

Air
Land
Sea
Space
Cyberspace

Innovation. In all domains.

CEDS Indianapolis Recycling & P2 Initiatives

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Memberships/Partnerships



Partners for
Pollution
Prevention



2010 Recycling Benefits



CEDS INDIANAPOLIS 2010 RECYCLING BENEFITS

In 2010, we recycled 128 tons of metal, 77 tons of paper and cardboard, 26 tons of wood pallets and debris and 109 tons of solid waste was sent for reuse as waste to energy. The recycling of these materials avoided their manufacturing and disposal thereby conserving the resources below:

1,586 Mature Trees

This represents enough saved timber resources to produce more than 19,646,921 sheets of newspaper!



7,862 Gallons of Oil

This represents 187 barrels of No.2 fuel oil, which provides enough energy to heat and cool more than 468 homes for one year!

277,869 KW-hrs of Electricity from WTE

This is enough power to fulfill the monthly energy needs of 278 homes!



541,222 Gallons of Water Conserved

This represents enough fresh water to meet the daily fresh water needs of more than 7,216 people.



367 Metric Tons of GHG Emissions Avoided

The recycling of these materials prevented these GHG Emissions!

1,109,895 KW-hrs of Electricity

This is enough power to fulfill the monthly energy needs of 1,111 homes!



708 Cubic Yards of Landfill Space

This represents enough airspace to fulfill the municipal waste disposal needs for 907 people for one year!

Color of Waste



Satellite Accumulation Areas

- 53 SAAs
- Inspected weekly
- Company Best Practice



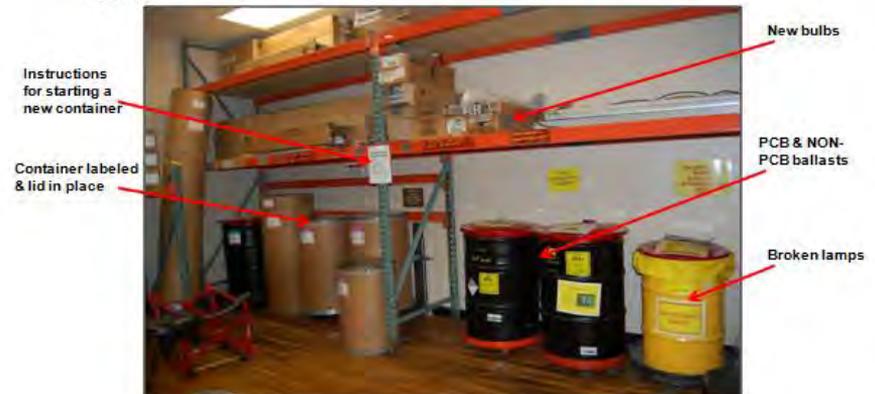
Lamps & Ballasts



2010 UNIVERSAL WASTE LAMPS & BALLASTS BULLETIN

This document serves as a quick reminder of universal waste handling requirements for employees and contractors at the Indianapolis site.

- 1. Properly store universal waste lamps.**
Lamps must be stored in sound, closed containers to prevent breakage. All containers must be labeled "Universal Waste" and include an accumulation start date.
- 2. Place waste lamps in the appropriate containers.**
Signs are posted on all containers indicating which type of lamp should be placed in the container. (4-foot, 8-foot, compact fluorescent, U-Bend, HID, Broken)
- 3. Broken lamps must be managed as hazardous waste.**
Lamps must never intentionally be broken. Immediately clean up broken lamps and place in the appropriate satellite accumulation area located in the bulb room.
- 4. Know the procedure for starting a new universal waste lamp container.**
Instructions are posted and materials are stored in the bulb room.
- 5. Store new lamps in the designated locations.**
Shelves have been labeled to identify where new lamps are to be stored. This is to prevent any confusion associated with storing new and used lamps in the same location.
- 6. Segregate PCB ballasts from NON-PCB ballasts.**
Instructions for differentiating between PCB and NON-PCB ballasts are posted in the bulb room.



Contact EHS with any questions:
Larry Bryan (x7447), Sandra Merritt (x7049), Al Barnes (x4235)

Recycle Centers



Raytheon

REDUCE REUSE RECYCLE

- Aluminum Cans
- Plastic Drink Bottles
- Other type 1 plastic (PET)
- Other type 2 plastic (HDPE)

Colored Paper
Newspapers
Magazines
Brochures
Envelopes
Sticky notes
Any clean mixed paper

NOT FOR USE FOR CLASSIFIED MATERIAL
CONTACT SECURITY FOR DESTRUCTION.

OTHER ITEMS RECYCLED AT EPS:
Cardboard, Wood, Electronic Scrap
Metals - Aluminum, Steel, Iron, Brass, etc.
Printer cartridges, Batteries,
Rags, Oil and Solvents

- White office paper
- All proprietary paper
- All private paper
- All sensitive paper

NOT FOR USE FOR CLASSIFIED MATERIAL
CONTACT SECURITY FOR DESTRUCTION.

Contact
Facilities Help Desk, x3291
for specific instructions or help,
or see the
EPS Facilities web page at:
<http://corp/FunctionalAreas/Facilities/recycling.asp>

Paper

- Copy Centers
 - 72 Copy Centers replaced individual workstation printers
- Xerox PrintSmart campaign
 - All Copy Centers default to 2-sided printing
- Junk Mail Reduction
 - Ecological Mail Coalition
 - Reduced junk mail by 80%



- CINTAS Document Management
 - Environmental Award for 2009 & 2010

Scrap Metals

- ***Empty Steel Drums*** – 1,600 pounds
- ***Copper*** – 15,000 pounds
- ***Aluminum*** – 63,000 pounds
- ***Brass*** - 1,000 pounds
- ***Stainless*** – 27,000 pounds
- ***Sheet Metal*** – 28,000 pounds
- ***Heavy Iron*** – 125,000 pounds
- ***Tin Solder*** – 520 pounds
- ***Precious Metals*** – 200 pounds
- ***Electronic Scrap*** – 17,000 pounds



Batteries

Used Battery Collection Stations

NON-HAZARDOUS WASTE ALKALINE BATTERIES

- THIS DRUM IS FOR **ALKALINE** BATTERIES ONLY!
- **OVER 9 VOLTS:** TERMINALS **MUST BE TAPED**
- **9 VOLTS OR LESS:** NO TAPING REQUIRED
- KEEP LID CLOSED WHEN NOT IN USE!
- PROFILE: 62423-72



UNIVERSAL WASTE LEAD-ACID BATTERIES

- THIS DRUM IS FOR **LEAD-ACID** BATTERIES ONLY!
- **TAPE ALL TERMINALS ON THESE BATTERIES**
- KEEP LID CLOSED WHEN NOT IN USE!
- PROFILE: 62423-55



UNIVERSAL WASTE MERCURY BATTERIES

- THIS DRUM IS FOR **MERCURY** BATTERIES ONLY!
- BATTERY WILL SAY "MR" OR "HG" OR "MERCURY"
- **TAPE ALL TERMINALS ON THESE BATTERIES**
- KEEP LID CLOSED WHEN NOT IN USE!
- PROFILE: 62423-54



NON-HAZARDOUS WASTE LITHIUM BATTERIES

- THIS DRUM IS FOR **LITHIUM** BATTERIES ONLY!
- BATTERY WILL SAY "LITHIUM", "LITHIUM ION", "LI-ION" OR "CR"
- **TAPE ALL TERMINALS ON THESE BATTERIES**
- KEEP LID CLOSED WHEN NOT IN USE!
- PROFILE: 62423-57



UNIVERSAL WASTE SILVER OXIDE BATTERIES

- THIS DRUM IS FOR **SILVER OXIDE** BATTERIES ONLY!
- BATTERY WILL SAY "SR" OR "AG" OR "SILVER OXIDE"
- **TAPE ALL TERMINALS ON THESE BATTERIES**
- KEEP LID CLOSED WHEN NOT IN USE!
- PROFILE: 62423-56



UNIVERSAL WASTE Ni-CAD / Ni-MH BATTERIES

- THIS DRUM IS FOR **NICKEL-CADMIUM** and **NICKEL-METAL HYDRIDE** BATTERIES ONLY!
- **OVER 9 VOLTS:** TERMINALS **MUST BE TAPED**
- **9 VOLTS OR LESS:** NO TAPING REQUIRED
- KEEP LID CLOSED WHEN NOT IN USE!
- PROFILE: 62423-73



Aerosol Recycling



RECOVERED MATERIALS AEROSOL CANS

- EXPIRED AEROSOL CANS ONLY!
- KEEP LID CLOSED WHEN NOT IN USE!
- NO TRASH or OTHER NON-AEROSOL CHEMICALS!
- For Service Call x4235



HAZARD(S): IGNITABLE, CONTENTS UNDER PRESSURE

DESCRIPTION: AEROSOL CANS CONTAINING SOLVENTS, WITH FLAMMABLE AND/OR NON-FLAMMABLE PROPELLANT

Additional Recycling Projects



Used Oil



Wood Pallets



Toner Cartridges



Tyvek



Cardboard



Electronic Scrap

Serving Up Sustainability

- Eliminated trash cans in Cafeteria
- Reusable utensils and dishes
- Separate recycled materials



- Napkins made of 100% recycled content
- Soup cups are 100% compostable
- 100% Styrofoam free in 2010
- Clam shells are biodegradable and made from 100% sugar cane
- Reusable mugs given to all new employees

Serving Up Sustainability



- Compost or dispose of food waste in garbage disposal
- Empty liquids
- Recycle kitchen grease



Cooling Tower H₂O Reuse



- Cooling tower water re-routed to air compressors to eliminate fresh water needs from public utilities.
- Reduced water usage by 6.06 million gallons (13%).

Air Compressor Upgrades



- Installed 2 new air compressors (1 variable speed).
- Achieved energy savings of 25% and a cost savings of \$11,000.

Communications



EHS/Wellness/Security

Indianapolis Site Joins Central Indiana Clean Air Partnership

The CEDS-Indianapolis site has become a Gold Partner with the Central Indiana Clean Air Partnership (CICAP), an initiative of the Indianapolis Office of Sustainability. As a Gold Partner, the site has committed to conserve energy, reduce pollution and operate more efficiently in order to help improve air quality throughout the region. As part of that commitment, the Indianapolis EHS department will advise employees when CICAP declares a "Knozone Air Quality Action Day," indicating that air quality in the region has dropped below acceptable levels. More information about Knozone Action Days is available [online here](#). For more information about CICAP, visit <http://indycicap.org>.

Free Tree Seedlings for Earth Day - Thursday, April 21

Facilities and EHS department employees will hand out tree seedlings Thursday, April 21, to celebrate Earth Day. The selection this year is Black Oak, Black Cherry, Black Chokeberry, Red Pine or Hazelnut. The trees will be available at the turnstiles from 2 to 5:30 p.m.

CEDS Renews Commitment to Environmental Stewardship

CEDS-Indianapolis is a charter member of the Indiana Environmental Stewardship Program (ESP) and recently renewed its commitment to environmental compliance for the fourth consecutive year.

ESP is a voluntary, performance-based leadership program that recognizes and rewards Indiana regulated entities for going above and beyond current environmental regulations. In return for exemplary environmental performance, CEDS-Indianapolis receives incentives including regulatory flexibility, public recognition and networking opportunities.

As a member of the ESP, our site identifies environmental improvement initiatives annually. In 2009, we implemented reusable dishes and tableware in our Cafeteria and installed a garbage disposal to divert food waste from the trash compactors. That project resulted in elimination of seven tons of waste over a seven month period.

To share your ideas about improving our impact on the environment, contact any member of the CEDS-Indianapolis EHS Department.



Knozone Air Quality Action Day - Ozone Notice
CEDS Communications to: All Indianapolis Employees



Knozone Air Quality Action Day - Ozone Notice

Today, June 7, is an Indianapolis Knozone Air Quality Action Day. This means the Air Quality Index forecast indicates ground-level ozone levels will be elevated.

Many scientific studies have associated ozone pollution with serious health problems, such as aggravated lung disease. Children, elderly people and those already suffering from lung disease are especially vulnerable to its effects.

The formation of ground-level ozone is reduced when we do the following:

- Reduce vehicle and small engine use
- Eliminate unnecessary idling – idling more than 10 seconds wastes more gas than turning off/on your engine
- Turn off lights at home and work when you leave the room
- When shopping for new appliances, choose Energy Star appliances
- Plan your route to avoid traffic congestion – visit TrafficWise.in.gov for Indianapolis area traffic conditions.

To learn more about current air quality conditions and how to keep the air clean, go to Knozone.com or call 317-327-4AIR. By working together, we can make a visible difference to Central Indiana's air quality!

Future Opportunities

- Evaporator Liquid & WWT Filter Sludge for Beneficial Reuse
- Reclaim of Liquid Paint Waste
- Plating Bath Purification System
- Electrostatic Painting System
- Liquid Sparging System for Plating Bath
- Paint Gun Cleaner & Solvent Recycler