



PREVENTION *quarterly*



SUMMER 1997

Integrated Assessment Pilot Program Announced

Governor Voinovich recently announced a new loan fund available to help Ohio manufacturers improve productivity while decreasing energy usage and minimizing waste. "This pilot program is designed to assist Ohio manufacturers in assessing their operations and finding ways to reduce costs in order to remain competitive, become more efficient and retain jobs," Governor Voinovich said. "By implementing assessment recommendations, participating manufacturers will save a significant amount of money while positioning themselves competitively for the future."

The Institute of Advanced Manufacturing Sciences (IAMS) Manufacturing Small Business Development Center is administering the Loan Fund under the direction of the Ohio Department of Development's Office of Energy Efficiency. Loans of up to \$40,000 are available to pay consulting fees for an assessment that takes an integrated look at productivity, waste, and energy efficiency. Interest rates are two-thirds of the prime rate and there are no application fees or collateral required.

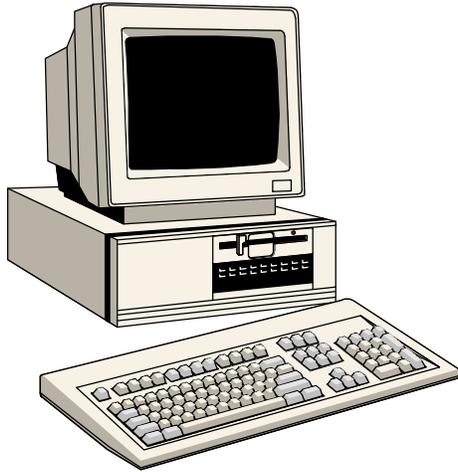
Loan applications and a list of consultants who offer the integrated assessment service are available from IAMS by calling (513) 948-2051.

Statewide Materials Exchange

Ohio EPA, Department of Development (ODOD), Department of Natural Resources, solid waste management districts and interested parties have met over the past six months to discuss setting up a statewide materials exchange program in Ohio. A materials exchange program serves to "match-up" one company's unwanted materials with another company that can use the material. More than 30 states have a successful materials exchange program. With Ohio's large industrial base, many industries and businesses believe a successful program can be implemented here. For further information, contact **Susan Covey, ODOD, at (614) 466-8425.**



Computer/Office Equipment Recycling



As more businesses upgrade existing computer systems to incorporate new technologies, many companies are looking for organizations to find a new home for their "old" computers. Two Ohio companies that recycle computers and other business equipment are listed below. The yellow pages in the telephone directory also may list companies that recycle computers and/or business equipment.

The **SGS Computer Corporation**, located at 24300 Solon Road, Bedford Heights, Ohio 44146, will recycle and/or market old computers for resale for companies of all sizes--including small businesses, universities, hospitals and large corporations. The 13-year-old company has an 80,000-square-foot facility that accepts old computer equipment, medical and science equipment, as well as other technical devices for recycling and proper disposal. For more information, call **(216) 786-8111**.

The Community Resource Center (CRC), located at 7030 Reading Road, Cincinnati, Ohio 45237, is a non-profit, in-kind donation clearinghouse that accepts office furniture, personal computers and PC components (386 processors or higher), office equipment, building materials, office supplies and overstocks. These donated items are then placed with charitable, tax-exempt non-profit organizations for a small handling fee. The CRC also has a computer Reuse Recycling Center where PCs are evaluated and repaired to give to non-profit organizations. Hardware and components such as hard drives and memory are needed. Unfortunately, the Center cannot accept monochrome monitors. For more information, call **(513) 351-7696**.

Find P2 Information on the Internet at
<http://www.epa.ohio.gov/opp/oppmain.html>

P2/Finance - Financial Analysis Software Available

P2/FINANCE is a user-friendly spreadsheet software program designed to guide companies in the data collection and analysis essential to a clear financial evaluation of pollution prevention projects. P2/FINANCE is designed to complement a company's existing project evaluation practices while ensuring that prevention investments receive balanced and comprehensive treatment during the capital budgeting process. It allows companies to define the financial parameters for a project and then input cost and revenue data for both business-as-usual operations and a proposed investment.

For companies or projects where no formal budgeting guidelines are in place, P2/FINANCE offers a valuable starting point for introducing a total cost assessment (TCA) approach. The TCA approach differs from conventional practices in four key ways: a broader inventory of costs and savings, allocation of all costs and savings to specific process and product lines rather than to overhead accounts, expanded time horizons to capture long-term benefits, and the use of profitability indicators that incorporate the time value of money.

The most recent version of P2/FINANCE (3.0) is programmed for Excel Version 5.0 for Windows and also is available for Lotus 1-2-3 Version 3.4a for DOS. P2/FINANCE is available free from **U.S. EPA's Pollution Prevention Information Clearinghouse** at **(202) 260-1023** or **ppic@epamail.epa.gov**.

Paper Mill Uses P2 to Save \$450K a Year

A 300-ton-per-day paper mill in western Ohio identified pollution prevention P2 opportunities and saved significant amounts of money by developing a P2 program with the assistance of Ohio EPA's Office of Pollution Prevention (OPP). The mill has a de-inking facility that produces recycled paper fiber, and a paper mill. The paper mill uses approximately 30 percent post-consumer fiber for a total of 87 percent recycled paper fiber. The largest waste stream generated by the facility is waste fiber, disposed in the facility's landfill. The projected capacity for the landfill is about eight years. The mill also wanted to reduce the amount of waste fiber going to its on-site wastewater treatment plant and the material in its effluent that discharges to a nearby creek.

Developing a formal pollution prevention program and performing the associated assessments often can help companies identify P2 options, even if they are already doing P2. Before OPP's involvement, the mill recognized the value of P2, and had actively investigated and implemented P2 and recycling projects as part of its paper recycling and mill operations. However, additional P2 opportunities were identified by developing a more formal P2 program and performing an in-house assessment. OPP helped the mill recognize that its waste was lost raw materials. OPP assisted the mill in further identifying P2 opportunities and activating some previously identified projects that had been stalled. A P2 team including members of all levels, from staff to upper management, was developed.

The team followed the steps outlined in OPP's "Ohio's Pollution Prevention and Waste Minimization Planning Guidance Manual" to develop their program and perform the necessary assessments. Twenty-two potential P2 projects were identified in the assessment process, and at least 19 of these projects have been implemented. The projects include many areas within the facility, including the paper machines, the de-inking facility, chemical storage, utility (energy), water conservation and recycling. The projects that saved the company the most money centered on recovering waste fiber from the wastewater leaving the facility. The combined projects saved the company nearly \$450,000 last year!

The paper machine improvement projects represent the largest savings for the company by recovering raw materials from the waste stream. These projects alone have improved plant yield by more than one percent.

The first project diverted approximately 3.6 tons per day of fiber rejected by the paper machines to the de-ink plant to be used as raw material. Formerly the fiber was discharged to the wastewater treatment plant (WWTP). The rejected fiber generated from the four paper machine cleaners is now used as raw material instead of lost as waste. This project saves 1300 tons per year of purchased waste fiber. Last year the mill saved more than half a million dollars.

The second project recovered waste fiber by screening one paper machine's selectifier reject stream

(bleed), instead of discharging directly to the WWTP. This project had a payback period of only four months. The project cost approximately \$30,000 to install, and saves the company more than a ton a day of lost fiber (almost 400 tons annually), for a savings of approximately \$100,000 annually.

Additional projects implemented include reducing fiber losses at the de-inking facility, reducing disposal of single-use chemical storage containers by ordering chemicals in returnable totes, reducing energy consumption, recycling cardboard, metal, glass and aluminum, and recycling a million gallons of water per day.

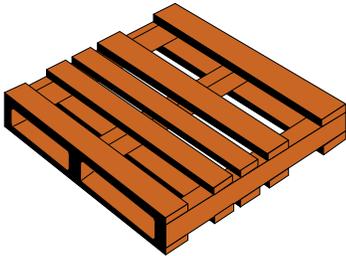
For this paper mill, implemented P2 projects have resulted in going beyond compliance, by improving water quality from the WWTP beyond permit requirements, without sacrificing product quality. The company also has optimized its resources, and produced significant cost savings.

The mill discovered that, once the company implemented a project, they benefited in more areas than anticipated. For example, when the company recovered more fiber from process and waste waters, they benefited not only by purchasing less raw material, but also by decreased treatment at their WWTP, and improved compliance with their NPDES permit. The mill discovered P2 as a technique to optimize resources and maintain or go beyond compliance.

For more information, contact **Ohio EPA's Office of Pollution Prevention at (614) 644-3469.**

Wood Waste Directory Available

Ohio EPA's Division of Solid and Infectious Waste Management and Office of Pollution Prevention compiled a statewide directory titled "Wood Waste and Pallet Recyclers/Reuse/Grinding Operations Located in Ohio." To obtain a free copy, contact **Lavaun Pinckney** at (614) 644-3469.



Materials Exchange List Server

During the February 1997 Ohio Materials Exchange Task Force meeting, members recommended that a list server be implemented to keep the dialogue flowing regarding ideas, concerns, needs and information on materials that can be reused. The Ohio Materials Exchange List Server (OMX) was officially launched on March 19, 1997.

A list server provides information by e-mail to a group of people (subscribers) who are interested in a specific topic, e.g., materials exchange. Meeting dates, ideas, technical resource and recycling information can be shared by anyone on the list at the same time through e-mail. The list is not limited -- anyone interested in sharing material reuse information can subscribe at any time. The list server is completely automated and free of charge.

The objectives of the list server are to:

- offer the opportunity to share success stories and problems;
- provide a communication link to share information;
- identify significant new technical assistance resources;
- provide immediate access to subscribers to communicate with each other in the search for solutions to reuse unwanted materials; and
- encourage partnerships between federal, state, local governments, private industry and others in reducing waste materials.

Contact **Nancy Moore** at **(614) 644-2928** for additional information and to receive a Fact Sheet on how to subscribe to the list server.



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