

Meeting Minutes NEMS Green Team Leads Council Wednesday, July 21, 2010 1:00 – 3:00 pm Building 31, Room 7 (6th Floor, C Wing)

Objectives

- ➤ Identify status of Sustainable Laboratory Practices Mini Fairs
- Agree on approach for letter on reducing printing of newsletters
- ➤ Identify tools and strategy for America Recycles Day
- ➤ Identify tools and strategy for the Lights Out Campaign

Demo: Motion Detector Vampire Gadget

Peter Baxter (DEP) demonstrated a WattStopper, which saves energy by controlling desktop equipment. It consists of an eight outlet power strip with surge protection and a personal occupancy sensor. Six outlets on the power strip are controlled by occupancy, and two outlets are uncontrolled for the computer or other items that should not be turned on and off. Case studies and additional information are available on WattStopper's website at http://www.wattstopper.com/products/details.html?id=74&category=122&type=Commercial. Theresa Franklin (OD) said that she would share this information with the NIH Self Service stores in order to bring the price down for NIH employees (typically \$90 each).

Action Items Review

There were several updates on the Toxic Chemical Reduction Strategy that was discussed during the June joint meeting with the NEMS Sustainable Lab Practices Working Group:

- Linda Thompson (Booz Allen Hamilton) shared with the group that she and Kazuhiro Okumura are working on guidance for the lab objectives each Green Team will be asked to develop as part of this initiative.
- Jean Tiong (NINDS) provided an update on the pilot Green Labs Mini Fair NINDS has been planning. The NINDS Green Labs Mini Fair will be on Monday, October 18, from 12 pm to 4 pm in the conference room of Building 40. Nine vendors have already agreed to participate and share their green products. The NINDS Green Team is still working on a communication strategy, food, and perhaps giveaways.
- Linda Thompson provided an update on the NIH Research Festival (October 5 and 6) on behalf of Barb Zwiesler (NIDCD). Ms. Ploplis submitted an entry for the Special Exhibits portion of the Research Festival on behalf of the NEMS Green Teams Leads Council and Sustainable Lab Practices Working Group to promote NIH's greening efforts in offices and labs, including the mini fairs.

There was an extensive discussion on the excess newsletter publishing issue and the draft letter from Brad Moss (ORF):

- Ms. Thompson is collecting comments from the Council and will revise and resend to the group for review and approval.
- Mr. Moss pointed out that his original draft letter was a bit less direct than the one shared with the group that Robin Hirschhorn (Booz Allen) had slightly revised. The Director of Mail Management Services has already had conversations with the various printers at NIH concerning the excess printing, but they were not cooperative. The group debated the merits of being direct in the letter versus more conciliatory.
- The group decided that the best strategy is to invite the newsletter editors to come speak with the Council to work together on how to reduce the number of copies being printed, including helping to promote the electronic version. The last resort will be to refuse delivery or to reduce the numbers associated with mail stop codes.
- Ms. Lord-Toussaint will take as an action item to discuss with her manager reducing the number of print copies that CIT distributes, including Interface and the NIH Phonebook.
- The last item discussed was whether the printers had environmental metrics as part of their Performance Plans. Danita Broadnax (DEP) will research whether the environmental metrics had become voluntary in 2010.

Green Team Updates

The following Green Teams provided updates:

- Trevor Blake (NHGRI) reported on the success NHGRI has had with a rechargeable battery program. She also said that NHGRI recently held a recycling competition and is trying to utilize green products during their renovation.
- Sophia Glezos Voit (NIMH) recently held an awards ceremony with compostable
 products, but when she brought them to the Montgomery County landfill, she was turned
 away because the products had grease on them. John Crawford (OD) explained that NIH
 is looking into composting options and meeting with a consultant in the upcoming weeks
 to discuss the options that would work for NIH.
- Chad Wysong (NIDCD) reported that NIDCD is reinventing its internet site with a focus on greening. He requested that other Green Teams make their intranet sites available to other Green Teams Leads in order to better share information.

Beth Osterink (DEP) provided several recycling updates:

- Ms. Osterink will be doing a personal outreach campaign in Building 31's cafeteria once the new recycling bins are placed. This cafeteria uses all compostable utensils and post-consumer content recycled paper products.
- She also reminded the group that she is attending all orientations and following up with the attendees about NEMS and DEP's waste disposal guide. Theresa Franklin (OD) and Wendy Lord-Toussaint (CIT) will work with Ms. Osterink to provide her with information on contractors and transfers who do not attend new employee orientation sessions.
- Invitrogen is starting a pilot program to take back Styrofoam coolers in Buildings 5, 35, and 37. She will provide more details later.
- In response to some other recycling questions from the group, she reminded everyone that recycling information is available on the NEMS and DEP websites at

http://nems.nih.gov/aspects/waste/programs/recycling.cfm and http://orf.od.nih.gov/Environmental+Protection/Waste+Disposal/recycling.htm.

America Recycles Day

Ms. Osterink gave a presentation (see Attachment 1) on past activities NIH and ICs have sponsored for America Recycles Day (November 15). She also shared some materials that might be helpful for the ICs' own activities (also Attachment 1) as well as the official website (http://www.americarecyclesday.org/). DEP is planning a recycling competition for all oncampus ICs, with office and lab categories. They need assistance with outreach as well as creating trophies out of recycled materials.

Maria Barhams (NIDA) asked whether off-campus locations within Montgomery County could participate based on the information provided in their recycling reports. Ms. Osterink agreed that they could so long as the data were actual (weighed) and not estimated.

Lights Out Campaign

Mr. Moss announced that the switch plate covers should be arriving the first week of August. Please contact him for distribution (brad.moss@nih.gov or 301-496-2215).

The group discussed holding a Lights Out Campaign during Energy Awareness month in October. Some ideas for the campaign are:

- Use distribution of the switchplate covers as a kick-off to the campaign.
- Send a global email making people aware of the WattStopper to use up end of the year money. (Although, that would have to be before October.)
- Encourage personal behaviors that can help save building energy such as the proper use of blinds in the offices.
- Encourage the use of rechargeable batteries or collecting batteries for recycling.
- Make cleaning crews and guards aware of turning off lights at night.
- Update and distribute energy awareness factsheets.
- Make NIH Employees aware of what ORF is doing to conserve energy by having them come speak to the Council.

As a homework item, the group agreed to think about objectives for energy conservation, as well as ways to baseline, track, and measure improvement. One example would be to count lights that are on when not in use.

Awards Program

Ms. Thompson asked the Council for input on the new awards program that DEP is developing to recognize NIH sustainability actions as well as grants for future activities. Members pointed to the HHS Green Champion awards program as well as NIH's Innovation awards, which is a grants program.

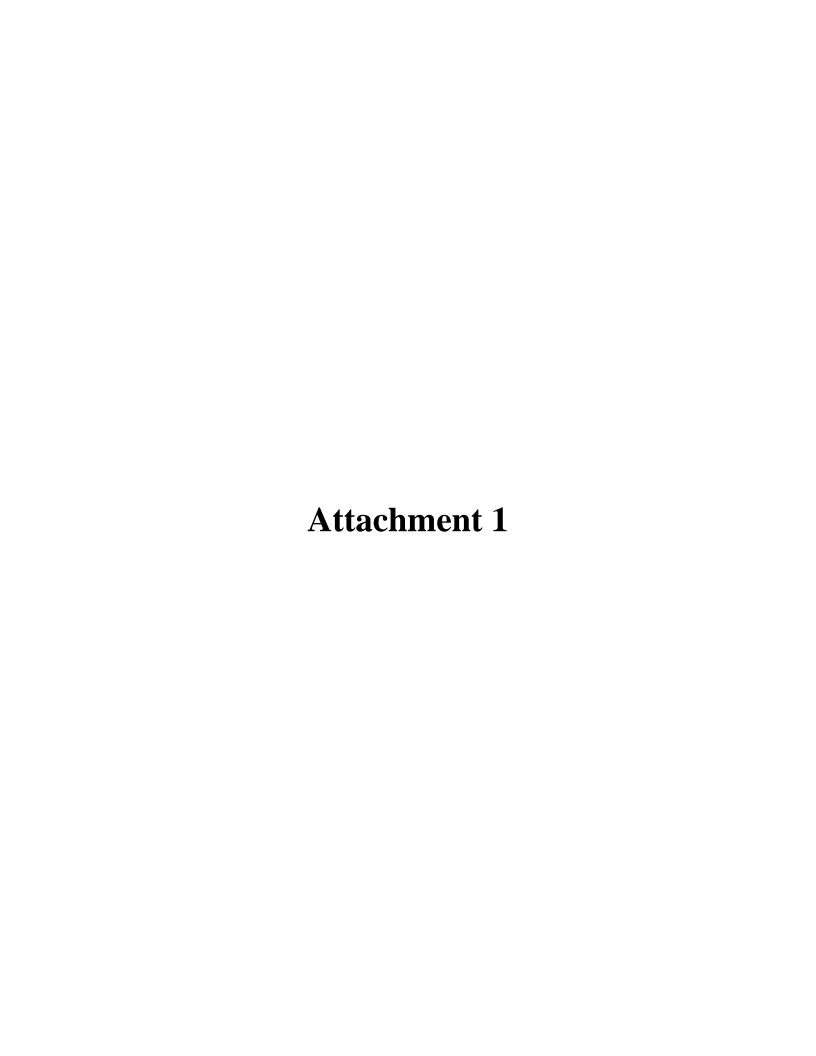
Next Meeting

Ms. Thompson notified the group that she will be sending out a calendar meeting update for the rest of the year, with room locations and teleconference information. However, in order to do that, she will first send out a meeting cancellation from the first half of the year since the distribution list has changed so extensively since January.

The next meeting will focus on the objective of a *Lights Out Campaign*. The meeting will be held on August 18 at 1:00pm in Building 31, 6^{th} floor, C Wing, Room 10.

Action Items

Action	ı Item	Responsible Person(s)	Due Date				
1.	Provide information on WattStopper to NIH Self Service Stores.	Theresa Franklin	August 18, 2010				
2.	Provide feedback on draft excess newsletter publishing letter to Linda Thompson, at thompson_linda@bah.com.	All Green Team Leads	August 4, 2010				
3.	Revise excess newsletter publishing letter and resend to group for approval. Needs to include invitation to come speak to Council.	Linda Thompson (BAH)	August 11, 2010				
4.	Identify ways for CIT to reduce the number of print copies of Interface and the NIH Phonebook.	Wendy Lord- Toussaint (CIT)	August 18, 2010				
5.	Confirm whether 2010 Performance Plan includes mandatory or voluntary environmental metrics.	Danita Broadnax (DEP)	August 18, 2010				
6.	Identify objectives for energy conservation, as well as ways to baseline, track, and measure improvement.	All Green Team Leads	August 18, 2010				
7.	Invite ORF to come speak to the Council about their energy saving initiatives across campus.	Robin Hirschhorn (BAH)	August 18, 2010				



America Recycles Day



Monday November 15th, 2010

2006



- Hall between CRC and CC
 - Giveaways transformed from trash
 - Division of Travel and Transportation Services offered energy-saving commuter choices
 - Provided recycling quizzes
 - National Industries for the Blind offered samples of environmentally friendly products (recycled pens)



2009



- R&W provided collection boxes for eyeglasses, cell phones, and sneakers (personal items)
- Green idea sheet
- Batteries and VHS Tapes/CDs
- Outreach at off-site retreat
 - Can this be recycled game
 - Take the challenge poster

Other Ideas

NATIONAL INSTITUTES OF HEALTH

NIH CELEBRATES

AMERICA RECYCLES DAY

NOVEMBER 15TH

- Office clean out
- Lunch and Learns
 - Recycling videos
 - Presentation/Recycling quiz
- Distribute blue bins
- Green purchasing
 - Distribute "green items" such as 100% recycled paper

Resources

- http://www.americarecyclesday.org
 - Conversionator
 - Banners
 - Flyers
- http://www.storyofstuff.com
- http://planetgreen.discovery.com/recycling/
- PDF Documents
 - ARD Activities: crossword puzzle, how to make paper, general quiz questions, links to buy recycled products for prizes
 - ARD: suggested activities, recycling factoids



DEP Plan



- Banners displayed during ARD week
- Building recycling competition
 - Promoting in September, Tracking in October, Results on ARD
 - Tracking Commingled and Mixed Paper
 - Awards:
 - Per Capita Classic (total lbs recycled/person)
 - Waste Minimization (total waste/person)
 - Grand Champion (recycling rate office and labs separate)
 - Most Improved

Assistance Needed

- Focus group
- Name for contest
- Promoting contest within all buildings in September
- Posting flyers
- Miscellaneous





America Recycles Day November 15

Earn an America Recycles Day prize!

November 15th is America Recycles Day – a day when millions of Americans join to celebrate and make the commitment to keep recycling. Communities across the country, including our own here in Kansas and Missouri, plan events to encourage residents to recycle, and buy recycled.

This program is a fun way to reward children and teens that have shown an interest in recycling and other environmental issues. Hands-on learning is an effective way to develop environmentally responsible habits.

This packet contains all the information you'll need to put on the program in your school, scout troop, or youth group:

- Exercises for receiving a prize
- · List of additional activities to choose from
- Recycled-content prize order information
- A list of local recycling resources
- · Paper making instructions

To earn an America Recycles Day prize, it is recommended that youth complete the required exercises and three additional activities. You can set the program deadline for whenever you wish.

Questions? Contact Matt Riggs at (816) 701-8313 or mriggs@marc.org

America Recycles Day Exercises 1 – 7

	Name
1. 🤏 List a	at least three different ways to reduce or reuse paper:
1.	
2.	
3.	
2. 🥞 List :	six different items that can be recycled:
1.	4.
2.	5.
3.	6.
4. 🤏 Nam away.	e a way each of these items can be reused instead of throwing them
•	Cardboard Box
•	Plastic Milk Carton
•	Glass Jar
•	Wooden Board
•	Plastic Bag
•	Newspaper
5. % Find below:	out where your nearest recycling center is located and write the address

6. 🍇 Find out what items are accepted for recycling at your recycling center.									
1.	6.								
2.	7.								
3.	8.								
4.	9.								
5.	10.								

Now, it's time to choose three activities listed on the following pages.

Please share your results. Thank you.

HAVE FUN!



Additional America Recycles Day Activities Listed By Grade Levels

Instructions: Each child can *choose and complete three activities*. Depending on age group and activity, parent, teacher or group leader may feel free to work with youth as a group to complete activities.

1. America Recycles Day Pledge All Grades

Pledge to recycle and close the recycling loop by buying products with recycled content (buy recycled). Pledges can be made online at www.nrc-recycle.org/americarecycles.aspx.

Note: This activity may not be available every America Recycles Day. Please verify at the national ARD website www.nrc-recycle.org/americarecycles.aspx before completing this activity.

2. Do ONE of the following:

All Grades	Make paper (see attached instructions)
All Grades	Create a recycled art sculpture from "trash"
3-12 Grade	Write a poem about reduce, reuse, and recycling
6-12 Grade	Create and display an environmental awareness exhibit at a local mall, school, library or community event

ACTIVITIES 3-4 All Grades
3. List three ways you as an individual can help the environment in your community, at home, and at school. 1.
2.
3.
4. Visit one of the four following locations and describe your experience:
Landfill (find out where our trash goes when we throw away)
Recycling drop-off center (offer to volunteer at the center a few hours and learn a lot!)
Material Recovery Facility-MRF (find out how what happens to your recyclables)
Reuse Store (Visit a local reuse center or thrift shop in your community)

ACTIVITY 5 1-8 Grade

5. Complete math problems for appropriate grade. Show work. (See pages 9-10.)

ACTIVITIES 6-7 3-12 Grade

	List some ideas or things you did:
7. I	For one day pick up litter from a local park, school, or other common area.
	Separate the trash from the recyclables. Describe your experience:
	ACTIVITIES 8-11 6-12 Grade
8.	Complete the America Recycles Day Crossword Puzzle. (See page 11.)
9. I	Develop a project plan that would help solve an environmental problem.
	Reduce an environmental impact or increase environmental awareness in your community. Include plans for a specific project that <i>could</i> be done by your class or troop. Describe the project:

10	Imagina yau managa yaur awn sunarmarkat								
10.	Imagine you manage your own supermarket. What are some things you can do to reduce the amount of waste caused by the products you sell?								
	Visit your local supermarket and see what things they do such as recycle cardboard or compost produce waste. List five things you observed.								
	1.								
	2.								
	3.								
	4.								
	5.								
	Visit a local supermarket or office supply store and find fifteen items that stain recycled-content. List percentage and type of recycled-content material.								
	Percentage (%) Type of Recycled Content Material								
	1.								
	2.								
	3.								
	4.								
	5.								

6. 7. 8. 9. 10. 11. 12. 13. 14.

ACTIVITIES 12-14 9-12 Grade

12. Identify and briefly describe the work of three organizations through which you could volunteer to benefit our environment. Volunteer at least one hour with one of these organizations.
1.
2.
3.
13. Perform a recycling or waste reduction experiment.
Name your experiment and describe the results:
14. Identify and discuss three possible careers in the field of environmental science.
Describe the type of education you would need to pursue these careers.
1.
2.
3.

America Recycles Day Math Problems for Grades 1-8

Easy (first grade)

- 1. Tom has 10 cans. He takes six to the recycling center. Draw a picture and write a number sentence to show how many cans Tom has left.
- Molly had eight pounds of newspapers. She took half of them to the recycling center. Draw a picture and write a number sentence to show how many pounds of newspapers were recycled.

Easy (second grade)

- Kevin has 27 glass jars. Eleven of them are brown, four are green, and 12 of them
 are clear. The recycling center only accepts brown and clear glass for recycling.
 Draw a picture and write a number sentence to show how many glass jars Kevin can
 take to be recycled.
- 2. Sally and Dan are sorting their recyclables. They take the aluminum cans to the recycling center. The man at the recycling center pays them \$1.50 for their cans. They decide to share the money evenly. How much money does each person receive?

Easy (third grade)

- 1. The recycling center pays 25 cents per pound for aluminum cans. Jan took seven pounds of aluminum cans to be recycled. How much money did Jan earn at the recycling center?
- 2. If the average person throws away four pounds of garbage every day, how many pounds of garbage does one person throw away in one year (365 days)?

Easy (fourth grade)

- 1. If 10 percent of the money you spend on groceries is for packaging and you spend \$75 at the grocery store, how much money was spent on packaging?
- 2. Bob made \$1.60 by recycling aluminum cans. He wants to buy a drink and a candy bar at the store. A drink costs 50 cents and a candy bar costs 45 cents. How much money will Bob have left?



Moderate (fifth grade)

- 1. Monica pays \$9.50 per month for trash service. She is allowed to have two barrels of trash per week. Monica decides to start recycling and only sets out one barrel of trash each week. By having only one barrel of trash each week, the cost of her trash service decreases by 30 percent. How much does Monica pay for trash service now?
- 2. Stan, Frank, and Tony are on the baseball team. They need to raise \$150 for new uniforms. They have an aluminum can collection at their school. Each week they make \$25 at the recycling center from the cans they collect. How long will it take them to raise enough money for their new uniforms?

Moderate (sixth grade)

- 1. Approximately 30 percent of our garbage is paper or paper products. If the average person throws away 1,460 pounds of trash a year, how many pounds of this trash is paper or paper products?
- 2. Americans throw away 2.5 million plastic bottles every hour. How many plastic bottles are thrown away in one day in America?

Moderate (seventh grade)

- Considering that one tree produces 117 pounds of paper, if your school sends 5,850 pounds of paper to the recycling center, how many trees would be saved by recycling?
- 2. Twice a month, Carol takes 24 pounds of aluminum cans to the recycling center. The recycling center pays 28 cents a pound. How much money will Carol earn in a year?

Moderate (eighth grade)

- 1. Approximately 11 percent of municipal solid waste is yard waste (grass clippings, branches, leaves). If the average household throws away 5,520 pounds of solid waste each year, how much trash would it throw away each year by composting yard waste?
- 2. The average American uses 580 pounds of paper each year. If you recycle 4.5 pounds of newspapers each week, 11 pounds of magazines each year, and 23 pounds of paper each month, how many pounds of paper will you send to the landfill in one year after recycling?

America Recycles Day Solid Waste Crossword Puzzle for Grades 6-12

ACROSS

- decomposition which occurs in the presence of oxygen
- 4. cut down the amount of waste created
- 6. a recyclable material
- 7. a recyclable material
- 9. a recyclable material
- 11. to use a product again without remanufacturing
- 12. dry waste
- 16. everything that surrounds us
- 17. a microscopic living thing
- 20. a way to dispose of waste by burying it in a carefully prepared area of land
- 21. a recyclable, used with 7 across

DOWN

- 2. a mixture of decomposing organic matter used to improve the soil
- 3. the flow of trash: from the source to its final end use or disposal
- 5. term for collecting recyclables in front of homes
- 8. single-celled organisms
- 10. a material that is recycled in some places
- 13. waste that is harmful is
- how long some waste lasts, for_____
- 15. to process waste material for manufacturing use
- 17. a group of recyclable materials including steel and aluminum
- 18. unsafe method of disposal, ____ dump
- 19. upper layer of earth

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America Recycles Day Solid Waste Crossword Puzzle Answers

Across: I aerobic Down: 2 compost

4 reduce 3 waste stream
6 steel 5 curbside
7 paper 8 bacteria
9 glass 10 plastic
11 reuse 13 hazardous

12 trash 14 ever 16 environment 15 recycle 17 microorganism 17 metal 20 landfill 18 open 21 news 19 soil

America Recycles Day Prize Order Information

To find recycled-content prizes, search online for "recycled content products". You can also choose from many products offered by the following vendors:

ADAPT CONSULTING, INC.

Phone: (888) 782-6974

Website: www.adaptadspecialty.com

AMERIMARK DIRECT

Phone: 800-228-0525(toll free)

Website: <u>www.AmeriMarkDirect.com</u>

CONCEPT ECO: GREEN BY DESIGN

Phone: 800-861-5067 (toll free)

Website: www.mstartrading.com/index.htm

KEEP AMERICA BEAUTIFUL

Phone: (888) 776-7763 Website: www.kabspo.com

RECYCLEDPRODUCTS.COM

Phone: 800-778-5420 (toll free)

Website: www.recycledproducts.com/

SIGNATURE MARKETING

Phone: 877-658-7172 (toll free)

Website: www.signaturemarketing.com/

TARGET MARKETING GROUP

Phone: (800) 211-5850

Website: www.recycledpromos.com

Local Recycling Resources

<u>www.RecycleSpot.org</u> - This web site is a one-stop shop for recycling and waste reduction information in the Kansas City metro area. If you can't find it on RecycleSpot.org or have other questions, call (816) 474-TEAM (8326).

Bridging The Gap (BTG) – Kansas City's local environmental organization, BTG operates local recycling centers, litter cleanup efforts and many other environmental projects. They offer many volunteer opportunities.

Location: 435 Westport Rd., #23, Kansas City, Mo., 64111

Phone: (816) 561-1087

Web: www.bridgingthegap.org

Kansas City Freecycle™ - Members of Kansas City Freecycle are free to post requests for items that they need or ads for items that they'd like to get rid of at www.kcfreecycle.org. Everything listed on KCFreecycle™ must be 100% free.

Habitat ReStore - Accepts donations of new and used building materials. Contributors avoid disposal costs while customers receive useable materials at deep discounts.

Location: 4701 Deramus, Kansas City, Mo., 64120

Phone: (816) 231.6889 Web: www.restorekc.org

Surplus Exchange – The Surplus Exchange has an electronics recycling center and accepts and sells used office equipment and furniture.

Location: 518 Santa Fe, Kansas City, Mo., 64105

Phone: (816) 472-0444

Web: www.surplusexchange.org/index.htm

To set up recycling at your school, church, or organization contact:

AbitibiBowater

Location: PO Box 3246, Kansas City, Kans., 66103

Phone: (913) 722-9022

Web: www.paperretriever.com

Deffenbaugh Recycling

Location: 8905 Kaw Drive, Kansas City, Kans., 66111-1729

Phone: (913) 441-9660

Web: www.deffenbaughindustries.com

Making Recycled Paper

Materials Needed:

- Waste paper of various grades and colors (white or colored bond, construction, crepe, notebook)
- Screens any window screen (nylon works the best), cut into the size of your choice (tape the edges for safety)
- Sponges and rags
- Blender
- Plastic tub or bucket
- Stack of old newspapers, divided into sections
- Additives (optional) Dryer lint, seeds, feathers, string, dried flowers, etc. can be pressed into the pulp when pressing out the water.

Making the Paper:

- 1. About two 8 ½ x 11" sheets equal one piece of recycled paper. Tear waste paper into small strips and tear small strips into small squares. Fill a blender about ½ full with the paper scraps and then cover them with water (an inch or two past the top of the paper).
- 2. Run the blender on high until the contents are well blended and mushy. The wet paper pieces are called pulp, and the mixture is called a slurry.
- 3. Place the screen over the plastic tub and pour the slurry from the blender onto the screen. Shake the screen back and forth a bit to distribute the slurry evenly. Then, lift the screen up by spreading your hand underneath it, and let the water drain in the tub for a few seconds.
- 4. If you will be pressing items into the paper, add them now. Place another piece of screen over the paper pulp and press the two screens together between your hands, squeezing the water into the tub. Dab a sponge over the screen to help squeeze the excess water out.
- 5. Lay the screens enclosing the paper pulp on a section of newspaper. The newspaper will help absorb water out of the new piece of paper. With the sponge on top of the screen, press water out of the paper, flattening the pulp as you go. You can also use the edge of the sponge (or your fingertips) to shape the paper onto the screen.

- 6. When you have pressed most of the water out of your paper with the sponge, carefully lift off the top screen and, with a flat hand supporting the entire screen, hold the bottom screen with pulp as you turn the newspaper stack over, exposing the dry side. Set the screened unit, pulp side down, on the dry side of the newspaper stack.
- 7. Carefully peel away the screen from the new paper. Allow paper to air dry overnight or in a sunny place for a few hours.

Enjoy your recycled paper by using it to make cards, picture mats or other beautiful craft projects!

America Recycles Day November 15 Every Year

he Oklahoma Department of Environmental Quality is proud to sponsor America Recycles Day (ARD) in Oklahoma. ARD is a nationwide public education and outreach campaign aimed at focusing attention on the importance of recycling and buying recycled products.

Oklahoma Recycles Day Partners:

- DEQ www.deq.ok.gov
- OKRA www.recycleok.org
- KOB www.keepoklahomabeautiful.com
- The M.e.t. www.metrecycle.com

To stimulate your interest in recycling, we have developed an informational recycling packet. We have filled it with information to educate and encourage you to go out and start recycling and buying recycled products.

Once you learn how easy it is to make a difference, those old habits will be broken and new earth friendly habits will be developed!





Included in the packet:

- General recycling information
- Suggested activities you can do on ARD or any day!
- Recycling factoids
- Resources
- Websites
- Fundraising opportunities
- Holiday tips

The Oklahoma Recycles Day committee would like to encourage you to "Make Every Day America Recycles Day!" Contact: Susie Shields(susie.shields@deq.ok.gov) at the Oklahoma Department of Environmental Quality

America Recycles Day

General Recycling Information



PAPER

Paper makes over 40% of America's

Newsprint can be recycled six to eight times before paper

fibers become too short to use again. It is made into more newsprint, tote bags, liner board and even clothing and accessories.

- In addition to newsprint, you can recycle magazines, comic books, catalogs, and junk mail.
- Old corrugated cardboard (OCC) represents 13.8 % of America's solid waste stream. Once contamination such as Styrofoam packing, case strapping, plastic film, etc. is removed, OCC is easily recyclable. It is often remanufactured into laptop cases, bin displays, 3-ring binders, and more. The cost of OCC recycling collections can be less than the cost of throwing it away.

GLASS

Glass makes up 7% of America's trash.

It can be recycled repeatedly into glass bottles, jars, tiles, and more.





ORGANIC WASTE

Yard trimmings and food scraps make up 25% of America's trash.

- All of this material can be composted into rich soil for use in our flower and vegetable gardens.
- Compost is also excellent mulch.

PLASTICS

Plastics make up 8% of America's trash.

RECYCLING

Drinking bottled water wastes money, energy, and water. It takes twice as much water to make the bottle as there is in the bottle.

Soda bottles, tables, bicycle racks, cameras, backpacks, carpeting, shoes, clothes and more are made from recycled

plastics.



TEXTILES

Clothing (textiles) make up 11 % of America's trash.

To reduce waste, give clothes to younger relatives or

friends. Donate clothes to churches or thrift shops.

Donate scraps of materials to local quilting shops.

Importance of Closing the Loop!

For recycling to succeed, recyclable materials must be processed into new products, and those products must be purchased and used. Look for items in packages and containers made of recycled materials. Many bottles, cans, paper wrappings, bags, cereal boxes, and other cartons and packages are made from recycled materials.

Suggested Activities

To help you get started recycling, we have listed some suggested activities for you to try at home, at work, at school or within your community. We hope these will inspire you to continue recycling and educate others about the importance of closing the loop!

At Home

- Hold a family garage sale!

 Remember: One man's trash is another man's treasure! Donate unsold items to charity or local shelter.
- Buy products that use little or no packaging.
- Plant a garden! Teach your family the benefits of working in the dirt and the rewards of growing your own food.

 Remember to compost!
- Participate in your city's curb side or drop-off recycling program.
- Determine if you really need to subscribe to a daily newspaper, do you read it? If so, be sure to recycle them! Electronic subscriptions are now often available.
- Newspaper can be shredded and added to your compost pile. It is biodegradable and can be used as a mulch to keep weeds away from plants and hold water in.
- If you live in an apartment complex, do they have a recycling system in place? If not, talk to the management about starting one. Recruit interested tenants into helping.





- Find paperless ways to communicate with friends and family members. Calling or e-mailing can save valuable resources.
- Teach your children about the benefits of recycling. Seeing it in action at home will have a lasting impact.
- Start a compost pile with kitchen and yard scraps. Use the rich compost in your garden and around flowers to reduce water evaporation.
- Use baby clothes or other fabric scraps to make a guilt.
- Buy products made from recycled materials.
 Buy one general household cleaner rather than a variety of products for different purposes.

 Make your own safe alternatives to save money.

Make your own safe alternatives to save mone (Recipes may be found on DEQ web site.)

Take your motor oil, brake and transmission fluids, and antifreeze to the local gas station for recycling. Call your city about Household Hazardous Waste disposal options.

Check out the Internet for crafts to make from recycled materials.

Join a Freecycle group in your area to trade items you don't want(www.freecycle.org).

Suggested Activities

At School

- The PTA or Student Council can coordinate a school-wide paper drive. Remember to get all students involved.
- Set up paper recycling bins at your school. See Abitibi Fundraising Ideas!
- Participate in ink and toner cartridge recycling. See Staples Fundraising Ideas!
- Hold a recycling pep rally. Have contests between classes or clubs on who can recycle the most paper.
- Have older students mentor younger students. Have them do presentations on the benefits of recycling.
- Have a paperless school day.
- Organize a book exchange day (get a coupon for a book if you bring one in).
- Organize a Recycling Fair. Display artwork, writing, and other projects related to recycling. Invite a guest speaker to talk about the benefits of recycling.
- Have the drama class write and perform a skit about recycling and picking up litter. "The Throwaway Three" is available from the DEQ.
- Form groups in your class and design 60 second radio public service announcements emphasizing the importance of recycling. Have students announce one PSA per week over the intercom system.





- Have a district-wide art, essay, or poster contest. Emphasize the importance of buying recycled with a buy-recycled theme. Participate in ODOT's Trash Poster Contest. Call 405-521-4037.
- For one day, integrate information that is related to recycling, especially buying recycled, into all subjects, such as; math, chemistry, biology, speech, etc.
- Encourage your school cafeteria to compost food prep wastes. Horticulture or outdoor classrooms can maintain compost piles.
- Start a worm composting bin in your classroom. See DEQ's Worm Composting brochure on-line.
- Have the environmental club plan a litter-free event. See DEQ's Litter-Free Events brochure on-line.
 - Organize a clean up day near your school. Recycle what you can.
 - Develop a take home survey to determine how many students already recycle; send home information about your school's recycling program.
 - Secondary students can design a recycling and /or "use less stuff" coloring book for elementary students.
 - See Resources section on page 9 for Curriculum Information.

Suggested Activities At Work

Hold an America Recycles Day (held annually on Nov. 15) pledge drive for employees. Find information on-line at www.recycleok.org.

Set up a recycling program. Be sure to get support from top management. Appoint a recycling coordinator and assemble a Green Team. Perform a waste audit to determine what types of waste your business produces. This is important when arranging for a recycling company to pick up your materials. Select a recycling company. See Local Recyclers on page 11. Educate your office by setting up clearly marked recycling bins. Prepare staff and begin recycling!

Organize a "Clean Your Files" Day at work (www.usmayors.org/recycle).

Provide desk side recycle bins made of recycled content for all your employees.

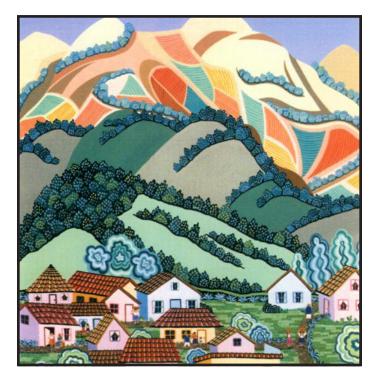
Encourage co-workers to use ceramic mugs instead of their disposable counterparts.

Change the way you print and copy, keep reduction in mind. Set printers for default duplex printing.

Find paperless ways to communicate. Using email and voicemail to communicate with coworkers and clients can save valuable resources.

Buy recycled materials for your business-from recycled copier and printer paper to toilet paper, paper towels, and rechargeable Nickel-Cadmium batteries.

Support local schools, churches, and community organizations in their recycling efforts.



If you are a store owner, look for products with less packaging, and offer larger economy-sized items for household products, or items that are used frequently.

Hold a promotional sale of "Recycled" or "Green" products.

Buy remanufactured office furniture, copiers, computers, iPods, etc.

Buy re-refined oil and retread tires for your fleet vehicles.

Start a coffee composting club at work. Organize a group of interested coworkers. Locate 2 plastic buckets with handles for collecting coffee grounds. Have interested co-workers take turns weekly taking the grounds and filters home to





Suggested Activities

In Your Community



- Participate in community recycling events, curb side programs, and drop-off collections. Call community officials, the local recycling center, or a nearby recycling business to find out if and how materials should be separated. Help spread the word in your area.
- Plan a Recycle Olympics Event! A flyer is available on-line @www.metrecycle.com.

 Team games include an obstacle course relay, academic trivia, recycled art competition and speed- sorting of recyclables. Individuals can participate in games such as two-liter ten pins, aluminum can smash, and milk jug catch.

Set up an interactive display that promotes the "buy recycled" message in your local library. Include posters, flyers, and brochures.

Start a recycling program in your community. If a recycling program does not exist in your community, participate in establishing one. Work with community officials to determine the most cost effective recycling options for your area. Recruit other interested citizens to help with the project. For help call the Department of Environmental Quality at 405-702-5100

or check out Community Recycling Toolkit on the DEQ web site (online by 11-15-08).

- Hold a community wide Garage sale or swap meet. Invite as many participants as possible. Be sure and advertise the event. Donate portion of earnings to a local charity.
- Start a community garden! Recruit youth organizations to help. Remember to incorporate composting into your garden. Composting is a method of making rich soil amendment from yard and kitchen scraps. It also acts as mulch, holding in water.
- Plan an environmental recycling fair at a local park. Invite specialists in the area of recycling to speak to the community. Plan activities for the children including making crafts from recycled products. Also have displays from companies that use recycled materials to make new products.
- Consider conducting a food or clothing drive to help others. Where appropriate, encourage area merchants to donate damaged goods and food items that are still edible to food banks, shelters, and other groups that care for the needy.



Recycling Factoids



Recycle aluminum cans. Every three months Americans throw out enough aluminum to rebuild America's entire commercial airfleet. Making aluminum cans from recycled materials create 95% less air pollution than making them from raw materials. You can make 20 new aluminum cans from the recycled materials with the same energy it takes to make one can from raw materials. The primary ingredient in aluminum is bauxite ore, often mined in the rainforest.

Recycle office paper. Every year Americans throw away enough office and writing paper to build a wall twelve feet high stretching from Los Angeles to New York City. All that paper is recyclable. Making new paper from waste paper results in 74% less air pollution and 35% less water pollution than using raw materials. Every ton of paper that is recycled saves 7,000 gallons of water, 17 trees and 3 cubic yards of landfill space.

Share newspaper subscriptions or read news on-line. It takes an entire forest (over half a million trees) to make all Sunday newspapers in the United States every week. Every day Americans buy about 62 million newspapers and throw away around 44 million of them. If we recycled just half of our newsprint every year, we'd need 3,200 fewer garbage trucks to collect trash.

Carry a reusable cup. Americans produce enough Styrofoam cups each year to circle the earth 426 times. That's one hundred cups per person per year. These cups are made from petroleum products, a non-renewable resource.

Purchase items with less packaging or recycled packaging. One-third of all garbage discarded by Americans is packaging. Packaging also accounts for \$1 out of every \$10 that consumers spend.

Recycle glass drink containers. Glass never wears out; it can be recycled forever. Each glass bottle that is recycled saves enough energy to light a 100-watt bulb for four hours. Making glass out

Recycling Factoids continued



- Recycle plastic drink containers. Americans dispose of 3 million plastic drink bottles every hour, yet only 1 out of 4 is recycled. That's enough to circle the earth over four times in a year. Recycling one ton of plastic saves the equivalent of 1,500 gallons of gasoline. Recycled plastic can be reprocessed more than four times in a year. Remanufactured plastic products include such items as insulation, carpet, plastic lumber for outdoor furniture and playground equipment, paint brush bristles, trash cans, recycling bins, clothing, book bags, filters and insulation.
- Ask your local auto supply store for recycled motor oil. Motor oil does not wear out—it simply gets dirty. It can be used again and again. Americans throw away enough used motor oil every year to fill 120 super-tankers and it could all be recycled. It takes 42 gallons of high quality crude oil to produce 2-1/2 quarts of motor oil;
 - it only takes 1
 gallon of
 waste oil to
 produce the
 same amount.

Recycle your used motor oil. Dumping out one quart of used motor oil can pollute 250,000

gallons of water.
Used motor oil
contains heavy
metals from your
car's engine and
should NEVER
be dumped into
the storm drain.
Used motor oil
can be burned
for fuel in heaters



- without the re-refinement process.

 Use rechargeable batteries instead of disposable
- ones. Batteries corroding in landfills can contaminate our groundwater with cadmium, mercury and lead. Take used batteries to a household hazardous waste (HHW) collection day—if your community has one. Call your public works department to find out what to do with your HHW.
- Store food in reusable containers or use resealable pouches that can be washed and reused. Americans use enough plastic wrap every year to shrink-wrap the State of Texas. Plastic bags and film account for up to 40% of America's plastic garbage.
- Reuse or recycle cardboard boxes. Americans use enough cardboard every year to make a bale as big as a football field and as high as the former World Trade Center.
- Recycle steel cans (often called tin cans) and other scrap metal items. Every year we save enough energy by recycling steel to supply the City of Los Angeles with electricity for ten years. Every ton of scrap metal recycled saves 2500 pounds iron ore, 1,000 pounds coal and 40 pounds limestone. Recycling scrap metal consumes 75% less energy than raw materials.

Recycling Resources

FUNDRAISING OPPORTUNITIES

ABITIBI PAPER RETRIEVER PROGRAM http://www.paperretriever.com/Newspaper recycling bins generate some income.

STAPLES Ink cartridge recycling http://www.staples.com/Recycle for Education: Ink & toner cartridge donations

COLLECTIVE GOOD: Cell phone recycling www.collectivegood.com

TERRA CYCLE

www.Terracycle.net. Current projects include collection of: Energy bar wrappers, drink pouches, cookie wrappers and more.

GRANTS AVALIABLE \$\$\$

The Environmental Education License Tag Grant www.deq.state.ok.us (offered each fall). Contact Susie Shields at: 405-702-5166 or susie.shields@deq.ok.gov.

Greenworks!
Community
Action Projects.
Contact
Christina
Stallings
Robertson at
405-522-6158.



CURRICULUM

Please email Susie Shields at DEQ at susie.shields@deq.ok.gov for information

DEQ Resource CDs available for schools:

Air

Water

Recycling

Sustainability

Green Schools

Edible Garden Planning Guide



Check These Out!

To see these DEQ pamphlets, visit www.deq.ok.gov.

- DOCKER CLEANOUT

 An Environmental Event
- UITTER-FREE EVENT
 Guidelines for sponsoring
- DEQ WASTE-FREE LUNCH DAY TIPS
- **BACKYARD COMPOSTING**

- WORM COMPOSTING
 Let Worms eat your Garbage
- HOUSEHOLD HAZARDOUS WASTE FACTS

Plus a whole lot more on our DEQ Website!!! Look in the lower right of the main DEQ web page and you'll find links to our publications and fact sheets!

To order a CD with recycling curriculum, information and school projects, see bottom of page 9.

Recycling Web Sites

Websites for Young Children

www.planetpals.com

Planet pals Earthzone Recycle Center. Remember to reduce, reuse, recycle, and repair all kinds of things used in everyday life.

www.epa.gov/kids/garbage.htm

Environmental Explorers Club: Garbage and recycling

www.commerce.state.il.us/com/recycling/kids/ Kid's Recycle Zone

http://epa.gov/epaoswer/osw/kids/ EPA's Planet Protectors club. Activities for youth

Websites for College students

www.onesweetwhirled.org
One sweet campaign to fight Global warming.
Interactive site.

Websites for Adults

www.42explore.com/recycle.htm Chose from a long list of links to web pages about recycling plastics, paper, batteries, and other types of garbage.

www.earth911.org/master.asp

Earth 911. Environmental information including recycling, water pollution and conservation

http://grn.com/

Global Recycling Network. Information exchange for recycling.

www.commerce.state.il.us/com/recycling/ Illinois recycling. Introduction to recycling.

America Recycles Day

www.americarecyclesday.org/

Oklahoma Recycling Association (OKRA) www.recycleok.org.

The Greens

http://meetthegreens.pbskids.org/features/

LOCAL RECYCLERS



The following Internet addresses take to you a list of Oklahoma recyclers listed by county. Oklahoma and Tulsa Counties have separate listings on the same web site. Counties A-L

http://www.deg.state.ok.us/LPDnew/recyclers/recyclers a-l.html

Counties M-Z

http://www.deq.state.ok.us/LPDnew/recyclers/recyclers_m-z.html

DATES TO REMEMBER

November 15- America Recycles Day
Use Less Stuff Week is the same week as Earth Day
Arbor Week - Last week of March
April 22- Earth Day

Now that you are geared up to start recycling, let's keep going through the holidays!

Holiday Tips to Use Less Stuff

Thanksgiving

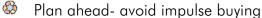
- Purchase what food you need- plan ahead.
- Purchase what food your family likes-and try to avoid leftovers.
- Prevent spoilage and waste-Store and preserve properly and freeze before spoilage.
- Compost leftover waste
- Don't shop on an empty stomach
- Use dishes, not paper plates unless you compost them
- If you use plastic utensils and plates, collect and reuse
- Purchase products in recyclable containers
- Get out family linens-napkins, tablecloths, launder after holidays
- 🍪 Rent dishes, napkins, cups and saucers,



- Point out the ways your party demonstrates waste reduction and recycling, and SPREAD THE WORD!
- Enjoy the time with your family and friends!

Holiday Tips to Use Less Stuff

Christmas



Wrap gifts in newspaper, especially colored comics

Make the wrapping part of the gift, nice scarf, tea towel, handkerchiefs, etc.

Gift family heirlooms – such as pictures

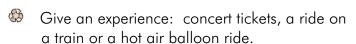
Consider the impact of your gift: Is it environmentally friendly and safe for children? Will it be reusable? Is it recyclable or made from recycled materials?

Give gift certificates for services such as hairdresser, car wash, oil change, or for personal services, such as doing the dishes for a week, shining the silver, raking the leaves, etc.

Give consumable gifts that you know they like and need-stamps, etc.

Purchase holiday cards made from recycled paper or make your own from items found around your home.

Help someone recycle.
Give a can crusher, a set of recycling bins, or a recycling cart.



- © Create and give a family recipe book
- Give a starter garden: Seeds, gloves, tools, etc.
 - Give a book on "How to Compost!"
- Bird feeder and seed
- Water-saving shower head
 - Compost bin

Automatic thermostat control device (automatically turns down heat at night)
 Give yourself or your children time to simply

Give yourself or your children time to s enjoy the season!





- © Consider buying a potted Norfolk pine, fig tree or indoor houseplant that can be used every holiday season as your evergreen tree.
- Consider buying an artificial tree that can be reused every year
- Find out if your city takes donated Christmas trees.

 Some will shred the trees and allow contributing citizens pick up mulch later.
- When sunk into private fish ponds, trees make excellent refuge and feeding areas for fish.

