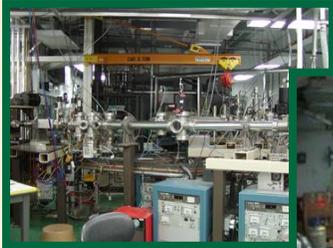


ORNL Organizations Partner in Clean Out of Building 3003 and Prepare for the Future

The Legacy Materials Disposition Initiative (LMDI) partnered with the Condensed Matter Sciences Division (CMSD) in the clean out of two large high bay, shop, and laboratory areas totaling approximately 6,400 square feet. Through up-front planning and commitment to safety, pollution prevention, and cost savings, LMDI and CMSD consolidated and reused a significant amount of equipment and supplies during this clean out in Building 3003. LMDI and CSMD personnel commitment and coordination not only allowed materials to be reused/recycled but also prepared the area to be available for future use, if needed, by the Inorganic Member Technology Laboratory (IMTL).



Before Clean Out - West High Bay



Disassembly of Accelerator for Reuse by Alabama A&M University



Final Loads of Salvaged Property, Scrap Metal, and Sanitary Waste



After Clean Out - West High Bay

Source reduction, reuse, and recycling

techniques used by LMDI included segregating materials and wastes, reusing materials within UT-Battelle, sending materials to UT-Battelle Property Sales, reusing an accelerator and parts at universities, and recycling.

Reused materials included loaning a university one large accelerator system valued at approximately \$1 million; providing large parts from three other accelerator systems and research equipment valued at approximately \$500,000 to two universities, CMSD, and other ORNL staff; providing a large drill press valued at approximately \$10,000 to the Facilities and Maintenance Division; and reusing some lead panels from one of the disassembled accelerators to shield a waste box being processed by Laboratory Waste Services.

Materials sent to Property Sales totaled ten truckloads of material including, office furniture, computers, research equipment, and miscellaneous materials.

Recycled materials included approximately 50 tons of scrap metal with a payback of approximately \$5,000, and approximately 1 ton of green-tagged lead.

Minimized disposition was realized through these innovative efforts, significantly reducing waste generation, which totaled approximately 16 cubic yards of sanitary waste, 234 chemical items characterized and sent for disposal, and approximately 50 cubic feet of solid low-level waste.

Through this effort, valuable alternatives were implemented that reduced waste, provided cost savings, and resulted in lower waste disposal costs. Generated wastes were further segregated and managed to maximize use of on-site landfills and to minimize the amount of waste sent to off-site facilities. In total, approximately 150 tons of material were recycled, reused, or sold saving similar landfill space and \$34,000 in disposal costs and resulting in a savings of more than \$1.5 million in acquisition and \$1 million in resale cost. This comprehensive, well-planned effort also saved approximately \$850,000 in the cost of facility clean out, based on previous CMSD estimates. Overall, this initiative resulted in an estimated total cost avoidance of more than \$3.3 million.

Oak Ridge National Laboratory Chemical Management Center

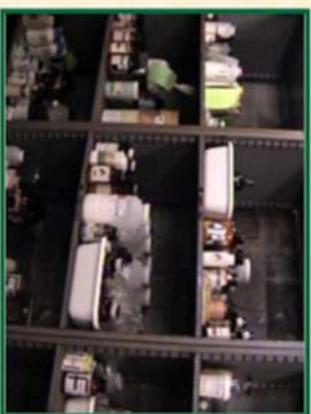
The Oak Ridge National Laboratory (ORNL) recognizes that having a strong chemical purchase and inventory control tracking system is a key component of its source reduction/pollution prevention strategy and had implemented an integrate d system, the Hazardous Materials Inventory System (HMIS), more than a decade ago. However, as a component of this chemical inventory control, UT-Battelle, LLC identified a need to facilitate the transfer of unwanted items at the laboratory to other custodians. This expansion of UT-Battelle's chemical inventory control not only would reduce waste generation but would also eliminate the costs of chemical purchases and waste management. So during 2001, UT-Battelle successfully piloted a Chemical Management Center (CMC).



Transferring items directly between custodians or to safe storage in the CMC has avoided unnecessary chemical purchases and waste management costs, has had a positive impact in reducing the chemical footprint in many laboratories, and has provided a valuable service to UT-Battelle research staff.

Consequently, in fiscal year 2005, this initiative:

- eliminated the purchase of 1,868 items
- eliminated the generation of approximately 1,868 kilograms of waste
- resulted in an estimated cost avoidance of more than half a million dollars.



Oak Ridge National Laboratory Recycling Program

The Oak Ridge National Laboratory (ORNL) has a well-established recycling program and continues to expand the types of materials that can be recycled by finding new markets and outlets for these materials. As shown in the ORNL recycling results graph, ORNL has diverted literally thousands of metric tons of materials from the landfill and into viable recycle processes, a true win-win situation. This success is only possible through the support of all ORNL personnel. Currently, materials recycled by ORNL range from office-oriented materials such as paper (including phone books), aluminum cans, and toner cartridges to operations-oriented materials such as scrap metal, tires, and batteries.



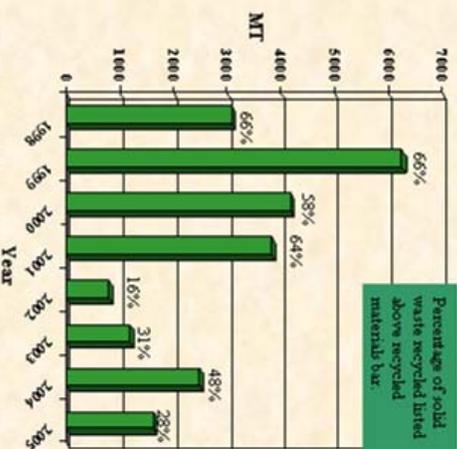
Plastic, Aluminum Beverage Can, and Glass Recycle Containers

In support of ORNL's recycling efforts, this homepage includes the following types of information:

- Recycling information by material (such as paper, toner cartridges, and corrugated cardboard)
- Recycling and pollution prevention contacts by activity (such as empty drum recycle and expense bench stock)
- Recycling statistics (office recycling and industrial recycling statistics)
- Recycling services by building and approved buildings (Before recycling can begin in a building at ORNL, the building or building area must be approved by Radiation Protection.)

A great one-stop homepage concerning ORNL's recycling activities is the ORNL Recycling Program Information homepage (<http://www.ornl.gov/data/ornlp/2b23.htm>) on the ORNL Pollution Prevention homepage.

ORNL Recycling Results^{a, b}



^a The ORNL Steam Plant converted to natural gas. So no coal ash was generated or recycled, significant only in reducing the total quantity of materials recycled since fiscal year 2001.

^b EM recycled much less material in 2002 (4901 MT) than in 2001 (2,608.21 MT) and did not report any ORNL-specific recycling data in 2003 or 2004.