

# CLOSED Loop

Spring 2002

## Charles City Area Chosen for Pilot Community-wide Program

**By Chad Gookin**  
*Public Relations Specialist*

In an effort to help small business and industry in the Charles City area, the Charles City Area Development Corporation partnered with the Iowa Waste Reduction Center (IWRC) and the Institute for Decision Making at the University of Northern Iowa to implement a community-wide pilot program providing environmental compliance assistance to all qualifying area businesses. The program is scheduled for April 15-19.

The services provided by the IWRC are free and confidential to businesses with fewer than 200 employees. IWRC will do on-site visits at each requesting business to identify trouble spots in waste disposal, opportunities for pollution prevention and to answer questions about environmental regulations.

The on-site review, IWRC's primary service, consists of a waste reduction professional gathering operational information at the facility and, specifically, the management procedures associated with waste materials. Then a facility tour is conducted

and additional information is gathered. After the completion of the site visit, the IWRC staff member prepares a report within four weeks, reviewing the relevant regulations and identifying pollution prevention opportunities. Six months following the report, a phone-call is made to the client to follow-up on the report and see if additional information or assistance is needed.

The greater Charles City area was chosen for this pilot program because of the diversity of local

business operations. By conducting visits throughout the entire community, IWRC can offer collective as well as individual business solutions to environmental and waste compliance issues.

For more information about this community-wide program or how to participate, please contact Charles City Area Development Corporation's Timothy Fox at (641) 228-3020 or the IWRC at 1-800-422-3109.



# EPA Has Lowered TRI Reporting Threshold Levels for Lead

## Do You Need To Report?

Lead and lead compounds have been added to the list of persistent bioaccumulative toxic (PBT) chemicals that must be reported on the Toxic Release Inventory (TRI) Form R each July 1. PBT chemicals have much lower reporting thresholds than other EPCRA Section 313 chemicals. For both lead and lead compounds, a threshold of 100 pounds per year has been established.

Before worrying about thresholds, stop and make sure you are a subject facility. Subject facilities are those that meet all three of the following criteria:

1. Have an operation that is defined by a specified standard industrial classification (SIC) code.
2. Employ ten full-time employees (or the equivalent of 20,000 employee-hours per year)
3. Manufacture, process and otherwise use an EPCRA 313 chemical in excess of established threshold. Thresholds are applied individually to the activities of manufacture, process and otherwise use. Annual activity thresholds for

| SIC Code   | Industry                                    |
|--|---|
| <b>10</b> (except SIC codes 1011, 1061, & 1074)  | Steel Milling                               |
| <b>12</b> (except SIC code 1241)   | Steel Milling                               |
| <b>20 through 30</b>   | Manufacturing Industries                    |
| <b>4811, 4831 or 4839</b><br>(each limited to facilities that conduct coal and/or oil for the purpose of generating power for distribution to customers) | Electric Utilities                          |
| <b>4953</b> (limited to facilities regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. section 6921 et. seq.)              | Commercial Hazardous Waste Treatment        |
| <b>8199</b>  | Chemicals and Allied Products - Mississippi |
| <b>501</b>   | Petroleum Bulk Terminals and Piers          |
| <b>7399</b> (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis)  | Industrial Solvent Services                 |

EPCRA 313 Chemicals are:

- a. 25,000 pounds for manufacturing or processing;
- b. 10,000 pounds for otherwise use; and
- c. chemical specific for PBTs.

If your facility meets both the first and second criteria, and you use lead in your operation, it is time to review the threshold values for lead. Lead and lead compounds are listed separately and threshold determinations should be made for each if applicable.

The EPA excludes lead present in stainless steel, brass and bronze from PBT threshold determinations. The EPCRA 313 Chemicals, including lead, present in stainless steel, brass or bronze alloys are still subject to reporting if they exceed the activity thresholds of 25,000 for manufacturing and processing or 10,000 for otherwise use.

If this is the first time you are reviewing this regulation and it applies to your operation, several

| TRI Chemical   | PBT Threshold         |                   |                         | Other EPCRA 313 Chemicals |                   |                         |
|----------------|-----------------------|-------------------|-------------------------|---------------------------|-------------------|-------------------------|
|                | Manufacture Threshold | Process Threshold | Otherwise Use Threshold | Manufacture Threshold     | Process Threshold | Otherwise Use Threshold |
| Lead           | 100                   | 100               | 100                     | 25,000                    | 25,000            | 10,000                  |
| Lead Compounds | 100                   | 100               | 100                     | 100                       | 100               | 100                     |

resources are available to you. The IWRC can provide confidential site-specific assistance and is free to small businesses in Iowa. Contact the IWRC by phone 319/273-8905 or email Lisa.Hurban@uni.edu with questions. The EPA's website, [www.epa.gov/tri/](http://www.epa.gov/tri/), has many useful guidance documents as well as software that can assist in preparing the TRI Form R. The EPA is sponsoring workshops to assist in TRI reporting. To learn more about the workshop or register call (913) 551-7680 or visit the web site at [www.mckinzieconstruction.com/](http://www.mckinzieconstruction.com/). Reservations are necessary.

For those familiar with TRI reporting, classifying lead as a PBT impacts other reporting requirements. They include:

- ✓ For PBT chemicals, including lead and lead compounds, de minimis levels do not apply. De minimis levels for other EPCRA 313 chemicals are typically 1 percent or 0.1 percent. For lead present in stainless steel, brass and bronze alloys, the de minimis level for lead is 0.1 percent.
- ✓ TRI reporting of PBT lead or lead compounds precludes businesses from using alternate reporting thresholds and Form A Certification Statement. PBT lead or lead compound reporting can not use range reporting of releases in Section 5 and of Part II of the Form R. Thus for lead compounds or lead not contained in stainless steel, bronze or brass alloys, facilities are required to report actual release numbers.
- ✓ Finally, data precision is also impacted. In all TRI reporting, a facility should use the level of precision in estimating its

releases and other waste management calculations that is supported by the available data. The level of precision required for PBT chemicals, including lead and lead compounds, is one-tenth (0.1) of a

pound. Therefore, releases that are less than 0.5 pounds/year can not be rounded to zero but those less than 0.05 pounds/year can. For more information, please contact the IWRC at 1-800-422-3109.



Source of information: EPA EPCRA - Section 313: Guidance for Reporting Releases: Lead and Lead Compounds. (EPA 260-B-027 December 2001) [http://www.epa.gov/tri/guide\\_docs/index.htm,#chemical\\_sp](http://www.epa.gov/tri/guide_docs/index.htm,#chemical_sp)

# Save the Date

## Environmental and Safety Assistance Workshops

|   |  |   |
|---|--|---|
| <p><b>April 12, 2002</b><br/><b>Ames</b><br/>ISU Research Park<br/>2501 N. Loop Drive<br/>Building 1, Conference Room A</p> | <p><b>April 16, 2002</b><br/><b>Mason City</b><br/>The Pappajohn Business Center<br/>North Iowa Area Community College<br/>500 College Drive, Room 117</p> | <p><b>May 29, 2002</b><br/><b>Sioux City</b><br/>Western Iowa Tech Community College<br/>4647 Stone Avenue<br/>Building B, Room 161</p> |
|---|--|---|

Contact the Iowa Waste Reduction Center at 800-422-3109 for workshop content inquiries and registration questions.

## LT&T Meets ARB Process Precertification Program Requirements

Laser Touch and Technologies™, Waterloo, IA, has met the requirements specified in the California Air Resources Board's (ARB) precertification program for its Laser Touch® targeting system, model LT-B512. ARB concludes that the Laser Touch Model LT-B512 used in conjunction with a High-Volume-Low-Pressure (HVLP) paint spray gun, in accordance with the Laser Touch® manufacturer's instructions, will significantly decrease volatile organic compounds (VOC) and other hazardous air pollutants. The program results showed a 15-percent reduction in material usage and a corresponding 15-percent reduction in VOC.

The Laser Touch® attaches to any manual spray gun using an adapter bracket. It provides real-time visual feedback alerting the operator of the distance from gun-to-part, spray pattern 50-percent overlap and targets the spray pattern on the part's surface. It emits two laser beams that converge into one dot when the spray gun is held at the proper distance and angle from the part to be coated. If the proper distance or angle is jeopardized, the two laser beams separate signaling the operator to make the proper adjustments. This provides an environmental and economic benefit through improved Transfer Efficiency (TE) and consistent coating finish quality.

Contact Nick Horan of Laser Touch and Technologies™ at 800-706-0053 for more information or on the web at [www.lt-t.com](http://www.lt-t.com).

**VOLUME 12.0 - SPRING 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

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**SPRING  
2002**

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University of Northern Iowa  
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Cedar Falls, IA 50613-6951**

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# IOWA waste exchange

spring  
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

## a Constructive Solution

By Julie Plummer

IWE Specialist, Area B

The Iowa Waste Exchange has recently found a successful match involving wood waste from the All American Homes of Iowa LLC facility that will divert nearly 600 tons of wood waste annually from Iowa landfills.



Julie Plummer

All American Homes of Iowa LLC builds approximately 20 modular homes per week inside their 153,000 sq. ft. state-of-the-art facility located in Dyersville, Iowa. These systems-built residential homes are constructed inside of the manufacturing facility in sections, and then transported to a job site 90-95 percent complete.

Iowa Waste Exchange Representative Julie Plummer has been working to

assist All American Homes of Iowa LLC in finding suitable alternatives to landfill disposal for many of the construction materials used in modular construction.

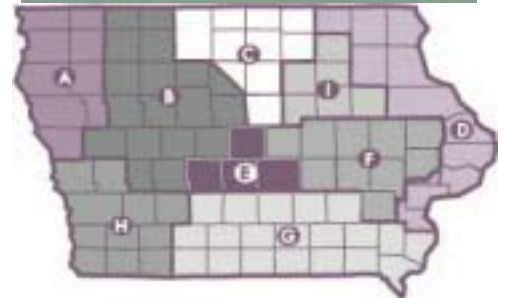
A nearby source collects both the dimensional lumber and oriented strand board from their manufacturing facility on a weekly basis. The scrap wood is then ground into sawdust consistency, and is reused by area farmers as animal bedding. Treated wood, sometimes unsuitable for animal bedding due to the glues used in its production, is mixed together with the clean sawdust in a ratio which allows all of the wood waste to be reused.

According to All American Homes facility manufacturing manager Dave Moore, the partnership with the wood recycling facility has substantially impacted the cost of dealing with the wood waste in a positive way, and he is very pleased with the quality of service being provided. Up to 600 tons of treated wood and dimensional lumber scrap is generated at the All American Homes of Iowa LLC facility annually, and so this reuse is providing a cost savings to the manufacturer as well as saving valuable space in an Iowa landfill.

During an on-site assessment of Heritage Lace of Pella, Jim Reimer, IWE Area Resource Specialist, was shown boxes filled with various finished lace products in storage. Dave Heinen, the operations manager for Heritage Lace, informed him it was soiled with small spots of equipment dirt and grease. They had 20,000 pounds in storage and

(continued on back page)

## Iowa Waste Exchange Regions and Specialists



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

## Cleanliness

is next to  
Profit



Jim Reimer

By Jim Reimer  
IWE Resource  
Specialist, Area G

# How to use the Iowa Waste Exchange

Spring 2002

| ITEM  | DESCRIPTION/AMOUNT               | ID#  | CONTACT   |
|---|----------------------------------|------|-----------|
| <b>Brown Goods and Accessories</b>              |                                  |      |           |
| Computer monitors                               | One time, 2,000 pounds           | 9614 | H - Bill  |
| <b>Chemicals</b>                                |                                  |      |           |
| Hydrocal  | Ongoing, 2,000 pounds per day    | 9357 | B - Fred  |
| Chloropicria 40 pound bags                      | One time, 80 pounds              | 9573 | B - Fred  |
| Toner cartridge ink                             | One time, 120 pounds             | 9612 | B - Fred  |
| Dyes  | One time, 247 pounds             | 9549 | B - Fred  |
| Dry-Blend Fertilizer                            | One time, 10,000 pounds          | 8798 | B - Fred  |
| Fusecote 240 (fusing fluid)                     | One time, 42 pounds              | 9644 | C - Kathy |
| BWT 850 (Corrosion Inhibitor)                   | One time, 250 pounds             | 9646 | C - Kathy |
| Mineral Spirits (virgin)                        | One time, 3,520 pounds           | 9622 | G - Jim   |
| Enamel Paint (virgin)                           | Ongoing, 188 pounds per year     | 9501 | G - Jim   |
| Hydrochloric Acid                               | One time, 150 pounds             | 9499 | G - Jim   |
| Sulfuric Acid                                   | Ongoing, 48,000 pounds per year  | 7851 | I - Jodi  |
| Hydrogen peroxide                               | One time, 142 pounds             | 9307 | I - Jodi  |
| Electrical Joint Compound (70 tubes)            | One time, 35 pounds              | 9650 | F - Rick  |
| <b>Drums</b>                                    |                                  |      |           |
| Naphthalene                                     | One time, 50 pounds              | 9306 | I - Jodi  |
| HDPE drums (55-gallon)                          | Ongoing, 2,700 pounds per year   | 5888 | B - Fred  |
| Fiber Drums<br>(55-gallon with clamp-lock lids) | Ongoing, 18,720 pounds per year  | 9558 | D - Julie |
| 55-gallon plastic drums                         | One time, 81,000 pounds          | 9609 | F - John  |
| <b>Glass</b>                                    |                                  |      |           |
| 55-gallon metal drums                           | Ongoing, 3,600 pounds per year   | 9552 | F - John  |
| Fiberglass                                      | Ongoing, 104,000 pounds per year | 7628 | B - Fred  |
| Fiberglass dust                                 | Ongoing, 5,200 pounds per year   | 2763 | B - Fred  |
| Glass Jars                                      | One time, 1,600 pounds           | 3837 | F - Rick  |
| <b>Metals</b>                                   |                                  |      |           |
| Fiberglass, window trimmings                    | Ongoing, 104,000 pounds per year | 1107 | C - Kathy |
| Stratified Wire (10,000 diameter wire)          | Ongoing, 168 pounds per year     | 9620 | B - Fred  |
| <b>Miscellaneous</b>                            |                                  |      |           |
| Stainless steel screws, bolts & nuts            | One time, 3,200 pounds           | 9487 | H - Bill  |
| Paint - Powder Coat                             | Ongoing, 60,000 pounds per year  | 9615 | A - Perry |
| Drywall scrap                                   | Ongoing, 16,000 pounds per month | 4706 | A - Perry |
| Drywall Scraps (gypsum)                         | Ongoing, 35 tons per month       | 108  | D - Julie |
| Diatomaceous earth                              | Ongoing, 10,500 pounds per week  | 5330 | D - Julie |
| Paint (Dupont IMRON 5000)<br>various colors     | One time, 2,070 pounds           | 9336 | G - Jim   |
| Door mats rubber (2-1/2' x 3')                  | One time, 18,400 pounds          | 9605 | G - Jim   |
| Fire Hose                                       | One time, 1,800 pounds           | 9601 | I - Jodi  |

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).

| <b>ITEM</b>  | <b>DESCRIPTION/AMOUNT</b>         | <b>ID#</b> | <b>CONTACT</b> |
|--|-----------------------------------|------------|----------------|
| <b>Organic Waste</b>                                     |                                   |            |                |
| Whey   | Ongoing, 153,000 pounds per week  | 9423       | E - Dennis     |
| Compost  | One time, 80,000,000 pounds       | 9451       | G - Jim        |
| <b>Paper</b>   |                                   |            |                |
| 2-ply paper with grease resistant coating                | Ongoing, 18,000 pounds per week   | 9298       | A - Perry      |
| Gaylords   | Ongoing, 2,400 pounds per year    | 9619       | B - Fred       |
| Cardboard, waxed   | Ongoing, 159,900 pounds per year  | 5077       | B - Fred       |
| Paper bags with plastic liner (3-1/2" x 10")             | Ongoing, 4,000 pounds per year    | 4761       | C - Kathy      |
| Abrasive paper waste                                     | Ongoing, 614,000 pounds per month | 8771       | E - Dennis     |
| Fiber core tubes   | Ongoing, 36,500 pounds per year   | 635        | F - Rick       |
| Cores, OMC-6"  | Ongoing, 2,400 pounds per year    | 9604       | G - Jim        |
| <b>Plastics</b>  |                                   |            |                |
| Styrofoam (1" x 1")                                      | Ongoing, 3,500 pounds per week    | 2764       | B - Fred       |
| High density polyurethane tubing (1-1/2" to 2" diameter) | One time, 4 truck loads           | 9651       | F - Rick       |
| Supersacks   | One time, 1,500 pounds            | 9359       | C - Kathy      |
| Mylar, scrap   | Ongoing, 2,600 pounds per year    | 3585       | D - Julie      |
| Diazo film with polyester base                           | Ongoing, 48,000 pounds per year   | 8560       | E - Dennis     |
| Plastic shell from computer monitors                     | Ongoing, 26,000 pounds per year   | 9610       | F - John       |
| Plastic Drums (55-gallon)                                | Ongoing, 52,000 pounds per year   | 9467       | F - John       |
| Plastic housings for computers and other elec.           | One time, 2,000 pounds            | 9025       | H - Bill       |
| Vinyl rolls  | One time, 440,000 pounds          | 9584       | H - Bill       |
| PVC molding  | One time, 1,000 pounds            | 9449       | H - Bill       |
| PVC scrap  | Ongoing, 9,600 pounds per year    | 2523       | H - Bill       |
| Plastic dust   | One time, 3,200 pounds            | 9600       | I - Jodi       |
| <b>Rubber</b>  |                                   |            |                |
| Rubber floor mats (2' x 3-1/2')                          | Ongoing, 500 pounds per year      | 9258       | D - Julie      |
| <b>Textiles</b>  |                                   |            |                |
| Wool trimmings tanned sheep                              | Ongoing, 14,400 pounds per year   | 3737       | D - Julie      |
| Leather scrap  | Ongoing, 32,500 pounds per year   | 90         | F - John       |
| Nylon with polyester                                     | Ongoing, 13,000 pounds per year   | 1461       | F - John       |
| <b>Wood</b>  |                                   |            |                |
| Scrap wood   | Ongoing, 19,200 pounds per week   | 9425       | E - Dennis     |
| Sawdust  | Ongoing, 1,500 pounds per day     | 9424       | E - Dennis     |
| Wood crates (various sizes)                              | Ongoing, 37,500 pounds per year   | 9617       | F - John       |
| Skids (oak 4'x4')  | Ongoing, 72,000 pounds per year   | 9500       | G - Jim        |

# Boy Scouts to the Rescue

**By John Koch**

*IWE Resource Specialist, Area F*

Culligan Store Systems, Iowa City, Iowa, provides bottled water services to area retail outlets. Providing water



*John Koch*

dispensing equipment and water containers is also included in their service. Manager Rob Wheeler contacted IWE Area Resource Specialist John Koch about

plastic waste they wanted to recycle. There was not a place to take the material in Iowa City and they did not want to send it to a landfill.

When Koch picked up samples from the company, he learned that the bulk

of the material was two- and three-gallon bottles that were unusable because the containers had a store label on them that they no longer serviced. The bottles had never been used and were suitable for holding potable water.

Koch asked them to hold off recycling the bottles while he tried to find someone who could use them. He then contacted Cindi Rader at the Boy Scout's office in Cedar Rapids, and she agreed to put a bottle on display to see if any of the scout troops were interested in them for use on camping trips. A few days later, she told Koch the troops were interested in ten bottles. Soon after, she revised the number to 35. Later she requested an additional 50. In the end, the Boy Scouts accepted all the containers Culligan had (about a pickup truck full) and is interested in more whenever they are available.

So rather than being landfilled or recycled, the bottles will be used and reused for years to come.

# Hog Heaven

**By Jim Reimer**

*IWE Resource Specialist, Area G*

Alaniz and Son's, Inc., a mass mailing company located in Mount Pleasant, Iowa, generates 43 tons of nonrecyclable pressure



*Jim Reimer*

sensitive paper each year. This material, known as peel and stick, has created a need for the company to find a landfill alternative.

Jim Reimer, Iowa Waste Exchange Area G Resource Specialist, was con-

ducting an onsite assessment of Alaniz and Son's when he discovered the company's want of a reuse solution for the nonrecyclable material.

Derby Farms in Drakesville, Iowa requires about 20 tons of bedding material per week for its hog feed lot. To help offset costs, they use paper shredded in the same machine used for hay processing, and blow that material into the hog hoop buildings.

Reimer arranged a meeting with the two companies. Alaniz and Son's agreed to put the peel and stick paper waste in gaylords to be transported and attach a pallet to each gaylord to prevent the paper from flying out during transportation.

Through this successful match, Alaniz and Son's eliminated their disposal costs, Derby Farms reduced their operating expenses, and the hogs think they are in "Hog Heaven."

## Cleanliness

*(continued from front page)*

generated about 20,000 pounds per year.

The company had taken the lace to a professional dry cleaning business. However, after cleaning the lace it looked used and could not be sold. Next, they tried to spot clean it themselves. Due to time constraints they discontinued the process. They were at a loss as what to do. They disliked the idea of having to landfill it. They contacted Reimer to see if he had any ideas.

Reimer contacted Ben and Doris Fuhs who own and operate Rainbow International a janitorial and vending business in Ottumwa. Ben said he would be happy to meet with the Heritage Lace operations manager to discuss mutual business interests.

Rainbow International took on the challenge of cleaning the lace to the satisfaction of Heritage Lace. Heritage Lace now sells the cleaned lace as a premium product for a profit. Not to mention, the \$440.00 savings from disposal costs.

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 Waste Management Assistance Division at (800) 367-1025 or the IWRC at (800) 422-3109.