

## **200 (I&I) – NIDDK Work Area Recycle Bin Program**

### **Reduce – Reuse – Recycle!**

#### ***Purpose***

The main purpose of the NIDDK Work Area Recycle Bin program is to increase the Institute's recycling of mixed paper and commingled waste at each of its on- and off-campus facilities while reducing the amount of solid waste. In addition, this project will enhance recycling awareness for all NIDDK staff.

**Note:** Although participation in this work area recycling program is **voluntary**, Institute leadership and the NIDDK Green Team encourages each of the Institute's Labs and Offices to participate. It is understood that lab and office space may already be too crowded for these bins, so we hope that staff considers the following suggestion:

- Have only one set of work area recycle bins for an entire lab and/or office suite.

Speak with co-workers and determine the best location for the bins in your particular work area.

#### ***Background***

Many employees have been recycling mixed paper and may even have their own desk side recycle containers for mixed paper. However, when it comes to commingled recyclables (coffee cups, juice bottles, soda cans, etc.), they often end up in trash cans instead of recycle bins. It requires a bit of thought, time, and effort to make the trip to discard this recyclable waste into the NIH Square Recycle containers that are located in nearly every hallway of each NIH campus facility. To request the large NIH Square Recycle containers for your hallway (if none are present), please contact the NIH Recycling coordinator at 301-496-7990.

To facilitate employees' recycling of commingled waste, NIH has purchased 7,500 sets of work area recycle bins (one bin for mixed paper and another for commingled waste). These bins are being made available to the ICs FREE of charge. When the work area recycle bins become full, employees will empty the bins into the appropriate NIH Square Recycle Containers that are located in hallways.

#### ***Specifications of Work Area Recycle Bins***

Each blue recycle bin (made of 100% post-recycled consumables) measures 14.5"L x 10.5"D x 15"H

If printing this document, please use 2-sided printing whenever possible. – Thank you!

## ***Getting Started***

Chris Bolling from the Intramural Administrative Management Branch (IAMB), NIDDK, will be contacting and designating a staff person within each NIDDK-occupied facility to become the major point of contact (POC) for the delivery and distribution of the work area recycle bins. These POCs will determine the amount of work area recycle bin sets needed for their particular facility and the delivery location. The POCs will then send their determined quantities to Chris Bolling along with details for the delivery of the recycle bins. POCs will send Chris the specific bin drop-off location(s) within their facilities. This information will be sent to the NIH Recycle Coordinator who will notify the contractor. The contractor will work with the POCs to determine the actual delivery date.

Once the bins are delivered to each facility, the POCs will announce to the staff within their facility that the bins are available and will arrange for delivery and/or pick-up from a central location.

## ***Care and Use of Work Area Recycle Bins:***

- The mixed paper bins usually do not need much care. Once they become full, employees would simply empty the content of the work area bin into the NIH Square Recycle Containers that are located in the hallway.
- The commingled bins also require minimal care; especially if used properly. Ensure that drink or food containers are rinsed clean prior to discarding the recyclable glass, plastic, can, etc. When possible, cap or re-lid drink containers as their lids can also be recycled and will prevent leakage. If the commingled bins are routinely becoming soiled, you may opt to use brown paper grocery bags or biodegradable plastic trash can liners.

**If the hallway NIH Square Recycle Bins are full, please call 301-402-6349 and the NIH Recycle Contractor will come and empty these bins.**

## ***Become the Recycle Champion within Your Lab or Office***

In order to continue the effective use of the work area recycle bins, the NIDDK Green Team is looking for 1 or 2 Recycling Champions from each Institute Lab and Office to volunteer to become the Recycle Champions for their work area.

Being a Recycle Champion is easy! The NIDDK Green Team will provide you with the necessary education and communication materials required to become Subject Matter Experts (SMEs) of NIH Recycling. Your role and responsibility will be to ensure that your coworkers are fully aware of NIH's Recycling Efforts and the NIDDK Work Area Recycle Bin program.

If printing this document, please use 2-sided printing whenever possible. – Thank you!

As a Recycle Champion, you will also assist the NIDDK Green Team with communicating to your coworkers any new recycling information or other NIDDK or NIH Green initiatives.

FYI: The Recycle Champion's Mantra is: REDUCE – REUSE – RECYCLE!

If you are interested in becoming a Recycle Champion for your lab or office, please contact the NIDDK Green Team Co-chair Walter Mitton at [mittonw@mail.nih.gov](mailto:mittonw@mail.nih.gov)

### ***Work Area Recycle Bins for NIDDK Off-campus Facility (DEM2)***

Bins for NIDDK Democracy 2 staff will be shipped directly from Montgomery County's Business Recycling Program, FREE of charge. Arrangements for delivering the bins to this location will be coordinated by a designated POC.

### ***What can be recycled at NIH?***

#### **Mixed Paper\***

(View a Mixed Paper recyclables poster at:

<http://nems.nih.gov/aspects/waste/programs/Paper%20Recycle%20Poster.pdf>)

- White or Colored Office Paper
- Shredded Paper
- Newspaper
- Telephone Directories
- Paper and Hardback Books
- Magazines
- Document Binders/Three Ring Binders
- Scientific Journals
- Catalogs
- Post-it® Notes
- Envelopes
- Manila Folders
- Tissue and Paper Towel Boxes
- All Other Paperboard Type Boxes (e.g., frozen meal packaging)

#### **Commingled\***

(View a Commingled Recyclables poster at:

<http://nems.nih.gov/aspects/waste/programs/Commingled%20Recycle%20Poster.pdf>)

- Aluminum Cans and Tin Foil
- Steel and Tin Cans
- All Plastic Bottles, Cups, and Containers (Plastic resin codes #1, 2, 3, 4, 5, 6 (Non-Styrofoam), and 7)
- Yogurt Containers (Rinsed)

If printing this document, please use 2-sided printing whenever possible. – Thank you!

- Prescription Bottles
- Glass Bottles and Jars - No Pyrex
- Food Storage Containers
- Grocery, Retail, Sandwich, and Other Miscellaneous Plastic Bags
- Plastic Utensils (Clean)
- Buffer and Saline Bottles
- Cardboard\*
- Corrugated cardboard (packaging materials removed)

### ***Voluntary Recyclables at NIH***

(View a poster of items YOU can voluntarily recycle at NIH at:

<http://nems.nih.gov/aspects/waste/programs/Voluntary%20Recycling%20Poster.pdf>)

- Pipette Tip Racks
- Wooden Pallets
- Construction Debris
- Toner/Printer Cartridges Benefits NIH Charities
- Tyvek Garments Benefits NIH Charities
- Batteries (All types)
- Fluorescent Tubes
- Electronics Waste (E-Waste)
- Solvents

\*Items that are required to be recycled in Montgomery County.

### ***Why recycle at NIH?***

**Montgomery County Executive Regulation 15-04 AM:** Requires ALL businesses and employees to recycle mixed paper, cardboard, commingled materials, and scrap metal. It is illegal to dispose of recyclable materials with solid waste. Violations of this regulation can result in fines of up to \$150 per day per offense.

**Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management:** Under Executive Order 13423 and the related implementing instructions, waste prevention and recycling must be incorporated into agency operations. The act of disposal is viewed as a last resort and recycling must always be considered first. Specifically, Section 2(e) of the Executive Order requires agencies to increase diversion of solid waste and maintain cost-effective waste prevention and recycling programs in its facilities.

If printing this document, please use 2-sided printing whenever possible. – Thank you!

***What are the financial benefits from recycling?***

**Reduced Waste Disposal Fees**

If the current recycling rate increases by...	Then NIH's annual solid waste disposal costs will be reduced by...
10%	\$51,000
35%	\$178,000
50%	\$255,000

**Generate Revenue from Recyclable Materials**

On average, NIH receives the following for the value of recyclables on a monthly basis:

Cardboard	\$4,500
Mixed Paper	\$1,500
Scrap Metal	\$2,500
Wood Pallets	\$1,300

This equates to nearly \$120,000 per year for the value of these recyclables.

***How does recycling benefit NIH Charities?***

For every usable inkjet or toner cartridge that is recycled, \$1.00 is donated to NIH Charities (The Children's Inn at NIH, Special Love for Children with Cancer-Camp Fantastic, Friends of the Clinical Center). Almost \$3,500 was donated through this effort in 2007 and over that amount was donated in 2008.

A charitable donation is also made on behalf of Garment Recovery Systems (GRS) for the recycling of Tyvek garments. A recent donation from GRS in the amount of \$280 was made to the Children's Inn.

***How does recycling benefit the environment?***

Recycling reduces the use of natural resources by reusing materials: 94% of the natural resources used by Americans are non-renewable. Non-renewable, natural resources use has increased from 59% in 1900 and 88% in 1945.

Recycling saves non-renewable resources. For example, by not recycling paper 80% more wood will need to be harvested by 2010 to meet growing paper consumption demands. However, through active paper recycling, only 20% more wood will need to be harvested by 2010.

It takes 95% less energy to recycle aluminum than it does to make it from raw materials.

Making products from recyclables results in energy savings. Recycled steel saves 60% production energy, recycled newspaper 40%, recycled plastics 70%,  
If printing this document, please use 2-sided printing whenever possible. – Thank you!

and recycled glass 40%. Using scrap steel instead of virgin ore to make new steel takes 40% less water and creates 97% less mining waste.

### ***How does recycling benefit the economy?***

Incinerating 10,000 tons of waste creates 1 job, while landfilling the same amount creates 6 jobs. Recycling the same 10,000 tons creates 36 jobs!

The National Recycling Coalition reports that recycling has created 1.1 million jobs, \$236 billion in gross annual sales, and \$37 billion in annual payroll. By meeting the state's 50% recycling goal, California is expected to create about 45,000 recycling jobs, compared to 20,000 new jobs slated to be created for the manufacturing sector.

Massachusetts employs more than 9,000 people in more than 200 recycling enterprises. About half of these jobs are in the recycling-based manufacturing sector. These businesses represent more than half a billion dollars in value to the state's economy.

### ***What are NIH's current recycling levels?***

NIH's current recycling monthly average is about 40%, which includes both the mandatory and voluntary recyclables.

The NIH recycling rates as reported to Montgomery County for the mandatory (e.g., mixed paper, commingled, cardboard, and scrap metal) recyclables was about 25% for 2007. The current recycling goal for businesses in Montgomery County is 50%.

A routine waste audit of Building 13 in June 2007 determined that over 42% of materials found in a solid waste compactor were mandatory recyclables. A follow-up audit of Building 13 in July 2008 determined that 38% of solid waste compactor contents were mandatory recyclables, weighing over 2,540 pounds with the majority of it being mixed paper (2,340 lbs).

### ***What is zero waste?***

Zero waste is a fresh approach to waste management and the use of resources. It focuses on a "whole system" approach by going beyond the "end-of-the-line" treatment of waste and promoting the three "R's" of reduce, reuse, recycle. Zero Waste maximizes recycling, minimizes waste, reduces consumption and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace.

If printing this document, please use 2-sided printing whenever possible. – Thank you!

## **Examples of Zero Waste Success in the Business World**

Hewlett-Packard (9,000 employees) is diverting 92-95% of its solid waste, saving almost a million dollars a year in avoided waste disposal costs.

Toyota claims a 97% zero-landfill status average over its 14 assembly plants. Copy-machine maker Ricoh has had a zero-landfill status at its U.S. plants since 2002.

Anheuser-Busch has recycled 99% of the solid waste generated at its 12 breweries.

Subaru claims that 99.8% of the refuse from its Indiana plant is diverted from going to landfills by recycling and reusing parts.

## ***Does NIH have recycling plans for the future?***

Yes, some of those plans include

- Recycling in work areas (labs and office suites) by all employees
- Composting of food scraps from cafeterias
- Composting of animal bedding
- Promote zero waste for special events held on campus
- Construction debris recycling
- Reduce waste through green purchasing

## ***Why is recycling important to future generations?***

Natural resources are being depleted and landfills are being filled at an increasing rate. Our current system of production, consumption and disposal has become unsustainable. It is imperative for everyone—from individuals to large organizations—to rethink our ideas and our relationship to trash disposal. By reducing the amount of trash produced and reusing existing materials, we can all make a difference by protecting the environment, conserving natural resources, and sustaining the planet for future generations.

If printing this document, please use 2-sided printing whenever possible. – Thank you!