

# CLOSED Loop

Summer  
2002

## MOPP up pollution

### By Sue Schauls

#### Waste Reduction Specialist

The Mobile Outreach for Pollution Prevention (MOPP), sponsored by the Iowa Waste Reduction Center, will be in eastern Iowa for a series of demonstrations in August.

The MOPP will provide businesses with free, hands-on equipment demonstrations using various waste reduction and recycling methods. The Iowa Waste Reduction Center (IWRC) has created the mobile outreach program to assist with pollution prevention and waste management for manufacturers and automotive maintenance and body shops. These industries have a myriad of regulations with which they must comply, including solid waste disposal, hazardous waste management, air emissions and others.

The Iowa Waste Reduction Center, the nation's premier small business technical assistance program, helps small businesses in Iowa meet these regulations. The IWRC is a free, confidential, assistance program regarding regulatory compliance and waste reduction. Located at the University of Northern Iowa, the main focus of the IWRC is working with Iowa's small businesses.

The MOPP is a 34-foot customized motor home which houses equipment intended to introduce pollution preven-

tion ideas to small businesses. The equipment in the MOPP includes antifreeze reclamation units, a solvent still, a hot soap degreaser, an alternative solvent parts washer, an oil filter processor, alternative cleanser parts washers, a paint gun washer, and other waste reduction equipment as well as training in better paint spray techniques.



The MOPP is a nationwide program funded by the U.S. Environmental Protection Agency. It has conducted workshops in Georgia, Idaho, Illinois, Iowa, Kansas, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, Ohio, Oklahoma, Pennsylvania, Texas, Wisconsin and Wyoming.

All demonstrations are free and open to the public. A regulatory expert is available at the demonstrations to discuss specific requirements in a confidential

setting. For more information about the MOPP or the IWRC, please contact Sue Schauls at 1-800-422-3109 or 319/273-8905 or visit [www.iwrc.org](http://www.iwrc.org).

### MOPP Demonstration Schedule

*All demonstration times are from  
10 a.m. to 2 p.m.*

#### **August 6th - Eldora**

ENP High School parking lot

#### **August 7th - Hampton**

Franklin County Fairgrounds

#### **August 8th - Grundy Center**

West side of county courthouse

#### **August 13th - West Union**

On the Square, near the Chamber

#### **August 14th - Manchester**

Municipal lot at S. Tama & E. Main

#### **August 15th - Independence**

Falcon Civic Center, 1305 5th Ave. NE

#### **August 20th - Parkersburg**

Depot Park

#### **August 21st - Waterloo**

O'Reilly's Auto Parts, 2115  
Washington St.

#### **August 22nd - Waverly**

City Hall parking lot at 200 1st St. NE

# State Adopts New Rules for Appliance Demanufacturers

**By Jeff Beneke**

*Waste Reduction Specialist*

State rules require that all appliances must be demanufactured before being disposed of or recycled. Appliances include refrigerators, freezers, kitchen ranges, air-conditioning units, dehumidifiers, water heaters, furnaces, thermostats, clothes dryers, clothes washers, dishwashers, microwave ovens and commercial coolers containing capacitors, refrigerants, or components containing mercury that are discarded from all sources.

The Iowa Environmental Protection Commission rescinds Chapter 118 of the Iowa Administrative Code, "Removal and Disposal of Polychlorinated Bi-phenyls (PCBs) from White Goods Prior to Processing," and adopts new Chapter 118, "Discarded Appliance Demanufacturing." The new rules became effective **March 27, 2002**.

The former State rule required businesses to be registered with the Iowa Department of Natural Resources (DNR). Although, any person or facility that removed less than 200 pounds of small capacitors in one month, but no more than 500 pounds in one year, was exempt from registration requirements.

## **Rule Requirements**

Under the adopted rules, a permit program has been established requiring *anyone* wanting to engage in the demanufacturing of discarded appliances to obtain a permit *prior to starting operation*. The permit must be renewed every three years. These rules

do not apply to appliance service and repair shops unless they are in the business of demanufacturing discarded appliances. These rules do not apply to the removal of capacitors, refrigerants, or components containing mercury during the maintenance or service of equipment containing such items.

An exception exists for any Iowa company currently involved in the demanufacturing of appliances. Such compa-



*improperly disposed of demanufactured appliances*

nies are allowed to continue demanufacturing activities until an Appliance Demanufacturing Permit has been obtained from IDNR. Any person engaged in the demanufacturing of discarded appliances and registered with the department for removal and disposal of PCBs from appliances as of March 27, 2002 may continue such activity while applying for a permit, provided:

1. The DNR is notified within 30 days after January 16, 2002, of the intent to file a permit application; and a permit application is submitted within 90 days after March 27, 2002.
2. If an appliance demanufacturing permit has not been obtained within one year of March 27, 2002, the appliance demanufacturer must cease appliance demanufacturing activities due to lack of a permit.

The adopted rules require:

1. All electrical parts containing PCB's, components containing mercury, and refrigerants be removed from discarded appliances prior to being recycled or disposed of.
2. No more than 1,000 discarded appliances may be stored at a location prior to demanufacturing.
3. No discarded appliances may be stored for more than 270 days without demanufacturing.
4. Demanufacturing of appliances must take place on an impervious floor (including but not limited to concrete, ceramic tile, or metal, but not wood).
5. The demanufacturing facility must be located 50 feet from a well and any water of the state.
6. An applicant must establish a unique marking system, to be submitted with the permit application for IDNR approval, signifying that all refrigerants, PCBs,

*(continued on back page)*

# Waste Tire

## Regulations Adopted

**By Traci McCollom**  
*Public Relations Assistant*

Recently, the Iowa Environmental Protection Commission rescinded Chapter 117, "Requirements for Waste Tire Facilities" and Chapter 219, "Beneficial Uses of Waste Tires" and adopted new Chapter 117, "Waste Tire Management." **The new rule is effective June 19, 2002.**

The purpose of the revision is to establish guidelines for the proper management of waste tires, including disposal, collection, storage, processing and beneficial reuse of waste tires and processed waste tire material. In addition, businesses and individuals must comply with local ordinances, fire codes or other applicable statutes pertaining to waste tire storage and/or processing.

### **Defining Waste**

A waste tire is defined as a tire that is no longer suitable for its originally intended purpose due to wear, damage or defect. This definition shall include such tires mounted on a rim, but not on a vehicle. A waste tire does not include a nonpneumatic tire. Land dis-

posal of waste tires, in whole, cut or shredded form is prohibited. Waste tires may be accepted at a permitted sanitary landfill for final disposal if the tires have first been cut into pieces that are not more than 18 inches on any side.

A person who contracts with another person to transport more than 40 waste tires in a single load is required to contract only with a person registered to haul waste tires.

Any tire collector, business or individual storing more than 500 passenger tire equivalents (a conversion measurement used to measure waste tire volume in which 1 passenger car tire = 20 pounds) on any site must obtain a waste tire stockpile permit. An authorized and licensed vehicle recycler may store up to 3,500 waste tires without a waste tire stockpile permit.

### **Aboveground Storage Requirements**

For aboveground storage in an open area a waste tire stockpile permit holder must meet the following requirements:

1. A site shall not contain more than 250,000 passenger tire equivalents.
2. Establish fire lanes with a width of 50 feet between any two tire piles.
3. Brush and trees within 50 feet of any tire pile must be cleared.
4. A waste tire pile shall not exceed a vertical dimension of ten feet and a single waste tire pile shall not be more than 100 feet in length.

5. A waste tire pile must be located at least 50 feet from any property line, street, public right-of-way or building.
6. A fire extinguisher shall be available within 100 feet of any one portion of the tire storage areas.
7. Combustible materials or volatile chemicals shall not be stored within 50 feet of any tire pile, unless stored in approved fire-resistant containers or cabinets.
8. The site must be graded to prevent any standing pools of water and to limit the run-off and run-on of precipitation.
9. A tire pile must be at least 200 feet from any well, lake, pond, river, stream, sinkhole, or tile line surface intake. The distance may be reduced to 50 feet if appropriate grading, dike or berm is completed to intercept surface water flows.
10. The site must be secured by a fence or barrier of a minimum of six feet in height.
11. The perimeter of the site must be posted with signs stating that burning is prohibited within 300 feet of any tire pile.

The Chapter also contains requirements for aboveground storage in an enclosed area and underground storage of waste tires, as well as requirements for waste tire processing facility permits and beneficial uses of tires. For questions regarding waste tire regulations or to obtain a copy of the new rules, please contact the Iowa Waste Reduction Center at 1-800-422-3109.



(continued from inside front page)

and mercury-containing components have been removed.

- 7. Beginning January 1, 2003, at least one owner or full-time employee of an appliance demanufacturing facility must have completed a IDNR-approved training course. A trained person must be on site at all times when discarded appliances are being demanufactured.
- 8. A permitted appliance demanufacturing facility shall keep records of the name of the facilities to which the wastes listed below were shipped, the date of each shipment, the number or amount shipped and the name and address of the transporter.

- ✓ Demanufactured appliances
- ✓ Components containing mercury
- ✓ Sodium chromate
- ✓ Refrigerants
- ✓ PCB capacitors

(Information shall be reported to IDNR annually on IDNR-approved forms.)

Any person engaged in demanufacturing must be in compliance with all federal and state laws relating to the management and disposition of all hazardous wastes, hazardous materials and refrigerants.

No person or facility in the state may shred, crush or bale any appliances that have not been demanufactured. Fluff (residual waste) from the shredding of demanufactured appliances must be sampled quarterly, at a minimum, and analyzed for PCBs, lead and mercury.

Existing registered appliance demanufacturing facilities, as well as previously exempted facilities will be inspected by IDNR prior to being issued the initial demanufacturing permit. Likewise, new facilities will be inspected prior to start-up. Permits will not be issued until inspection indicates the facility is in compliance with these rules.

Contact the Iowa Waste Reduction Center at 1-800-422-3109 for assistance with the permit application or for a copy of the new rules.

## VOLUME 12.2 - SUMMER 2002

### Iowa Waste Reduction Center

Creating Tools for Small Business

#### SMALL BUSINESS POLLUTION PREVENTION CENTER

#### SPRAY TECHNIQUE ANALYSIS AND RESEARCH PROGRAM

#### IOWA AIR EMISSIONS ASSISTANCE PROGRAM

#### IOWA WASTE EXCHANGE

#### MOBILE OUTREACH FOR POLLUTION PREVENTION

#### POLLUTION PREVENTION FOR PAINTING AND COATING COMPLIANCE ENHANCEMENT

#### Articles in



may be reprinted.

As a courtesy, please contact the IWRC.

Chad Gookin & Traci McCollom,  
Editors (800) 422-3109

PRINTED WITH SOY INK



SUMMER  
2002

Iowa Waste Reduction Center  
University of Northern Iowa  
1005 Technology Parkway  
Cedar Falls, IA 50613-6951

Non-Profit Organization  
U.S. Postage  
**PAID**  
Permit No. 62  
Cedar Falls, IA 50613

# IOWA waste exchange

summer 2002

A cooperative effort of the

- Iowa Waste Reduction Center/ University of Northern Iowa
- Iowa Department of Economic Development/Recycle Iowa
- Iowa Department of Natural Resources

- Iowa Community Colleges
- Local Councils of Government
- Iowa Solid Waste Agencies



## By Rick Meyers

*IWE Resource Specialist, Area F*

As the largest newspaper publisher in Eastern Iowa, Gazette Communications in Cedar Rapids accumulated numerous



*Rick Meyers*

wood pallets and crates. The Gazette had few problems dealing with the waste until about a year ago when their recycling outlet refused to take many of their waste pallets and crates.

Although their former pallet recycler was still willing to take standard-sized pallets, they had informed the Gazette that the odd-sized pallets, pressed-wood pallets and wood crates taken in the past would no longer be accepted. Ultimately, the Gazette decided to stop utilizing this market.

Over the next several months, the gazette was able to move several loads of pallets through one-time arrangements with a

trucking company. Struggling to find outlets for the still growing number of excess pallets, they contacted the Iowa Waste Exchange for assistance.

Rick Meyers, IWE Resource Specialist for Linn County, initially referred the Gazette to a neighboring business, Apache Hose & Belting, a company interested in acquiring excess pallets. Apache was able to pick up a few loads of standard-sized pallets, but the Gazette still had problems with the pressed-wood pallets, odd-sized pallets and wood crates.

Meyers continued to search for a single market that would take care of all the excess wood materials. Eventually locating an Illinois company called Myers Industrial Shipping Products, the IWE was able to provide the Gazette with the services they needed.

Myers Industrial Shipping Products not only restores pallets and crates to a sellable condition, but also has wood mulch and alternative fuel markets for the undesired or unsalvageable wood products.

As a result of this successful match, nearly 50 tons of pallets and crates per year are conveniently going to one company, providing the Gazette with greater efficiency in storage and handling. This match was accomplished thanks to the market locating abilities of the Iowa Waste Exchange.

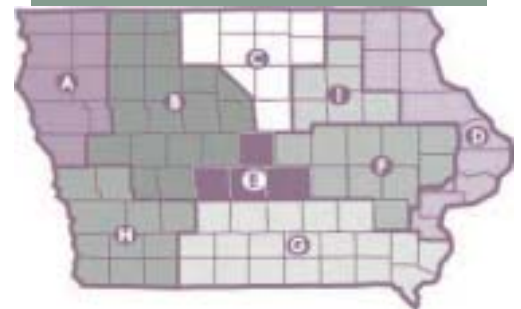
Many nonprofit organizations do not always have the funds available to provide computer equipment to their facilities. That is exactly what Kathy Millard of the Iowa Waste Exchange had



*Kathy Millard*

*(continued on back page)*

## Iowa Waste Exchange Regions and Specialists



- |  |  |
|--|--|
| <p><b>A:</b><br/>PERRY NELSON<br/>Western Iowa Tech<br/>Community College<br/>(712) 274-8733<br/>Ext. 1560</p> | <p><b>F:</b><br/>RICK MEYERS<br/>(Linn County only)<br/>and<br/>JOHN KOCH<br/>Kirkwood Training<br/>and Outreach<br/>Services<br/>(319) 398-5665,<br/>(319) 398-4904</p> |
| <p><b>B:</b><br/>FRED KESTEN<br/>Region XII Council of<br/>Governments<br/>(712) 792-9914</p>                  | <p><b>G:</b><br/>JIM REIMER<br/>Indian Hills<br/>Community College<br/>(641) 683-5269<br/>Ext. 5269</p>  |
| <p><b>C:</b><br/>KATHY MILLARD<br/>North Iowa Area<br/>Community College<br/>(641) 422-4379</p>                | <p><b>H:</b><br/>BILL PENDGRAFT<br/>Iowa Western<br/>Community College<br/>(712) 325-3309<br/>Ext. 3309</p>  |
| <p><b>D:</b><br/>JULIE PLUMMER<br/>Eastern Iowa<br/>Community College<br/>District<br/>(563) 336-3319</p>      | <p><b>I:</b><br/>JODI JEANES<br/>Iowa Northland<br/>Regional<br/>Council of<br/>Governments<br/>(319) 235-0311</p>   |
| <p><b>E:</b><br/>DENNIS<br/>HAYWORTH<br/>DMACC - Economic<br/>Development Center<br/>(515) 964-6346</p>        |  |

## E-Waste Furthers Education

### By Kathy Millard

*IWE Resource Specialist, Area C*

# How to use the Iowa Waste Exchange

*Summer 2002*

ITEM	DESCRIPTION/AMOUNT	ID#	CONTACT
<b>Brown Goods and Accessories</b>			
Computer Monitors	One time only, 4,000 pounds	9614	H - Bill
<b>Chemicals</b>			
Armex Blast Media	Ongoing, 24,000 pounds per year	9197	E - Dennis
Assortment of Antifreeze Additives	One time only, 2,503 pounds	9820	H - Bill
Carnauba Wax	One time only, 150 pounds	9823	F - Rick
Duplicating Fluid	One time only, 4,548 pounds	9652	E - Dennis
Hydrocal	Ongoing, 250,000 pounds per year	9357	B - Fred
Oakite 32	One time only, 1,648 pounds	7624	B - Fred
Paint Thinner Dupont 3871 (Virgin)	One time only, 1,320 pounds	9732	G - Jim
Power Kleen Cleaner and Degreaser	One time only, 1,125 pounds	9672	B - Fred
Sanitizing Cleaner	One time only, 1,100 pounds	9739	D - Julie
<b>Construction and Demolition</b>			
Wallboard	Ongoing, 2,080,000 pounds per year	9356	B - Fred
<b>Glass</b>			
Glass Wine Jugs - 3 liter	Ongoing, 900 pounds per year	9828	D - Julie
<b>Liquid Waste</b>			
Glue	One time only, 1,200 pounds	9831	E - Dennis
<b>Metals</b>			
Mercury	One time only, 300 pounds	9471	H - Bill
Steel Plate	One time only, 324,000 pounds	9653	E - Dennis
Grinding Chips	Ongoing, 48,000 pounds per year	9654	E - Dennis
Cold Roll Steel	Ongoing, 52,000 pounds per Year	9795	B - Fred
<b>Miscellaneous</b>			
150,000 Gallon Steel Tank	One time only, 4,000 pounds	7152	F - John
Counter Tops/ Laminated Wood	Ongoing, 3,640 pounds per year	9744	I - Jodi
Grit Blast	Ongoing, 75,000 pounds per year	3617	F - John
Office Furniture & Other	One time only, 60,000 pounds	9792	F - Rick
Parts Tubs (Metal) 2'x2'x1'	One time only, 200 pounds	9688	G - Jim
Storage Racks (Various Sizes)	One time only, 7,500 pounds	9691	G - Jim
Solvent Reclaimer	One time only, 220 pounds	9787	D - Julie
Wire Baskets 3'x4'x3'	One time only, 500 pounds	9689	G - Jim
<b>Organic Waste</b>			
Diatomaceous Earth	Ongoing, 120,000 pounds per year	9833	A - Perry
Grease, Cooking Oil	Ongoing, 2,340,000 pounds per year	22	E - Dennis
Meat Scraps And Misc Meat	Ongoing, 2,340,000 pounds per year	9648	E - Dennis
Noodles & Dough	Ongoing, 2,288,000 pounds per year	4598	H - Bill

The materials listed on this insert are available for reuse or recycling. By using the Iowa Waste Exchange, you may be able to save your company money. At the same time, you can help reduce waste and save natural resources. Listing is free-of-charge. Solid waste fees fund the service.

For more information about listed materials, see the column marked "Contact" and call the specialist(s) listed on the front page of this insert. A searchable list of materials available through the Iowa Waste Exchange can be found at: [www.recycleiowa.org](http://www.recycleiowa.org) or [www.iwrc.org/exchange](http://www.iwrc.org/exchange).

ITEM	DESCRIPTION/AMOUNT	ID#	CONTACT
<b>Organic Waste (continued)</b>			
Protein By-Product	Ongoing, 936,000 pounds per year	9643	A - Perry
Soybean By-Product	Ongoing, 1,040,000 pounds per year	8392	B - Fred
<b>Paper</b>			
Unlined Paper Bags	Ongoing, 219,000 pounds per year	9799	A - Perry
<b>Plastics</b>			
Anti-Static Bags	Ongoing, 16,560 pounds per year	1389	F - John
Anti Static Tubes	Ongoing, 18,200 pounds per year	1711	F - John
Foam Mattresses	One time only, 22,500 pounds	9821	H - Bill
Food Tray	Ongoing, 6,500 pounds per year	9835	A - Perry
HDPE	Ongoing, 20,000 pounds per year	1897	H - Bill
HDPE Trays	Ongoing, 1,050 pounds per year	9801	B - Fred
Jelco HDPE Plastic Totes & Lids	One time only, 30,000 pounds	9733	G - Jim
Parts Cases	Ongoing, 36,000 pounds per year	9737	F - John
PE, scrap	Ongoing, 208,000 pounds per year	5731	H - Bill
Plastic Golf Cart Bodies - TPO	Ongoing, 12,000 pounds per year	5747	D - Julie
Plastic Housings For Computers And Other Electrical	One time only, 4,000 pounds	9025	H - Bill
Plastic Pallets	One time only, 8,000 pounds	9782	F - John
Plastic Jugs 2.5 Gallons	Ongoing, 50 pounds per year	9747	G - Jim
Plexiglas Clear Acrylic 1/8"x96"x81" (New)	One time only, 10,900 pounds	9676	G - Jim
PP	Ongoing, 25,000 pounds per year	1912	H - Bill
PVC Powder	One time only, 5,280 pounds	9826	D - Julie
Roller Bottles	Ongoing, 57,600 pounds per year	9819	B - Fred
Seat Upholstery	Ongoing, 62,400 pounds per year	8271	B - Fred
Styrofoam	Ongoing, 182,000 pounds per year	2764	B - Fred
Styrofoam Packaging Blocks	Ongoing, 6,240 pounds per year	8074	E - Dennis
<b>Wood</b>			
40"x48" 4-Way Pallets	Ongoing, 8,000 pounds per year	9748	G - Jim
Oak Wood Sawdust Untreated	Ongoing, 3,120,000 pounds per year	9727	G - Jim
Particle Board & Treated Wood Scraps	Ongoing, 52,000 pounds per year	9777	F - Rick
Pressed Wood Cores	Ongoing, 2,160 pounds per year	9508	F - Rick
Sawdust Scrap	Ongoing, 12,600,000 pounds per year	9797	I - Jodi
Wood Shavings With Turkey Litter	Ongoing, 1,400,000 pounds per year	9740	B - Fred
White Pine Shavings With Manure	Ongoing, 1,300,000 pounds per year	9743	F - Rick

# Exchanging Trash Saves a Company Cash

**By Perry Nelson**

*IWE Resource Specialist, Area A*

Robert Coacher, Iowa Manufacturing Extension Partnership (IMEP) representative requested the assistance of the Iowa Waste Exchange (IWE) to conduct a Total Assessment Audit (TAA) for NutraFlo.



*Perry Nelson*

IWE Area Resource Specialist Perry Nelson, along with several management members

from the company, was assigned to the assistance team.

The team then separated into groups, each group touring one of the four area facilities owned by NutraFlo.

During the tour of a facility, Nelson noticed that a majority of the paper feeds sacks were being bundled and thrown into a dumpster as waste.

Hoping to create a successful match, Nelson contacted Ed Sands at Siouxland Recovery. Sands agreed to see if the sacks from NutraFlo could be used in bedding material at Siouxland Recovery. Nelson established a meeting between the two companies and during a follow-up, discovered that Siouxland Recovery was able to utilize the feedbags and save money for NutraFlo in disposal costs.

As a result of the cost savings realized through the IWE, NutraFlo has scheduled a second session for a TAA to determine if there are any other potential cost savings.

## E-Waste

*(continued from front page)*

in mind when she was contacted by the Belmond Independent Newspaper editor.

Because they upgraded their computers and had no further use for the old equipment, the editor of the Belmond newspaper contacted Millard to ask if there were any businesses or organizations that could use two McIntosh computers and a printer. Millard contacted Liz Austin, director of Charlie Brown Daycare Centers in Mason City, IA, to see if they might be interested in the computer equipment.

Austin indicated that the daycare would really like to have the equipment, noting that as a nonprofit, they often cannot allocate the funding for purchasing equipment such as this. As a result of this match, the children at the daycare center are now able to fulfill educational benefits from the use of the computers.

# Aiming for a Waste Exchange

**By Kathy Millard**

*IWE Resource Specialist, Area C*

Always looking for new products he can design and manufacture for his archery business, Don Chipman, manager of Specialty Archery Products, contacted the IWE for a possible solution to a new design problem he was encountering.



*Kathy Millard*

Chipman recently designed a product

that requires the use of small pieces of foam rubber. Wondering if there might be sources of this material generated as waste by other manufacturers, he contacted Kathy Millard of the IWE for assistance in locating a possible source.

Millard contacted an industry in Clarion that generates a foam rubber waste to inquire on Chipman's request. As a result, a successful match was created and Chipman was able to utilize the foam waste material in manufacturing his new archery product.

The Iowa Waste Exchange is a cooperative effort of Recycle Iowa/ Iowa Department of Economic Development, the Iowa Waste Reduction Center, the Iowa Department of Natural Resources, Iowa Community Colleges, Local Councils of Government and Iowa Solid Waste Agencies. The Exchange will not determine what may constitute a hazardous substance or create a hazardous situation. The Exchange will not make judgments with respect to any legal requirements, particularly for the storage, transportation, treatment or disposal of what may be defined as hazardous substances. For information about hazardous waste reduction and/or proper disposal, call the Department of Natural Resources Waste Management Assistance Division at (800) 367-1025 or the IWRC at (800) 422-3109.