

CLOSED Loop

Fall 2003

Iowa Waste Reduction Center Reduction Center:

Assisting Iowa Hospitals



The Iowa Waste Reduction Center (IWRC), at the University of Northern Iowa, provides Iowa small businesses with pollution prevention information, waste reduction and regulatory compliance solutions. IWRC services are completely free, confidential and non-regulatory, enabling Iowa small businesses to maintain awareness of environmental requirements without expending valuable time and resources. Because our specialists understand that environmental requirements are becoming more demanding, we keep up-to-date by conducting applied research, offering training and educational opportunities and conducting on-site reviews.



Recently, the IWRC has begun providing environmental, industry-specific services for healthcare facilities throughout Iowa. Like many other small businesses in the state, hospitals and clinics are subject to numerous state and federal environmental regulations. The IWRC's new hospital outreach program is a

way for us to share with medical facilities the information needed to address and comply with the environmental regulations pertinent to their industry. Through a combination of on-site reviews and an analysis of current facility procedures, IWRC specialists offer suggestions to hospitals that can make an impact on their environmental compliance, decrease their waste stream and possibly save the facilities money.

Our goal for the hospital outreach program is to provide hospitals and clinics with the resources they need to make informed environmental decisions. With this initiative, the

IWRC is committed to providing information to hospitals on waste reduction, pollution prevention and environmental regulations.

For additional information about this program, please contact Sue Schauls of the IWRC at 1-800-422-3109, or for more information about the IWRC please visit our website at www.iwrc.org.

Environmental Management System Implementation Training

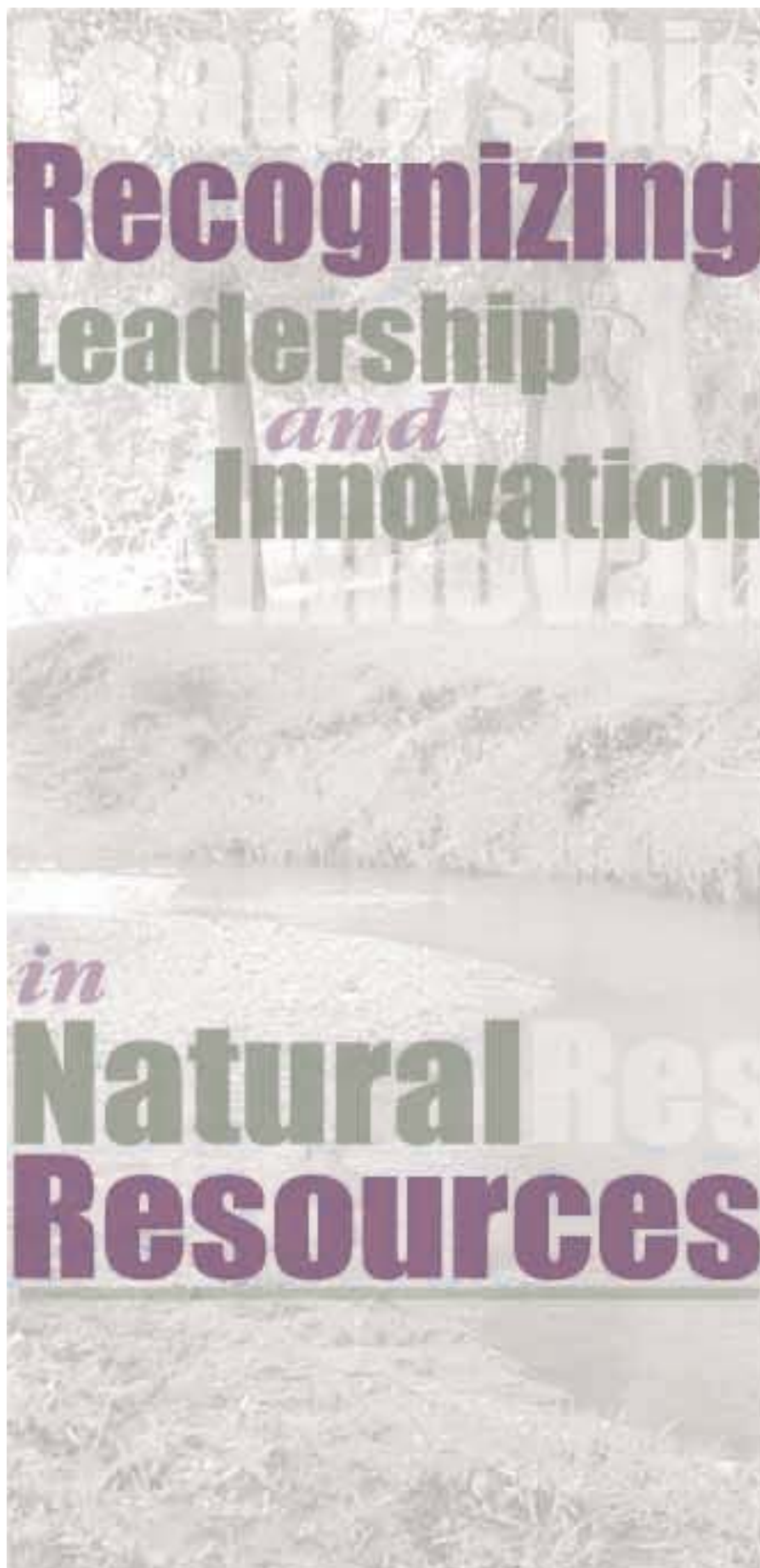


The Iowa Waste Reduction Center (IWRC) established an Environmental Management System (EMS) Service Center as part of the U.S. Environmental Protection Agency's strategic plan to

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IOWA WASTE REDUCTION CENTER UNIVERSITY OF NORTHERN IOWA

WASTE REDUCTION WORKS FOR BUSINESS & IOWA



Iowa businesses, organizations and individuals are invited to apply for the 2003 Governor's Iowa Environmental Excellence Awards. This premier environmental awards program, sponsored by Governor Vilsack and the State of Iowa, recognizes leadership and innovation in the protection of Iowa's water, land and air.

"We are very excited to recognize Iowans who have worked to protect and enhance our state's natural resources," said Jeffrey Vonk, director of the Iowa Department of Natural Resources. "Their work is critical to the future health and vitality of our state."

Awards will be given for overall environmental excellence and special recognition in water quality, waste management, energy efficiency/renewable energy, air quality and habitat restoration/development.

Categories for the awards include:

- ❖ Community/Local Government
- ❖ Small Business or Industry (up to 200 employees)
- ❖ Large Business or Industry (more than 200 employees)
- ❖ Institution/Public Sector Facility (hospital, college, school, etc.)
- ❖ Agriculture (farm, operation or other ag-related business or organization)
- ❖ Service/Civic/Nonprofit Organization (Kiwanis, Lions Club, Pheasants Forever, etc.)

The awards are sponsored by the Governor's Office, the Iowa Department of Natural Resources, the Iowa Department of Agriculture and Land Stewardship, the Iowa Department of Economic Development, the Iowa Department of Education, the Iowa Department of Public Health and the Iowa Waste Reduction Center.

The application deadline is November 10, 2003. To obtain an application, go to the Web site www.iowadnr.com/other/ee/index.html, or contact: Jill Cornell, Department of Natural Resources (515) 281-0879; e-mail: Jill.Cornell@dnr.state.ia.us.

EMS Training

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promote the use of EMS. Its fundamental success is built on the "buy-in" of facility participants at every level.

The EMS Service Center is announcing quarterly training sessions to facilitate the development of an EMS written plan. The classes will provide step-by-step EMS implementation training. The EMS training seminar is grouped into four quarterly training sessions offered at the IWRC's Process Training Facility in Cedar Falls, Iowa.

Facilitated development of an EMS uses a training structure that includes classroom instruction in regard to the components of an EMS and implementing each of the modules of an EMS through homework. This methodology has proven to be valuable for clients as it walks them through the development and implementation of an EMS. After completion of the EMS training course, companies in Iowa may request further assistance through site visits or hands-on assistance with the implementation of their EMS plan.

There is no fee for the sessions. Registration is required two weeks prior to the event:

- Online registration at <http://www.iwrc.org/programs/emsclasses.cfm>,
- Fax to 319/268-3733 or
- US mail to Iowa Waste Reduction Center, 1005 Technology Parkway, Cedar Falls, IA 50613.



Training Schedule for Facilitated Development of EMS:

January 28-29, 2004

Session I:

- Gap Analysis
- Environmental Policy
- EMS Scope
- Aspect & Impact Identification
- Legal Requirements

Session I - The first session will include an EMS Overview, Gap Analysis, Environmental Policy and EMS Scope Development and selection of a Core Team. EMS representative's roles and responsibilities will be discussed. The aspects and impacts that are vital to an effective EMS will be addressed. Legal requirements will also be reviewed in the first session. Companies in Iowa may request to have the EMS overview and gap analysis presented to management at their facility.

April 13-15, 2004

Day 1:

Review of Session I

Day 2-3:

Session II

- Objectives & Targets
- Environmental Programs
- Structure & Responsibilities
- Training & Awareness

Session II - The second session is the meat of the EMS, during which the significance of the aspects and impacts of an EMS will be defined. Objectives and targets, Environmental Management Programs, operational controls, structure and responsibilities, training, awareness and competence will all be presented and implemented through homework assignments.

July 19-22, 2004

Day 1: Review of Session I

Day 2: Review of Session II

Day 3-4: Session III

- Documentation & Records
- Operational Control
- Emergency Preparedness
- Monitoring & Measurement
- Nonconformance Action
- Internal Audits
- Management Review

Session III - In the third session, all the tools to fully utilize the EMS and attain the level of quality environmental stewardship desired will be addressed. This will include ways to manage the EMS by formally identifying internal and external communication, documentation and record keeping, review of operational control, emergency preparedness and response and monitoring. The third session will also address nonconformance and corrective and preventive action along with management review of the EMS development.

Sept 20-24, 2004

Day 1: Review of Session I

Day 2: Review of Session II

Day 3: Review of Session III

Day 4-5: Session IV

- Internal Audit Procedures
- EMS Implementation
- Nonconformance Corrective and Preventative Action
- Management Review

Session IV - The final session will be used to review, update and enhance the EMS developed through the training sessions and homework assignments. Internal audit procedures will be examined. The final session will be an opportunity for the businesses to walk through a facilitated Environmental Management System plan's implementation process. After completing the course, the business should have a completed EMS with execution steps identified and ready to put in place.

Electronic Recycling Regulations Proposed for Iowa

By Jeff Beneke

In recent months, national articles have discussed growing concerns with proper recycling and disposal of computers and other electronics. The Environmental Protection Agency (EPA) and various state regulatory agencies are working to address these concerns by formulating specific rules for computer equipment and electronic recycling.

Lead, cadmium and mercury in circuit boards, batteries or cathode ray tubes (CRTs) are the primary hazardous materials of concern found in computers and electronics. If improperly handled, such hazardous materials may be released into the environment. This could lead to harmful exposure to plants, animals and humans, causing serious damages. In March 2003, the Iowa Department of

Natural Resources (IDNR) established a committee representing electronics recyclers, solid waste officials, recycling officials, business and industry and IDNR staff to discuss proposed electronics recycling rules for Iowa. The purpose of the committee is to draft rules for the recycling of electronics and the disassembling and removal of toxic components from electronics in a manner that is safe for human health and the environment.

The proposed rules will apply to all facilities that perform electronic recycling functions, including, but not limited to, the collection, refurbishing, demanufacturing and processing of discarded electronics. The IDNR plans to complete the proposed administrative rules (Chapter 122) and submit them for public comment sometime in January or February of 2004.

For additional information or for environmental assistance, please call the Iowa Waste Reduction Center at 800-422-3109 or visit our website at www.iwrc.org.

VOLUME 13.3 - FALL 2003
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

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Articles in
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As a courtesy, please contact the IWRC.
Kaylene Reilly, Editor
(800) 422-3109

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please call 1-800-422-3109

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IOWA waste exchange

fall
2003

A cooperative effort of the ■ Iowa Waste Reduction Center/University of Northern Iowa ■ Iowa Community Colleges
■ Iowa Department of Economic Development/Recycle Iowa ■ Local Councils of Government

Iowa Waste Exchange welcomes Shelly Codner

By Jeff Beneke

Iowa Waste Reduction Center



Shelly Codner

The Iowa Waste Exchange (IWE) would like to welcome Shelly Codner as the new IWE Area Resource Specialist for the Mason City area. Shelly will reside out of the Rural Iowa Waste

Management Association office. She joins other IWE Area Resource Specialists in providing Iowa business and industry with waste management alternatives and assistance that result in both economic and environmental benefits.

Shelly comes to the IWE program with a great deal of experience in the solid waste industry. She has served as the recycling education coordinator and director of the Butler County Solid Waste Commission as well as the project leader

for SEED (Sustainable Environmental Education Directive). For the past year, she has served as the recycling education coordinator for the Rural Iowa Waste Management Association. Shelly is also the managing editor of the Iowa Recycling Association's education newsletter *4R's* and the regional editor of *Green Teacher Magazine* based in Ontario, Canada. She has been a featured author in numerous environmental periodicals including *BioCycle* and *Inbusiness*. In 2001, Shelly was the recipient of the Iowa Recycling Association's Outstanding Public Service Award for the Betterment of Recycling.

Shelly will be responsible for the ten counties in Area C: Cerro Gordo, Floyd, Franklin, Hancock, Hardin, Kossuth, Mitchell, Winnebago and Worth counties as well as a portion of Wright county. Feel free to contact Shelly at (319) 267-9946 or (319) 404-1942 or email her at shelly@netins.net.

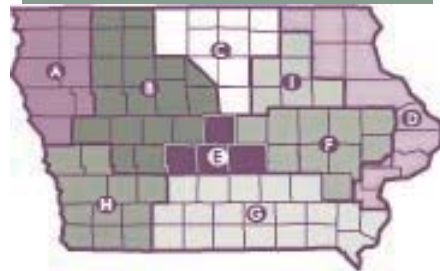
Iowa Waste Exchange Helps Businesses Save Millions This Year

The Iowa Waste Exchange (IWE) completed another year serving Iowa businesses interested in saving money while increasing recycling. In the past fiscal year (July 1, 2002 to June 30, 2003), the IWE found alternative uses for nearly 450 materials. By diverting more than 71,000 tons of material from disposal, the IWE saved businesses

\$2.5 million in avoided disposal costs. Ten IWE resource specialists offer free assistance at host locations across the state. Not only do IWE resource specialists match a wide variety of industrial materials and by-products; they also offer pollution prevention, recy-

(continued on back page)

Iowa Waste Exchange Regions and Specialists



- | | |
|--|--|
| A:
PERRY NELSON
Western Iowa Tech
Community College
(712) 274-8733
Ext. 1560 | F:
RICK MEYERS
(Linn County only)
and
JOHN KOCH
Kirkwood Training
and Outreach
Services
(319) 398-5665,
(319) 398-4904 |
| B:
FRED KESTEN
Region XII Council of
Governments
(712) 792-9914 | G:
JIM REIMER
Indian Hills
Community College
(641) 683-5269 |
| C:
SHELLY CODNER
Rural Iowa Waste
Management
Association
(319) 404-1942 | H:
BILL PENDGRAFT
Iowa Western
Community College
(712) 325-3309
Ext. 3309 |
| D:
JULIE PLUMMER
Eastern Iowa
Community College
District
(563) 336-3319 | I:
SARAH SMITH
Iowa Northland
Regional
Council of
Governments
(319) 235-0311 |
| E:
DENNIS
HAYWORTH
DMACC - Business
Resources
(515) 964-6346 | |

GENERAL INFORMATION:

If you are not sure who to contact, call or write

IOWA WASTE REDUCTION CENTER: or
1005 Technology Parkway ❖ Cedar Falls, IA 50613-6951
800/422-3109 or 319/273-8905

RECYCLE IOWA:
200 East Grand Avenue ❖ Des Moines, IA 50309
800/532/1216

How to use the Iowa Waste Exchange

Fall 2003

ITEM	DESCRIPTION/AMOUNT	ID#	CONTACT
Chemicals			
Coconut oil surfactant for hand soap/lotion	One time only, 2,760 pounds	10636	G - Jim
Duplicating fluid	One time only, 64 pounds	10647	A - Perry
Dyes	One time only, 247 pounds	9549	B - Fred
Oakite 32	One time only, 1,648 pounds	7624	B - Fred
Petroleum jelly	One time only, 200 pounds	10407	I - Sarah
Rubber cement	One time only, 64 pounds	10648	A - Perry
Sulfur, 85%	Ongoing, 82 tons per year	10404	F - Rick
Toner and developer	Ongoing, 10,404 pounds per year	10349	E - Dennis
Construction and Demolition			
Granite/Marble cutoffs	Ongoing, 58 tons per year	10415	G - Jim
Drums			
Drums, fiber	Ongoing, 7,200 pounds per year	6180	F - John
Drums, metal, 55 gal	Ongoing, 2,600 pounds per year	3832	F - John
Drums, plastic	Ongoing, 81,000 pounds per year	6181	F - John
Glass			
Plate Glass	Ongoing, 300 tons per month	7464	C - Shelly
Metals			
Aluminum foil scrap	Ongoing, 48,000 pounds per year	9728	H - Bill
Aluminum foil/plastic laminate	Ongoing, 305 tons per year	8534	D - Julie
Fuel barrels	One time only, 150 pounds	10631	B - Fred
Metal parts	Ongoing, 48 tons per year	10509	E - Dennis
Pouches (Al foil laminate)	Ongoing, 1,528 tons per year	7221	D - Julie
Steel wire w/Brass PL - #012	Ongoing, 78 tons per year	2566	H - Bill
Welding flux	Ongoing, 40 tons per year	10490	F - John
Miscellaneous			
Electrostatic Bags	Ongoing, 600 pounds per month	10650	I - Sarah
Hot Melt Adhesive	One time only 12,800 pounds	10386	D - Julie
Incinerator ash	Ongoing, 5,742 tons per year	10403	F - Rick
M2 video tapes	One time only 1,000 pounds	10414	I - Sarah
Mica flakes	One time only, 10,000 pounds	9051	E - Dennis
Orbital rivetter (makes european style elect plugs)	One time only, 2,000 pounds	10534	G - Jim
Paint filters	Ongoing, 100 tons per year	10491	F - John
Powder coat	Ongoing, 1,600 pounds per year	10212	B - Fred
Rail crane (diesel 50 ton)	One time only, 100 tons	10249	G - Jim
Seco dust collector (new 4-bag)	One time only, 1,000 pounds	9976	G - Jim
Talc Poly 9610	One time only, 10,000 pounds	9050	E - Dennis
Unused plastic bottles (with lids, various sizes)	One time only, 500 pounds	10582	G - Jim
Wind turbine blades	Ongoing, 700 tons per year	10587	B - Fred
Motor Vehicle Items			
Grease	One time only, 350 pounds	10524	I - Sarah
Organic Waste			
Biosolids	Ongoing, 16,790 tons per year	10526	F - Rick

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 or www.iwrc.org/exchange.

ITEM	DESCRIPTION/AMOUNT	ID#	CONTACT
Paper			
Corrugated containers	One time only, 6,000 pounds	10527	H - Bill
OCC scrap & paper	Ongoing, 1,300 tons per year	6668	F - John
Paper rolls, new	One time only, 3,300 pounds	10454	F - Rick
Wet-strength containers	Ongoing, 52,000 pounds per year	10551	F - Rick
Plastics			
10" white core plugs #2	Ongoing, 5,200 pounds per year	9841	H - Bill
Black poly plastic/foam	Ongoing, 240 tons per year	1522	C - Shelly
EPS insulation	One time only, 3,240 pounds	10549	B - Fred
Film boxes and spools	Ongoing, 24,000 pounds per year	8561	E - Dennis
Foam trays	One time only, 5,670 pounds	10645	B - Fred
Lumber wrap	Ongoing, 13,680 pounds per year	10442	F - Rick
Mix of polystyrene and polyethylene	Ongoing, 600 pounds per year	10525	I - Sarah
Nylon window screens	Ongoing, 2,400 pounds per year	8159	I - Sarah
PE foam	One time only, 3,500 pounds	3907	B - Fred
Poly resin pellets	Ongoing, 2 tons per year	8846	C - Shelly
Polyethylene and urethane foam blend	Ongoing, 10 tons per year	10651	I - Sarah
Polyurethane, foam	Ongoing, 561 tons per year	496	F - John
Polyurethane, thermoset	Ongoing, 104 tons per year	4810	E - Dennis
Styrofoam packaging blocks	Ongoing, 6,240 pounds per year	8074	E - Dennis
UHMWPE	Ongoing, 11,500 pounds per year	10433	B - Fred
Vinyl	One time only, 1,300 yards	1537	C - Shelly
Vinyl rolls	One time only, 220 tons per year	9584	H - Bill
Vinyl #103	One time only, 100 pounds	10400	D - Julie
Rubber			
Rubber gasket sheets	Ongoing, 240 pounds per year	5101	I - Sarah
Rubber linings, ground	Ongoing, 83 tons per year	10311	D - Julie
Textiles			
Furniture upholstery material	Ongoing, 130 tons per year	10253	H - Bill
Leather, scrap	Ongoing, 28,080 pounds per year	3455	B - Fred
Processed wool	Ongoing, 51,792 pounds per year	9352	B - Fred
Wool padding	One-time only, 4 tons	10157	I - Sarah
Wood			
Crates with metal strip on edges	One time only, 44,800 pounds	10476	F - Rick
Excelsior (fine curled wood shavings)	One time only, 250 pounds	10583	G - Jim
Junk pallets	Ongoing, 16,800 pounds per year	10620	F - Rick
Pallets	Ongoing, 28,800 pounds per year	10337	E - Dennis
Particle board laminate cutoffs	Ongoing, 624 tons per year	10514	D - Julie
Plywood scraps	Ongoing, 24,000 pounds per year	10447	F - Rick
Redwood beams	One time only, 4,000 pounds	10592	B - Fred
Salvaged construction wood	One time only, 80 tons	10558	B - Fred
Sawdust	Ongoing, 195 tons per year	9424	E - Dennis
Sawdust	Ongoing, 1,040 pounds per year	10531	F - Rick
Scrap wood	Ongoing, 499 tons per year	9425	E - Dennis
Wood, oak door skins	Ongoing, 208 tons per year	5407	F - John

Pictures of materials with this symbol are available at www.iwrc.org/exchange

Closed Loop Makes Another Match

By Bill Pendgraft

IWE Specialist, Area H



Bill Pendgraft

In April, G & H Transportation Co. in Greenfield, Iowa contacted Bill Pendgraft concerning a product they had been storing for another

firm in Greenfield for quite some time. The firm requested G & H try to dispose of the product because they could no longer use it, nor could they return it to the European manufacturer. G & H had worked with Bill before on recycling other products and neither the manufacturing company nor G & H wanted to send perfectly good product to the landfill.

The product is known as Desifill (glass beads used somewhat like a desiccant). Bill listed the product in the Closed Loop newsletter and was contacted by several firms. The first firm given the information was the Recycle Bin of Red Oak, Iowa. Brian Howes, the owner, immediately asked for a sample and soon had matched the product with some of his contacts. This consisted of 16 pallets at 2,000 lbs. per pallet, totaling 16 tons of product that was kept out of the landfill.

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 judgements 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 Energy and Waste Management Bureau at (800) 367-1025 or the IWRC at (800) 422-3109.

Golden Opportunity with Rainbow Services

By Fred Kesten,

IWE Specialist, Area B



Fred Kesten

Continental Manufacturing, Inc. in Madrid is a manufacturer of personal care and animal care products. Its waste stream is primarily corrugated boxes and 55-gallon steel and plastic drums. Fred first

met with the company in August 1996. Since then, Fred has made many referrals for the company's drums with no

success. Madrid does not have a recycling program due to the distance the Boone-located hauler would have to travel to the Boone County Activity Center, so the corrugated boxes were also not recycled. The company estimated that they could generate three bales per week, but the decision was never made to purchase a baler.

In the fall of 2002, Fred made a referral to Rainbow Services. Within the last month, Rainbow Services has collected 436 drums with another load yet to be completed. While in Madrid, Rainbow Services also completed a one-time pick-up of 128 drums from another company. Rainbow Services has also shown interest in collecting the corrugated cardboard from Continental Manufacturing, Inc.

CUNA Mutual Life Distributes Office Supplies

By Sarah Smith

IWE Specialist, Area I



Sarah Smith

In May of 2003, CUNA Mutual Life contacted Sarah Smith, Iowa Waste Exchange (IWE) specialist for Area I. Over time, CUNA Mutual Life has collected and stored a large amount of

used office supplies no longer needed by its employees. Rather than hauling all of the materials to the Bremer

County Sanitary Landfill, CUNA Mutual Life hoped to find alternative uses for the supplies.

Sarah Smith visited CUNA Mutual Life to discuss the IWE program and take a quick inventory of all the different types and amounts of office supplies they had accumulated. Available materials included binders, file folders, mailing dots, file dividers, folder page inserts and the list went on. In the next couple of weeks, approximately 23 boxes (600 pounds) of office supplies were delivered to two separate markets that were able to make use of the used materials.

In the future, the Iowa Waste Exchange and CUNA Mutual Life will continue to work together to divert valuable material from the landfill.

IWE

(continued from front page)

cling and general business assistance referrals. In addition to helping businesses realize savings from avoided purchases, reduced transportation costs and increased storage space, the confidential nature of the program also provides security for businesses concerned with maintaining their privacy.

The IWE mission is to provide Iowa industries with smart waste management alternatives and business assistance services that result in both economic and environmental benefits, including waste reduction from Iowa landfills. The IWE is a cooperative effort of Recycle Iowa, Iowa Waste Reduction Center, Iowa Department of Natural Resources, Iowa Community Colleges, Regional Council of Governments and Iowa Solid Waste Agencies.