
- Implement consensus method(s) by each state (and hopefully province)

MnTAP Sees Great Results in 2003

In 2003 the Minnesota Technical Assistance Program (MnTAP) helped Minnesota companies reduce over six million pounds of waste and conserve 16.7 million gallons of water—saving almost \$2.7 million. This was accomplished through telephone assistance, site visits, a student intern program and the Materials Exchange.

Student Interns Deliver Solutions

In 2003, MnTAP interns helped six Minnesota companies save nearly \$256,000 by reducing 41,850 pounds of solid waste, 65 pounds of molybdenum and 13.2 million gallons per year of water. Using the research of a MnTAP intern, Crenlo in Rochester, Minnesota, modified procedures for paint filter change out, saving \$95,600 annually. Lou-Rich in Albert Lea, Minnesota, cut wastewater by 8.3 million gallons, saving over \$21,000 a year.

MnTAP is MnGREAT!

MnTAP and Donna Peterson, MnTAP staff scientist, were honored with 2003 MnGREAT! awards from Minnesota's Interagency Pollution Prevention Advisory Team (IPPAT), coordinated by the Minnesota Office of Environmental Assistance. MnGREAT! awards recognize environmental achievements by government employees. The program focuses on preventing waste and pollution, reducing waste at its source and conserving resources.

MnTAP was honored for its work with Hospitals for a Healthy Environment (H2E) to improve environmental performance in the health care sector. MnTAP staff played an important role in developing two key resources on chemical waste minimization and total waste reduction in health care facilities. Catherine Zimmer, MnTAP health care specialist, has also engaged many Minnesota hospitals in H2E through technical assistance, outreach and MnTAP's student intern program.

Donna Peterson was honored for providing excellent service to her colleagues and Minnesota businesses. Donna is a nationally recognized expert on preventing pollution in the printing industry, one of Minnesota's largest industries. She was a critical player in the Great Printers Project, which prompted over 40 Minnesota printers to sign on to environmental, health and safety practices. In addition, Donna coordinated the student intern program at MnTAP for several years, supervised over 10 intern projects and helped eight Minnesota companies reduce solvent and cleaning waste by 140,000 gallons per year through an EPA technical assistance project. After over 20 years of outstanding service in the environmental field to Minnesota businesses, Donna retired from MnTAP in December 2003.

Save a Tree, Go Catalog Free—Materials Exchange Program Eliminates Catalog

The Materials Exchange Program has eliminated its biannual printed catalog and now sends email listings twice a month to over 2,000 registered users. The catalog was cut to help reduce waste and because of budget constraints. Although the catalog was a great tool for getting the word out about the Exchange, listings quickly became outdated. Email notices are much more efficient at keeping users aware of current listings. In place of the catalog, registered Exchange users now receive a postcard twice a year reminding them to visit the web site (www.mnexchange.org) to search for available items and to list wanted items. Information about all available and wanted listings are available online.

Everything You Need to Know About Growing Your Business Sustainably

Everything you need to know...that is the theme of Michigan's 9th Annual Sustainable Business Conference & Expo, to be held on February 27, 2004 at the University of Michigan Business School in Ann Arbor.

This year's keynote speaker is H. Thomas Johnson, Professor of Business Administration at Portland State University. In a survey published by the Harvard Business School Press in 2003, Johnson was named as one of the 200 leading management thinkers living today. In 2001 he received the Shingo Prize for Excellence

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in Manufacturing Research for his book, *Profit Beyond Measure: Extraordinary Results through Attention to Work and People*. Johnson will discuss how enterprises can organize work to smaller scale and slower pace and prove that small is not only beautiful, but is efficient practical, and Earth-friendly.

Breakout sessions will include case studies and implementation tools for sustainability in product design, packaging, bio-based materials, energy and cogeneration, buildings, social responsibility, third-party certifications, marketing, fuels and transportation, land use, ISO and EMS, and much more.

Zingerman's Delicatessen will be catering the event, and Todd Wickstrom, a managing partner from Zingerman's will be speaking on the Slow Food Initiative. Leopold Brothers of Ann Arbor, another local business with a focus on environmental effectiveness, will provide refreshments and a discussion about its brewery design.

The conference and expo are being organized by the Southeast Michigan Sustainable Business Forum. To learn more about the forum visit www.smsbf.org. Online attendee and exhibitor registration, and a full conference brochure, are available at the Small Business Association of Michigan's website at www.sbam.org/sustain. For more information, contact Angela Gerry at 1-800-362-5461 or email alg@sbam.org.

Michigan Automotive Parts Supplier Practices P2 in Muskegon Facilities

ADAC Door Components, an automotive parts supplier based in Muskegon, Michigan, has initiated multiple pollution prevention projects at its Muskegon facilities. These improvements focus on source reduction and waste minimization and have resulted in an overall decrease of operational costs, hazardous materials consumption and associated hazardous waste disposal.

The first process improvement is referred to as Mini-Systems for basecoat (color) applications. Relatively small quantities are consumed of several different basecoats in a typical production day compared to a few other coatings such as prime and clear coats that require a higher daily volume as they are applied to parts per customer specification.

The new Mini-Systems use multiple, smaller paint pots located adjacent to the spray booth applications. The older system uses larger containers in a distant, large mix room that transferred paint via hard pipe over a longer distance. Less frequent color changes and associated purge requirements to flush the lines clean have been achieved by utilizing and dedicating multiple Mini-Systems to specific, comparatively low volume usage colors. The tangible benefits achieved from the Mini-Systems include:

- more efficient, timely production operations
- less wasted coating material
- less purge solvent consumption, and
- less spent purge solvent (hazardous waste) generation

The monthly average generation rates for hazardous waste alone have been reduced by 41 percent and 45 percent, respectively, for the two locations, a great example of source reduction for ADAC's paint operations.

Historical recycling/disposal practices for the Spent Purge Solvent were to send the hazardous waste to a fuel blender for consumption. ADAC then made a cost improvement change in its recycling/disposal practices. Offsite co-mingling of the spent purge solvents from the respective locations went into a single bulk transport container and were sent directly to a cement kiln as a fuel source.

Additionally, ADAC recently launched an offsite Solvent Reconstitution Program for its Spent Purge Solvent, further reducing the amount of hazardous waste for offsite recycling/disposal. The Solvent Reconstitution Program started off by conducting trials with four different suppliers. Each trial consisted of onsite consuming of virgin solvent with a specified formula, collecting enough spent purge material as a hazardous waste to make a full batch load, then sending it offsite for recovery via solvent distillation. Recovered solvent was then

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tested and reconstituted with additional virgin solvent offsite by each respective supplier to a specified formula range. Remaining still bottoms collected from the distillation process were recycled/disposed of via fuel blending at a cement kiln.

Based on objective evidence collected from these trials, a supplier was selected to start the program. As part of the selection and due diligence process, site tours were conducted at the selected supplier to confirm how the hazardous waste and recovered product were handled and tested. Initial results indicate that ADAC can reuse 70 to 80 percent of the spent purge solvent previously sent off as a hazardous waste. The remaining 20 to 30 percent of still bottoms from the Solvent Recovery Process will continue to be disposed of at the cement kiln. ADAC will also be purchasing less virgin solvent by consuming and recycling the Reconstituted Purge Solvent.

ADAC Plastics is an automotive supplier that produces door handles and components, cowl vent grilles, exterior trim, and marker lighting for worldwide automakers. ADAC is compliant with the ISO14001 Environmental Management System Standard and all five domestic manufacturing locations have been designated by the State of Michigan as "Clean Corporate Citizens." For more information on the company and its capabilities, visit www.adacplastics.com, or call 616-957-0311.

NCR3 Develops More Efficient Remanufacturing Technologies

Surface cleaning is often a time-consuming and expensive operation for remanufacturing companies that restore worn and discarded durable products to a like-new condition meeting original equipment manufacturers (OEM) specifications. This is particularly true of the automotive parts remanufacturing industry, which often relies on older cleaning technologies. These technologies create significant amounts of hazardous waste and are energy-intensive, labor-intensive and expensive. Many of these companies do not have the knowledge or resources to identify and implement more efficient cleaning technologies, resulting in lost jobs and revenues for an important New York State industry.

The National Center for Remanufacturing and Resource Recovery (NCR3) at the Rochester Institute of Technology in Rochester, New York is the nation's leading center for applied research and development in remanufacturing technology. NCR3 has helped many companies identify and implement alternative cleaning technologies that are cost-effective, energy-efficient and environmentally friendly. In 2002, NCR3 received a New York State Governor's Award for Pollution Prevention for a project to identify and facilitate implementation of these technologies in New York State's automotive parts remanufacturing industry.

In the first phase of the project, 24 New York automotive parts rebuilders were recruited to serve as partner companies. These companies provided automotive parts for cleaning and information about their current cleaning practices to NCR3. A review of cleaning systems was conducted to identify those technologies that would be most effective for this industry. Cleaning equipment was purchased and installed at NCR3 and a test program was developed for cleaning automotive parts using this equipment. Automotive parts provided by the partner companies were cleaned under a variety of conditions and returned to the partner companies for evaluation. Information about the parts and cleaning processes was collected and stored in a database for subsequent retrieval and analysis. From this information, best cleaning practices for specific parts and contaminants were identified and cleaning costs for each practice were estimated.

In the second phase, the results of the project were disseminated to the partner companies. This was accomplished through cleaning workshops held at NCR3, presentations at conferences, direct assistance to the partner companies themselves and by the creation and distribution of fact sheets. In addition, two partner companies served as demonstration sites, where demonstrations of particularly effective cleaning technologies were conducted for an audience of interested rebuilders. These partner companies were able to purchase the equipment being demonstrated at a significant discount and the public demonstrations encouraged other automotive parts rebuilders to implement these alternative technologies. Finally, the results of the project were summarized in a user-friendly report distributed to automotive parts remanufacturers throughout New York State.

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The benefits from installing alternative cleaning technologies at just two of the 24 partner companies participating in this project are summarized below:

- The payback period for replacing a mid-pressure spray washer with a high-pressure spray washer was less than eight months and generates annual savings of \$105,000 on an installed cost of \$67,000. In addition, electrical consumption was reduced by 1,200 kilowatt-hours per year.
- By installing an ultrasonic cleaning system, a rebuilder completely eliminated the need for a manual cleaning operation and no longer needed to dispose of a solvent waste stream. Energy consumption was reduced while increasing product quality and \$10,000 of annual savings was realized on a capital investment of \$21,300.
- The installation of a wash water filtration system resulted in longer bath lives, reduced operating costs for soap, water and waste disposal, reduced labor costs and generated \$5,300 of annual savings on an installed cost of \$7,200. In addition, natural gas consumption was reduced by 79,000 cubic feet per year and annual consumption of electricity was reduced by 12,600 kilowatt-hours.

If these systems were installed in all 945 automotive remanufacturing facilities in New York State, the potential benefits would be a reduction in natural gas consumption of more than 27.6 million cubic feet per year, a reduction in power consumption of more than 4.39 million kilowatt hours (KWH) per year, the elimination of a hazardous waste stream of more than 125,000 gallons per year, and a reduction in non-hazardous waste of more than 560,000 gallons per year.

For profiles of other winners of New York State Governor's Awards for Pollution Prevention, see <http://www.dec.state.ny.us/website/ppu/p2gov.html>. Visit <http://www.dec.state.ny.us/website/press/pressrel/2003/2003116.html> for an announcement of the 2003 award winners.

Generator Estimates Savings of \$472,000 by Implementing P2

A follow-up study of an Ohio company shows some pollution prevention projects have generated big savings. In 2000, Ohio EPA's Division of Hazardous Waste Management (DHWM) and Office of Pollution Prevention (OPP) conducted a pollution prevention (P2) assessment at Mill's Pride, a manufacturer of hardwood kitchen cabinets located in Waverly, Ohio. The assessment focused on the company's coating application processes, which generated large quantities of hazardous waste, spent solvents and coatings, spent rags and paint filters. A recent follow-up call to the company revealed that several P2 projects were implemented in mid-2002 as a result of the assessment, and that the company will have realized a savings of approximately \$472,000 in the first year after making improvements.

Ohio EPA identified five suggestions for improving efficiency on Mill's Pride's coating lines by decreasing overspray on cabinet parts that were being coated. Based on these suggestions, Mill's Pride chose to install new reciprocators on one of its coating lines. The reciprocators are a component of the spray gun that has an electric eye, which "reads" the edges of the boards, automatically shutting off the spray at the edge of the board. As a result, Mill's Pride has increased the transfer efficiency of their coating process by an estimated 35 percent. This also resulted in a similar reduction in the volume of waste generated by the company, as well as decreasing the volume of raw materials the company has to purchase for coating and cleanup. Mill's Pride is generating 33 fewer drums of hazardous waste solvents and coatings each month, estimated to be a savings of \$27,720 per year in hazardous waste disposal costs. The purchase of 35 percent less stain, topcoat and sealer amounted to a savings of \$432,000 per year. Total annual savings from waste disposal and raw materials as a result of installing new reciprocators is approximately \$460,000. The estimated environmental benefit of reducing coating losses is a 30 percent reduction in total annual volatile organic compound (VOC) emissions, or an annual reduction of 137 tons of VOCs.

Ohio EPA also suggested that Mill's Pride replace disposable filters used in two paint booths with reusable filters, and replace disposable rags used for cleanup with reusable rags. Together, these two waste streams resulted in the generation and disposal of 14 drums of hazardous waste per month. The company found an

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industrial launderer who recovers spent solvent from rags. Mill's Pride also purchased plastic reusable filters for one manual paint booth. As a result of these changes in rag and filter use, and the increased life of the disposable filters due to decreased overspray, the company now manifests only five drums of hazardous paint filters per month, and has estimated that it saves \$11,600 per year in purchase and disposal costs.

Per Ohio EPA suggestions, Mill's Pride is continuing to evaluate alternative cleaning solvents to decrease air emissions, as well as decrease operating and disposal costs. Also Mill's Pride has formed a "continuous improvement" work team which meets once per week with the goal of looking at all production processes in order to reduce costs and waste.

VOC Reductions at International's Springfield Assembly Plant

International Truck and Engine Corporation's Springfield Assembly Plant (SAP) in Springfield, Ohio, continues to implement reduced Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) materials to further reduce emissions to the atmosphere. The Springfield Assembly Plant has had a focus on reducing air pollutants at the source for many years, reducing VOCs from an average of 300 tons per year, or greater than 9 pounds per unit, in the early 1990's to below 100 tons per year and less than half the pounds per unit today. Many items contribute to this continual improvement, including product mix and volume. Collaboration with suppliers has led to real improvements in the products themselves without any adverse impact to quality. Extensive work by plant's paint supplier, Akzo Nobel Coatings, resulted in new formulations for some of the plant's repair paints, lowering VOC content by an average of 0.25 pounds VOC per gallon. This improvement in air quality, pollution prevention, and resources to manage compliance allows the Paint Department more time to focus on customers and quality with a greater assurance of daily compliance.

Continual improvement means replacing VOCs without other hazards being introduced. Potential reformulations are reviewed for fire, safety, and industrial hygiene concerns to ensure no new or additional hazards. The plant's suppliers are meeting the challenge of reducing HAPs as well. The VOC reductions must not increase any HAP levels. Any remaining HAP-containing products are targeted for reduction or replacement. Recently, BASF met this challenge developing a quality e-coat product that maintains a low VOC and replaced all HAP components. The replacement product was phased into the plant's system to ensure no waste in the transition. Today the e-coat system is believed to be nearly HAP-free and certainly well within compliance limits for new upcoming HAP regulations. Akzo recently replaced a vendor of the water-based chassis paint used at the plant, meeting the existing low VOC content and reducing HAP levels by 65%.

Even the purge solvent used to clean up the paint processes is being investigated. Trials to replace the current organic purge solvent are underway. The following goals direct the progress at the Springfield Assembly Plant:

- 1) Eliminate HAP components,
- 2) Eliminate RCRA "F" codes as a waste,
- 3) Reduce SARA 313 TRI reportables,
- 4) The solvent should be recyclable,
- 5) Lower VOCs, and
- 6) Eliminate RCRA "D" codes as a waste.

Preliminary results from the trials currently underway have yielded two organic solvents that meet the first four objectives listed above. Another trial is planned for a water-based product that would meet all of the objectives except recyclability. If cost competitive however, this product would produce zero waste and actually assist in wastewater pre-treatment.

Over 1,500 Indiana Wastewater Treatment Operators Trained in P2

For the past four and a half years, the Indiana Department of Environmental Management (IDEM) has made a concerted effort to incorporate pollution prevention more fully into its regulatory functions. The effort was funded by an EPA Pollution Prevention Incentive for States Grant and built upon prior pollution prevention integration efforts at IDEM.

With the help of the consulting firm Kerr, Greiner, Anderson and April, Inc. (KGAA), IDEM employed a multifaceted approach to its pollution prevention (P2) integration efforts. This approach involved developing a senior management steering committee; working with staff, branch, section, and office managers to identify potential P2 integration projects; and winnowing 10 projects from a list of 36 proposed projects for implementation.

Each of the 10 projects went through screening and review at the IDEM office level and by the senior management steering committee. Once the steering committee approved projects, the senior managers identified project leaders and staff, and the project teams prepared detailed work plans. These included task descriptions, staffing requirements, performance measures, timelines, and training needs. IDEM began implementing the projects in 2001. A summary of the P2 regulatory integration projects is available on the web at <http://www.in.gov/idem/oppta/p2/integration/>.

The Wastewater Treatment Plant Operator Certification Program was one of the most successful P2 regulatory integration projects. Wastewater treatment plants are responsible for a variety of activities that could affect the environment including treatment, analysis, and discharge. Not only do pollution prevention opportunities exist in the day-to-day process at the plant, but there are also many education opportunities for a plant to teach other industries about pollution prevention as well. To take advantage of this, IDEM incorporated the concepts of pollution prevention into the Wastewater Treatment Plant Operator Certification Program

All wastewater treatment plants must have at least one certified operator in charge of supervising the plant's operations; certification is also required for pretreatment operators discharging to Publicly Owned Treatment Works (POTWs). In addition, some wastewater treatment plants require all operators to pass the certification exam to retain their jobs. Since less than half of those taking the exam pass on their first attempt, the exam is a major training component for wastewater treatment operators.

Several steps were taken to implement this project including dedicating a portion of each certification exam to pollution prevention questions. The level of expected understanding is graduated to be consistent with the various levels of professional certification. Pollution prevention reference materials are provided to those studying for the certification exam and a portion of the wastewater operators' certification manual now contains pollution prevention information. To date, over 1,500 wastewater treatment plant operators have received the pollution prevention training. This project was also recognized by the National Pollution Prevention Roundtable, and will appear in the P2 Regulatory Integration Case Study resource tool commissioned by U.S. EPA's Office of Pollution Prevention and Toxics. For additional information, see <http://www.in.gov/idem/water/compbr/compeval/wwcert.html>.

The Wisconsin Voluntary Emission Reduction Registry

The Wisconsin Department of Natural Resources (DNR) was directed by the state legislature to "establish and operate a system under which the department registers reductions in emissions of greenhouse gases if the reductions are made before the reductions are required by law." The law also allows the DNR to register reductions in other air contaminants. The Wisconsin Voluntary Emission Reduction Registry is the only multi-pollutant emission reduction registry in existence. The rules that govern the operation of the registry are contained in chapter NR 437 of the Wisconsin Administrative Code, which went into effect on November 1, 2002.

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The registry is a record of voluntary reductions of greenhouse gas and air contaminant emissions that result from actions taken by businesses, governments, organizations, individuals, or others to reduce emissions. The reductions are voluntary, either because they are not required by law or go beyond legal requirements.

Any person may register a voluntary emission reduction. "Person" is broadly defined under Wisconsin law and includes individuals, corporations, large businesses, small businesses, commercial enterprises, retail stores, environmental groups, clubs, organizations, municipalities, towns, government agencies, and others. Basically, a very broad group is eligible to register voluntary emission reductions.

Reductions in the emissions of all of the substances listed below may be registered if the reduction is equal to or greater than the registration threshold listed.

Emission Reduced	Registration Threshold
Greenhouse gases	25 tons per year CO ₂ equivalent
Nitrogen oxides	1 ton per year
Sulfur dioxide	1 ton per year
Volatile organic compounds	1 ton per year
PM ₁₀	1 ton per year
PM _{2.5}	1 ton per year
Carbon monoxide	1 ton per year
Lead and lead compounds	0.5 ton per year
Mercury and mercury compounds	1 pound per year

There are three easy steps to registration:

- 1) Document the emission reduction. To do this you must determine eligibility, quantify emissions before (baseline) and after the emission reduction action is taken, and measure or calculate the emission reduction.
- 2) Fill out the two application forms: the registrant information form and the project information form.
- 3) Submit the application forms to the Wisconsin DNR. If the forms are complete and all requirements of the registry rule have been met, the emission reduction will be registered.

The registered emission reductions are recorded in a database and are displayed as a table on the registry web site. The registry data table is available for anyone to examine. It will list the reductions made by each registrant.

Only reductions made inside Wisconsin will be registered. Emissions may be registered on a mass basis (e.g., tons per year) or on a rate basis (e.g., pounds per million Btu). Emissions must be registered for calendar years and must be re-registered every year. Quantification protocols and baselines are specified in the registry rule. The standard baseline consists of actual emissions averaged over the two years immediately prior to the year in which the emission reduction action is taken. Verification of emission reductions is not required for registration.

The benefits of registering emission reductions include:

- getting ahead of the curve, especially for pollutants where no reduction requirements currently exist (greenhouse gases, fine particulate, mercury)
- public and peer recognition
- baseline protection, and
- possible trading of emission credits (verification required)

For more information, consult the registry web site at <http://www.dnr.state.wi.us/org/aw/air/registry/index.html>.

Wisconsin DNR and Partners Collect Mercury From Scrapped Autos

For the past two years, the Wisconsin Department of Natural Resources (DNR) has been involved in a program to collect mercury switches from end-of-life vehicles. According to a recent study, steel mills using auto scrap metal are the fourth largest source of mercury air emissions in the United States. Most of the mercury in automobiles is found in hood and trunk light switches and in some anti-lock brake and navigational systems. Foreign automobile manufacturers have already phased out the use of mercury in light switches, and U.S. automobile manufacturers plan to phase out the use of mercury switches by 2004. Until that plan becomes a reality, and years afterward, there will be scrapped vehicles with mercury in their lighting applications.

To combat this problem, the Wisconsin DNR partnered with Concerned Auto Recyclers of Wisconsin (CARS), the Wisconsin Institute of Scrap Recycling Industries (WISRI), and the Storm Water Cooperative Compliance Programs (CCPs) to help reduce mercury releases into Wisconsin waters. As of July 2003, there were roughly 80 auto and scrap recyclers participating. So far the project has collected 200 lbs of mercury containing devices, most of which included auto mercury switches. The switches only take a few minutes to remove. Once removed, Wisconsin auto and scrap recyclers can take the mercury switches to twelve established mercury switch drop-off sites around the state. The cost of picking up and recycling the switches is currently paid for by a Great Lakes National Program Office (GLNPO) grant from EPA. Instructions for the removal, storage and transport of switches can be found at:

<http://www.dnr.state.wi.us/org/caer/cea/assistance/scrap/switches/removal.htm>. Please contact Mark Harings at Mark.Harings@dnr.state.wi.us for more information.

GLBTS Workgroup Activity Update, Fall 2003

The Great Lakes Binational Toxics Strategy (GLBTS) is an agreement between Canada and the U.S. to virtually eliminate persistent toxic substances from the Great Lakes environment. Environment Canada, the U.S. Environmental Protection Agency (EPA), environmental and community groups, and stakeholders from industry, academia, state/provincial and local governments, Tribes, and First Nations have worked together toward the achievement of the Strategy's challenge goals. Substance-specific workgroups have worked to eliminate the Level 1 substances from the Great Lakes Basin, and an Integration Workgroup has addressed issues that fall outside the scope of the substance-specific workgroups. The Level 1 substances include mercury, polychlorinated biphenyls (PCBs), dioxins and furans, hexachlorobenzene (HCB) and benzo(a)pyrene (B(a)P), octachlorostyrene (OCS), alkyl-lead, and five cancelled pesticides: chlordane, aldrin/dieldrin, DDT, mirex, and toxaphene. Highlights of recent workgroup activities are described below.

Mercury Workgroup: The workgroup drafted and is finalizing a report on options for reducing dental mercury for state/provincial and local governments. The workgroup has monitored mercury use and provided input for efforts to regulate mercury in scrap. In May 2003, the workgroup analyzed mercury trends in the environment.

PCB Workgroup: The workgroup continued its "Recognition and Award" incentives, continues to seek voluntary reduction commitments from industry sectors, reviewed PCB source emission studies, and maintains a website to facilitate the identification and removal of PCB equipment.

Dioxin/Furan Workgroup: The workgroup has gathered information on sources (e.g. on stack test results, ash management), monitored existing initiatives (e.g. MACT implementation, Canada wide Standards), supported national initiatives, and drafted a new two-year work plan. The Burn Barrel Subgroup of the Dioxin Workgroup has gathered education/outreach materials, conducted education/outreach activities, and completed surveys to learn more about open burning behavior and regulations against it. The subgroup maintains a web site of background information, emissions studies, outreach materials and more at www.openburning.org.

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HCB/B(a)P Workgroup: The workgroup continues to hold discussions with the scrap tire sector on tire fire reduction practices, and has supported the "Burn it Smart!" wood stove campaign in Canada. The workgroup has also gathered information from pesticide manufacturers and the Pest Management Review Agency regarding HCB concentrations in pesticides, assessed new emissions reports and monitoring data, and developed a draft inventory on vehicle emissions.

Integration Workgroup: The workgroup meets quarterly at alternating locations in Canada and the U.S. The workgroup has supported a municipal toxics management pilot project in Severn Sound, prepared a draft communications plan, shared information about other toxics reduction strategies and developed a draft evaluation process to assess the status of current Level 1 substances and a draft adoption process for other substances for the GLBTS to consider.

Long-Range Transport: A long-range transport workshop was held in September 2003 in Ann Arbor, MI to address regional, continental, and global source contributions of Level 1 substances to the Great Lakes Basin.

Emerging Pollutants Workshop: An Emerging Pollutants Workshop, sponsored by U.S. EPA Region 5 and the U.S. EPA Office of Research and Development, was held in Chicago, IL on August 11-14, 2003. The workshop had a scientific focus, with the following objectives: 1) To clarify the state of the science for a number of chemicals of emerging concern, and 2) To develop a list of next steps where indicated, such as research needs and pollution prevention strategies.

For more information on the GLBTS, visit <http://www.binational.net>, or the U.S. EPA Great Lakes National Program Office web site at <http://www.epa.gov/glnpo/>. Watch the GLRPPR calendar at <http://www.glrppr.org/calendar/> for information on upcoming GLBTS meetings.

Fine Print

LINK is a free quarterly publication of the Great Lakes Regional Pollution Prevention Roundtable. For subscription information, please contact the editor or see our website at www.glrppr.org.

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