

# Recycling



# in Pennsylvania

**Act 101 Annual Report  
to the General Assembly of Pennsylvania  
for 2001 & 2002**

Act 101 of 1988, "The Municipal Waste Planning, Recycling and Waste Reduction Act"



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Edward G. Rendell  
Governor

Kathleen A. McGinty  
Secretary

## **U.S. Recycling Economic Information Project**

The U.S. Recycling Economic Information (REI) Study of 2001 is unprecedented in that it quantifies the importance of recycling and reuse to the U.S. economy. The study, commissioned by the U.S. Environmental Protection Agency (EPA) and numerous states through a cooperative agreement with the National Recycling Coalition, clearly shows what many have known for a long time — recycling works.

Nationally, more than 56,000 recycling and reuse establishments employ more than 1.1 million people, with a total annual payroll of approximately \$37 billion. The average wage for those workers was \$32,700-- \$3,000 more than the national average wage. Total annual sales receipts for these industries are \$236 billion. Pennsylvania's employment, payroll and sales numbers are higher than any other state's. Specifically, Pennsylvania leads in the glass, metals, paper, plastic and rubber recycling industries.

Pennsylvania's recycling industries further had an indirect effect on the economy, estimated at \$1.8 billion, and a direct impact on the tax base, contributing \$305 million. The study also reports that 3.5 percent of Pennsylvania's jobs can be attributed to the recycling and reuse industry. A downloadable copy of the full report is available at EPA's website: <http://www.epa.gov/jtr/econ/rei-rw/result.htm>

# Message from the Governor

Pennsylvania has a long line of environmental achievements that have helped to create jobs and stimulate the state's economy—and the success of the state's recycling program is proof.

Recycling has become one of the engines that drive Pennsylvania's economy. More than 3,247 recycling and reuse businesses and organizations made more than \$18.4 billion in gross annual sales, paid \$30.5 million in taxes and provided jobs for more than 81,322 employees at an annual payroll of approximately \$2.9 billion. Our recycling and reuse industry leads the nation in employment, payroll and sales numbers.

In addition to our leadership at home, the efforts of Pennsylvanians are contributing greatly to recycling's larger national success story. According to the U.S. Recycling Economic Information Study of 2001, the recycling and reuse industry accounts for about 2.7 percent of the U.S. gross domestic product. The nation recovered 56 million tons of materials, at a total market value of more than \$3.6 billion.

Pennsylvanians are taking advantage of the opportunity to recycle, sending millions of tons of recyclables to manufacturers to generate new products rather than sending the materials to landfills or burning them. We have demonstrated that we can create a vast supply of commodities ranging from paper and cardboard to containers and computers, and we are fortunate that many of these items can be processed and turned into new goods right here in Pennsylvania.

With both pride and gratitude, I thank the more than 10 million Pennsylvanians who make recycling work. We are well on our way to building a sustainable recycling economy for the state and the nation.

Sincerely,  
Edward G. Rendell, Governor  
Commonwealth of Pennsylvania

# Message from the Secretary

Greetings!

I am pleased to present to the General Assembly the 2001-02 edition of the Act 101 Annual Report on the progress of recycling in Pennsylvania. Within these pages, you will find much evidence that shows recycling truly means business in municipalities and counties throughout the Commonwealth.

This report highlights some of our recycling partners and how they make recycling sustainable in Pennsylvania. We can all be proud of our efforts to date, and look forward to greater development and sustainability to preserve our environment and strengthen our economy.

It certainly is true that public and private partnerships have been vital to recycling here in Pennsylvania. At every stage, recycling has been a collaboration that ripples out into still more partnerships, creating an expanding economic sector with a growing labor force. State staff and county and municipal recycling coordinators have worked with residents and businesses to develop better collection programs. DEP has partially funded projects to demonstrate new uses for materials and new technologies, and special equipment to help manufacturers produce recycled products. State and local governments have worked together with many institutions and private companies to buy and promote buying recycled products.

Since 1989, the primary measure of recycling in Pennsylvania has been the number of tons recycled. In 2001, 3.9 million tons, or 36.1 percent of our waste, went to create new products such as carpets, mats, clothing, playground equipment, wallboard, partitions, tiles, furniture, fencing, reflective paints, traffic signs, decks, office products and casings for electronic products. It is recognition of these expanding market opportunities that has us moving to evaluate the importance of recycling through economic means rather than just tons collected and counted.

In November, the Rendell administration announced three new programs to boost demand for recycled materials by creating new markets. The Recycling Markets Center will develop healthy, accessible markets for Pennsylvania's recycled materials, while helping producers of recycled-content products overcome long-time market barriers and inefficiencies. In addition, two new grant programs will aim to develop the infrastructure to enhance recycling markets and encourage composting.

We can help communities sustain their recycling programs by creating economic development opportunities for the industry. It makes good business sense to add value to recyclables by supporting Pennsylvania companies that utilize them. With the support of both public and private effort, we look forward to an even more successful, progressive and self-sufficient program in the years to come.

Kathleen A. McGinty, Secretary  
PA Department of Environmental Protection

# FACTS

## on how Pennsylvania manages municipal wastes

**Statewide recycling in Pennsylvania** began in 1988 with a state law — Act 101 — that required larger municipalities to recycle and encouraged smaller ones to do so. The minimum goals were to freeze municipal waste generation rates at 1988 levels, recycle 25 (later 35) percent of waste materials, and ensure 10 years of disposal capacity. Act 101 authorized each county to develop a plan to manage its own wastes. Each year, the counties report countywide municipal waste generation and recycling data to the Pennsylvania Department of Environmental Protection (DEP), which consolidates the reports to develop a statewide profile. To fund these programs, the act imposed a \$2-per-ton recycling fee on waste disposed at Pennsylvania municipal waste landfills and waste-to-energy facilities.

Pennsylvania generates 10.9 million tons of municipal waste per year. Through recycling programs in 1,580 communities, we diverted 3.9 million tons (36 percent) from disposal in 2001 and 4.1 million tons (37.6 percent) from disposal in 2002.

An estimated 90 percent of Pennsylvania's population has access to recycling. Nearly 90 percent of those people are served by the state's 945 curbside collection programs. Since Pennsylvania is largely rural, its 635 drop-off programs are necessary to extend recycling to the greatest number of communities.

By weight, paper — predominantly corrugated cardboard — comprises the greatest proportion of materials collected, followed by construction/demolition waste from residential do-it-yourself building projects. Green building practices have created a boom market for recycled building materials.

Some programs collect and recycle wastes that cause problems when improperly disposed. Sixty-

one counties have sites that accept waste oil from the public.

Household hazardous waste (HHW) collection is not mandatory in Pennsylvania. Municipalities or private sponsors may hold collection events if they register them with DEP. Most collections are one-time events sponsored by counties or municipalities. During FY 2001-02, HHW programs in 30 communities collected 1,486 tons of materials. Paints and paint-related products accounted for 50 percent of the materials collected. Electronics accounted for 18 percent. To date, 30 communities have reported collecting 1,300 tons of materials in FY 2002-03.

Pennsylvania has been working with EPA and the other members of EPA Region III—Delaware, Maryland, Virginia, West Virginia and the District of Columbia—to develop the ability to recycle electronics (eCycling). Collections were held in five Pennsylvania counties in 2002.

The Commonwealth of Pennsylvania purchased more than \$70 million worth of recycled products in FY 2001-02. All Pennsylvania state office buildings are expected to recycle their waste paper. In FY 2001-02, Pennsylvania earned \$70,246 in revenue from waste paper alone.

A number of Commonwealth agencies work on special recycling projects statewide. PENNDOT uses a wide variety of recycled materials in transportation projects, including plastic, aluminum, glass cullet, scrap tires, reclaimed concrete/asphalt/aggregate, fly ash, steel and blast furnace slag, spent foundry sand, compost, shingle tabs, cellulose fiber and biosolids. From April through December 2001, the Pennsylvania Department of Agriculture collected and granulated 86,774 pounds of plastic pesticide containers for recycling; PDA depends on 131 businesses and pesticide distributors in 51

counties to collect the containers. The Bureau of State Parks, Pennsylvania Department of Conservation and Natural Resources, has been using waste tire chips on playgrounds and trails. In 2002, the bureau conducted a demonstration project to compare the use of plasphalt with conventional asphalt.

Pennsylvania's 50 municipal waste landfills and six waste-to-energy facilities reportedly received 12.4 million tons of waste generated in Pennsylvania during 2001 and 11.6 million tons in 2002. Pennsylvania exported approximately 350,000 tons out of state; most was shipped to a disposal site on the Ohio border, the entrance to which is in Pennsylvania.

Out-of-state haulers transported 12.4 million tons of waste into Pennsylvania for disposal in 2001 and 11.6 million in 2002. This accounted for 46.6 and 45.3 percent of the total municipal waste disposed in the state, respectively, compared to 27 percent in 1989. Most out-of-state waste is imported from New York (5.8 million tons in 2001 and 4.8 million in 2002) and New Jersey (5.2 million tons in 2001 and 5.7 million in 2002). Pennsylvania is the nation's largest municipal waste importer.

An unintentional result of the \$2-per-ton recycling fee has been to turn imported waste into a benefit. In FY 2001-02, the fee generated more than \$49.4 million, nearly half of it from imported waste. These funds provided 863 grants for local waste management programs, totaling \$44.9 million. Grants awarded since 1988 total \$381 million. Statewide recycling education and marketing are among the other programs that have benefited.

There are, however, disadvantages from imported waste. Safety and environmental risks have arisen from an increasing number of waste trucks on our highways, and several traffic deaths have resulted from them.

As of June 29, 2002, municipal and residual waste haulers need to register each of their vehicles with DEP before they can use Pennsylvania waste disposal and processing facilities. Act 90, the "Waste Transportation Safety Act," was Pennsylvania's response to ever-increasing violations of state environmental and highway safety laws. In May 2001, surprise inspections of more than 40,000 trash trucks revealed that fully 86 percent of the trucks had safety violations; more than one-third were removed from service as unsafe vehicles.

Registration provides a tracking system for violators. Before, DEP could issue only tickets to the driver and a summary offense to the waste hauling company for violations. Now, a second violation could lead to a \$25,000 fine, and the company may not be allowed to haul waste in the state. The act empowers DEP to deny or revoke transporter authorizations.

Act 111 of July 10, 2002 also requires waste tire haulers to obtain written authorization from DEP to use processing or disposal facilities.

Visit our recycling website. You'll find a wealth of information on recycling, waste reduction and composting, including downloadable publications, lesson plans, technical assistance, a gallery of poster contest winners, and a list of links to other sites.

**Pennsylvania Department of Environmental Protection ♦ Bureau of Land Recycling & Waste Management**

Mail: Rachel Carson State Office Bldg., P.O.Box 8472, Harrisburg, PA 17105-8472 ♦ Visit: 14<sup>th</sup> Fl., 400 Market St., Harrisburg

Phone: 717 787-7382 ♦ Fax: 717 787-1904 ♦ Recycling Hotline: 1-800-346-4242 ♦ E-mail: [recyclepa@state.pa.us](mailto:recyclepa@state.pa.us)

<http://www.dep.state.pa.us> (**directLINK "recycling"**)

# HIGHLIGHTS

Pennsylvania's recycling fee provided nearly \$495.8 million to fund Act 101 programs from 1988 through FY 2001-02.

In FY 2001-02, DEP awarded 863 grants totaling over \$44.9 million to counties and municipalities to bolster local recycling, planning and other waste management programs, for an aggregate of 10,365 grants totaling \$381 million since 1988. Of this combined total, nearly \$230.5 million funded local recycling programs.

More than 10 million residents — at least 85 percent of the state's population — have convenient access to recycling. About 75 percent have curbside pick-up.

Pennsylvania's 3,247 recycling and reuse businesses employ 81,322 people and do \$18 billion worth of business annually.

Recycling reduces pollution. Substituting steel scrap for virgin ore alone reduces air emissions by 85 percent and water pollution by 76 percent.

Through recycling, Pennsylvanians diverted 4.1 million tons of recyclable materials from the state's disposal facilities in 2002, or 37.6 percent of the state's municipal waste stream.

Paper accounted for 29 percent of all materials recycled in 2002. Corrugated paper is the second largest item recycled (edged out of first place in 2002 by construction and demolition waste).

The Commonwealth of Pennsylvania purchased more than \$70 million worth of recycled products in FY 2001-02.

DEP awarded 23 Act 190 grants, totaling \$714,000, to reimburse 17 household hazardous waste (HHW) program sponsors in FY 2001-2002. Thirty communities collected 1,300 tons of materials at HHW collection events in FY 2002-03.

Pennsylvania's Recycling Professional Certification Program won an award from the University Continuing Education Association, one of the oldest college and university associations in the U.S., for outstanding achievement in continuing and adult education. The noncredit program to certify recycling professionals is a public/private partnership between DEP, the Professional Recyclers of Pennsylvania and Penn State-Altoona. More than 50 recycling professionals graduated from the first class in August 2002. More than 300 recycling professionals are enrolled in the program.

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# RECYCLING

**Pennsylvania recycles more than 1/3 of its municipal waste stream.**

**2001 Materials Diverted: 3.9 million tons**

**2002 Materials Diverted: 4.1 million tons**

## INTRODUCTION

Pennsylvania counties reported recycling 36.1 percent (3,926,047 tons of materials) in 2001 and 37.6 percent (4,092,524.8 tons) in 2002. We achieved our 35 percent recycling goal a year early.

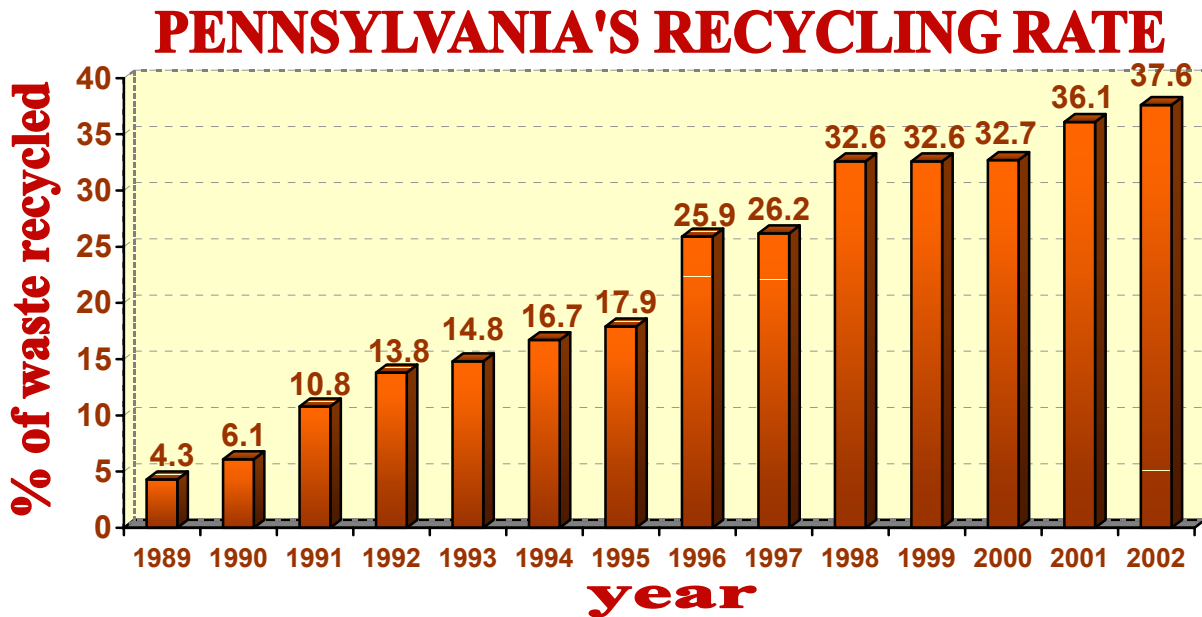
Pennsylvania's recycling program, which requires larger municipalities to recycle and encourages smaller communities to do so, has enjoyed enormous success. When the program started in 1988, we were recycling less than two percent of our municipal waste. We were fortunate to have glass, metals and paper industries that were already accepting materials for recycling, but in 1988, our recycling infrastructure consisted of little more than that and an enthusiasm to make recycling work.

The recycling infrastructure developed alongside local collection programs, which provided a consistently growing supply of materials (see "Pennsylvania's Recycling Rate," Table 1). A \$2-per-ton fee on all waste disposed at municipal waste landfills and incinerators helped pay for local collection programs, public education, materials processing and composting facilities, equipment and technical training. The Department of Environmental Protection (DEP) and local recycling programs gave top priority to educating the public on recycling materials and buying recycled products. Pacesetter businesses voluntarily established recycling and waste reduction programs; most realized cost savings — some of them enormous — and told other businesses how they did it.

Companies, colleges, individuals and government agencies took up the challenge to develop new uses for recycled materials, new processes and new equipment. A number of manufacturers developed uses for waste by-products and thereby increased their profits. In at least one case, a small farm community retrofitted old farm equipment to assist their voluntary recycling program. State and local governments revised procurement procedures to give preference to recycled products and stimulate recycling markets. Retail merchants showcased recycled products. Government and private enterprises constructed "green" buildings, using recycled materials and products. The development of computers and the Internet coincided with the expansion of recycling, and we promptly made use of the wonderful new tools to build more efficient programs. Pennsylvanians were on a creative roll in an environmental cause.

In 2001 and 2002, we recycled more than one-third of our municipal waste stream. Nearly 1,600 of our 2,700 municipalities — representing approximately 90 percent of the population — collected close to 4 million tons of recyclables annually and delivered them to 84 processing facilities and other markets. At least 144 businesses in the state used nearly all of these materials to make recycled products (for information, visit <http://www.dep.state.pa.us>, DEP Keyword "pa recycled products"). All told, our 3,247 recycling and reuse establishments employ 81,322 people — accounting for 3.5 percent of the state's jobs — and do \$18 billion worth of business annually. This report celebrates those accomplishments and the Pennsylvanians who make recycling work.

Table 1



## MUNICIPAL RECYCLING PROGRAMS

**MANDATED COMMUNITIES.** Act 101 of 1988, “The Municipal Waste Planning, Recycling and Waste Reduction Act,” mandates recycling in municipalities with populations over 10,000 and those with populations between 5,000 and 10,000 that have population densities greater than 300 persons per square mile. At present, 440 of Pennsylvania's 2,700 municipalities are mandated to recycle and provide curbside collection programs. These municipalities collect leaf waste and at least three materials from a menu of eight materials — steel/tin and aluminum cans, plastics, clear and colored glass, office paper, newspaper and corrugated cardboard from residents. They also provide recycling education and enforce their recycling ordinances.

**NON-MANDATED COMMUNITIES.** Of the communities not required to recycle, 505 have curbside programs and 635 have drop-off programs.

**TOTAL NUMBER OF PROGRAMS.** Pennsylvania has a total of 1,580 recycling programs. These programs serve an estimated 90 percent of the state's population.

Table 2

### NUMBER OF MUNICIPALITIES WITH RECYCLING PROGRAMS

Type Program	# of Municipalities
Mandatory Curbside Collection	440
Voluntary Curbside Collection	505
Drop-off Collection	635
<b>Total Number of Programs</b>	<b>1,580</b>



Employees at the Lackawanna Co. MRF load recyclable materials into rail cars. The county MRF, supported by Act 101 funding, processes the materials collected locally and ships them to markets around the country to be used as feedstock for new products. *Photo courtesy of Lackawanna Co. Solid Waste Authority.*

**COLLECTION AND PROCESSING.** Approximately 70 percent of the municipalities use private haulers for residential recycling collection; the rest collect their own. The private sector operates 56 of Pennsylvania's 84 materials recycling facilities (MRFs). Most leaf and yard waste composting is handled by municipal, county and authority-owned composting facilities.

**COUNTY-BY-COUNTY RECYCLING.** Nineteen of the 67 counties met or exceeded the 35 percent recycling goal in 2001. These 19 counties recycled more than 2.5 million tons of materials, or 64 percent of the statewide total. In 2002, 15 counties met or exceeded the goal, recycling 2,353,413.6 tons, or 62 percent of the total. Refer to Table 4 for regional recycling rates.

**MATERIALS COLLECTED.** By weight, more paper is recycled than any other material, followed by construction/demolition waste from residential do-it-yourself building projects. Paper accounted for 30 percent of all materials recycled in 2001 (Table 5-A) and 29 percent in 2002 (Table 5-B).

Pennsylvania distinguishes between "standard" and "nonstandard" recyclable materials. "Standard" materials refer to those covered by the U.S. standard recycling calculation, which was developed by the U.S. Environmental Protection Agency (EPA) and the Council of State Governments to enable comparisons of recycling results between states. These include all the materials specified in Act 101 plus food wastes, textiles, tires and white goods (Tables 5-A and 5-B). Pennsylvania's recycling programs collect "nonstandard" materials, as well — notably construction and demolition wastes, used oil and aluminum scrap (Table 6). For tables of materials recycled by county, visit:

<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/101rpt00/tables.pdf>.

Table 3  
**WASTE GENERATION & RECYCLING, 2001 & 2002\***  
 (based on 2000 census data)

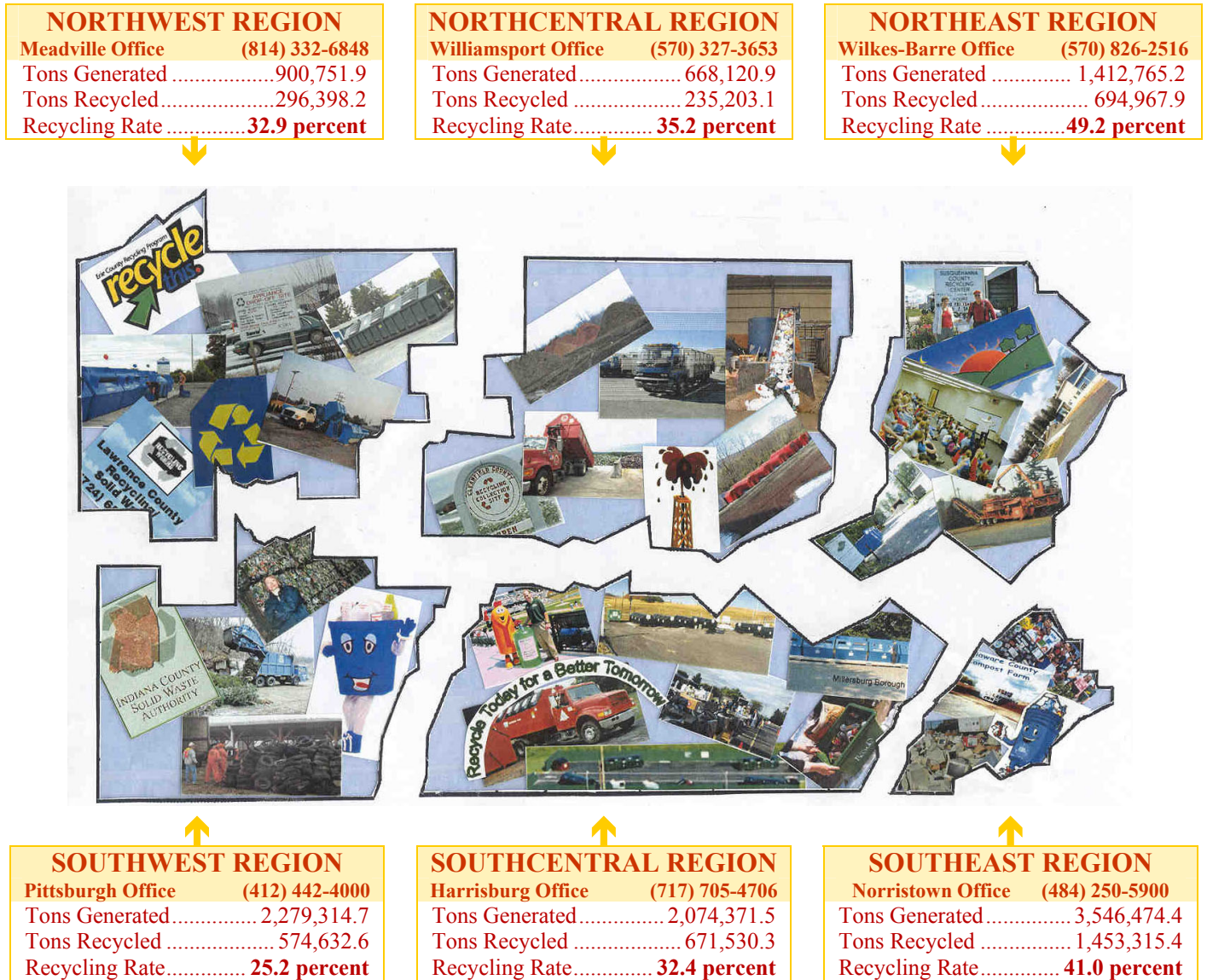
Year	Tons MSW Generated Normalized to .87 tons per/person/year	Lb./Person/Day MSW Generated	Total Tons Recycled	Total Recycling Rate	EPA Standard Tons Recycled	EPA Standard Recycling Rate
2001	10,881,798.6	4.77	4,092,524.8	37.6	2,984,591.30	27.4
2002	10,881,798.0	4.77	3,892,206.3	35.8	3,044,591.30	28.0

\* Generation for Philadelphia is 1 ton per person per year.

\*\*ISRI - Institute of Scrap Recycling Industries

Table #4-A

## MUNICIPAL WASTE GENERATION & RECYCLING BY DEP REGION, 2001\* (ALL MATERIALS)



\*The figures above are derived from county report data. They also include recycled tonnages reported to DEP by the Institute of Scrap Industries (ISRI), additional Sec. 904 materials and tires.

Region	County	Program/Feature Pictured Above
SW	Allegheny	Christmas Tree Composting Program
SW	Armstrong	Plastics Recycling
SC	Blair	Recycling at Altoona Curve Games
NC	Bradford/Sullivan/ Tioga	Northern Tier S.W.A. Recycling Center
SE	Bucks	Elementary School Recycling Education
NW	Butler	Recycling Logo
SW	Cambria	Recycling Mascot – Benjabin
NC	Centre	Glass Recycling
SE	Chester	Electronics Recycling
NC	Clearfield	Recycling Collection Site
NC	Clinton	Mulch Site
SC	Cumberland	HHW Event
NW	Crawford	Drop-off Site & Collection Truck
SC	Dauphin	Recycling Drop-off at Millersburg
SE	Delaware	Compost Farm
NW	Elk	Drop-off Collection Site
NW	Erie	Recycling Logo – Recycle This
SC	Franklin	Recycling Motto

Region	County	Program/Feature Pictured Above
SW	Greene	Tire Recycling Event
SC	Huntington	Recycling Truck
SW	Indiana	Recycling Logo
NW	Jefferson	Appliance Collection Site
NE	Lackawanna	Recycling Center Logo
SC	Lancaster	Curbside Program – 38 municipalities
NW	Lawrence	Recycling Logo
SC	Lebanon	Recycling Center at GLRA
NE	Lehigh	Composting Site
NE	Luzerne	Recycling Education
NC	Lycoming	New Commercial Recycling Truck
NW	Mercer	Drop-off Center (one of five new)
NE	Monroe	Recycling Center
SE	Philadelphia	Recycling Mascot – Curby Bucket
NE	Schuylkill	Drop-off Site in Walker Twp
NC	Snyder	Used Oil Collection Logo
NC	Union	West End Recycling Center
SC	York	Recycling Drop-off Center

Table #4-B

## MUNICIPAL WASTE GENERATION & RECYCLING BY DEP REGION, 2002\* (ALL MATERIALS)

<b>NORTHWEST REGION</b>	
Meadville Office	(814) 332-6848
Tons Generated .....	900,751.8
Tons Recycled .....	213,589.4
Recycling Rate .....	<b>23.7 percent</b>

<b>NORTHCENTRAL REGION</b>	
Williamsport Office	(570) 327-3653
Tons Generated .....	668,120.9
Tons Recycled .....	268,127.6
Recycling Rate .....	<b>40.1 percent</b>

<b>NORTHEAST REGION</b>	
Wilkes-Barre Office	(570) 826-2516
Tons Generated .....	1,412,765.1
Tons Recycled .....	648,896.3
Recycling Rate .....	<b>45.9 percent</b>



<b>SOUTHWEST REGION</b>	
Pittsburgh Office	(412) 442-4000
Tons Generated .....	2,279,314.7
Tons Recycled .....	468,523.5
Recycling Rate .....	<b>20.6 percent</b>

<b>SOUTHCENTRAL REGION</b>	
Harrisburg Office	(717) 705-4706
Tons Generated .....	2,074,371.6
Tons Recycled .....	650,962.2
Recycling Rate .....	<b>31.4 percent</b>

<b>SOUTHEAST REGION</b>	
Norristown Office	(484) 250-5900
Tons Generated .....	3,546,474.5
Tons Recycled .....	1,642,107.3
Recycling Rate .....	<b>46.3 percent</b>

\*The figures above are derived from county report data. They also include recycled tonnages reported to DEP by the Institute of Scrap Industries (ISRI), additional Sec. 904 materials and tires.

Table 5-A  
**EPA STANDARD MATERIALS RECYCLED, 2001**

<b>Material</b>	<b>Breakdown</b>	<b>Subtotal</b>	<b>Total Tons</b>
Paper			1,172,540.90
	Corrugated	609,880.15	
	Newsprint	276,681.89	
	Office Paper	60,228.66	
	Other	225,750.20	
Metals			664,795.75
	Steel Cans	43,087.84	
	Alum. Cans	35,012.03	
	Other*	586,695.88	
Glass			43,760.62
	Clear	15,608.74	
	Mixed	28,151.88	
Plastics			54,996.14
	HDPE	4,364.91	
	PETE	16,330.73	
	Mixed	34,300.50	
Leaf/Yard			427,042.17
Commingled			250,416.06
Wood			117,212.70
Tires			97,607.55
Food Waste			67,092.70
Car Batteries			16,703.54
Textiles			15,167.30
Antifreeze			2,589.70
HHW			1,626.10
Fluorescent Tubes			513.80
Consumer Electronics			498.10
Circuit Boards			424.00
Oil Filters			261.70
Mattresses			63.50
<b>Total</b>			<b>2,933,312.33</b>

\*Mixed metals and scrap steel, copper, brass, etc.

Table 5-B  
**EPA STANDARD MATERIALS RECYCLED, 2002**

Material	Breakdown	Subtotal	Total Tons
Paper			1,184,180.70
	Corrugated	682,091.20	
	Newsprint	215,820.30	
	Office Paper	78,972.10	
	Other	207,297.10	
Metals			638,983.20
	Steel Cans	25,876.10	
	Alum. Cans	18,732.20	
	Other*	594,374.90	
Glass			64,889.90
	Clear	31,089.30	
	Mixed	33,800.60	
Plastics			36,098.10
	HDPE	4,888.10	
	PETE	3,013.40	
	Mixed	28,196.60	
Leaf/Yard			426,745.20
Commingled			276,863.50
Wood			141,627.50
Tires			62,499.90
Food Waste			71,645.80
Car Batteries			16,703.54
Textiles			21,382.00
Single Stream Collection*			21,952.10
Antifreeze			2,589.70
HHW			2,835.10
Fluorescent Tubes			551.50
Consumer Electronics			2,643.80
Circuit Boards			137.00
Oil Filters			2,921.30
Mattresses			58.70
<b>Total</b>			<b>2,984,591.30</b>

\*Mixed metals and scrap steel, copper, brass, etc.

Table 6

**NONSTANDARD MATERIALS RECYCLED, 2001 & 2002**

Materials	Tons	
	2001	2002
Construction/Demolition Waste	622,965.17	690,019.10
Miscellaneous/Other Consumer Items	162,276.20	86,481.80
Motor Oil	125,070.11	27,604.70
Aluminum Scrap	56,686.18	24,694.40
Auto Parts	19,538.00	4,456.20
Drum Steel	3,984.34	12,040.30
Furniture	1,452.60	1,434.00
Nickel Cadmium (or NiCad) Batteries	458.62	547.00
Fiber Drums	302.80	337.50
Asphalt	0	260,318.50
<b>TOTAL</b>	<b>992,734.02</b>	<b>1,107,933.50</b>

## COMMERCIAL RECYCLING PROGRAMS

Mandated communities are responsible for ensuring that commercial, institutional and municipal establishments recycle aluminum cans, corrugated cardboard, office paper and leaf waste, at minimum. Many businesses in nonmandated communities also recycle, but do not always report their efforts for inclusion in the statewide recycling rate. Private haulers account for nearly 100 percent of collection from commercial, institutional and municipal establishments.

**BUY RECYCLED BUSINESS OUTREACH.** DEP hired an independent business consultant to expand business recycling efforts and reporting, and facilitate the purchase of recycled materials. By the time the project concluded in April 2002, the "Buy Recycled" business representative had contacted more than 250 businesses in 16 counties. The consultant explained how businesses can help their communities earn more money under the Act 101, §904 performance grants, simply by reporting their recycling results. Each business visited received a free binder containing a "Buy Recycled" guide, an easy-to-use recycled products catalog that furnishes money-saving information, and information on the Buy Recycled Business Alliance for Pennsylvania businesses. The binder also contains a "Buy Recycled" CD Rom, a "Buy Recycled" brochure, information on the EPA WasteWise program, and information from DEP's Office of Pollution Prevention and Compliance Assistance. DEP continues to assist Pennsylvania businesses by mailing the "Buy Recycled" binder to those who request it from the website or the recycling hotline.



Everlast Plastic Lumber Inc of Hamburg, Pennsylvania manufactures solid plastic lumber from 100 percent recycled plastics for outdoor building and lawn care. Plastic lumber withstands time and weather. UV stabilizers and colorfast pigments help to extend the color life and prevent extreme fading due to weather and sun. It is maintenance free and more affordable than wooden lumber.

For more information, visit Everlast's web site at <http://www.everlastlumber.com> . Photo courtesy of Everlast.



Besides plastic lumber and fencing, other products made from recycled plastics include garden accessories, outdoor furniture and traffic control applications. PlasTEAK of Akron, Ohio, uses recycled plastics to manufacture high-end recreation applications, such as the boat swim platforms shown above. For more information, visit <http://www.plasteak.com> . Photo courtesy of PlasTEAK.



**COMMONWEALTH AGENCY RECYCLING.** The Commonwealth of Pennsylvania purchased more than \$70 million worth of recycled products in FY 2001-02. Table 7 contains a partial list of recycled products purchased and the amounts spent. For more information on state government procurement, visit <http://www.dgs.state.pa.us/indexIE.htm> .

Table 7  
**EXAMPLES OF RECYCLED PRODUCTS  
 PROCURED BY THE COMMONWEALTH**

Recycled Products	Purchase Cost
Paper Products	\$12,443,979
Re-refined Oil Products	710,194
Recycled Rubber Crack & Joint Sealant	918,812
Recycled Plastic Lumber	45,134
Retread Tires	277,763

All Pennsylvania state office buildings are expected to recycle their waste paper. In FY 2001-02, Pennsylvania earned \$70,246 in revenue from waste paper (Table 8) collected by the Department of General Services, Commonwealth Agency Recycling Program. The Harrisburg program also recycles:

- |                |                            |
|----------------|----------------------------|
| Bottles & Cans | Toner & Ink Jet Cartridges |
| Corrugated     | Videotape Cassettes        |
| Newspapers     | Computers & Electronics    |
| Magazines      | CDs & Cases                |
| Phonebooks     | Fluorescent Lamps          |
| Carpeting      | Tires                      |
| Scrap Metal    | Batteries                  |
| Microfilm      | Pallets                    |
| Shrink Wrap    | Oil                        |

Table 8  
**WASTE PAPER COLLECTED BY THE  
 COMMONWEALTH AGENCY RECYCLING PROGRAM**

TYPE PAPER	TONS
Office Paper	2,718.65
Corrugated Paper	551.23
Newspaper & Magazines	336.00
Phone Books	7.00
Turnpike Tickets	137.38
<b>Total Waste Paper</b>	<b>3,750.26</b>

In FY 2001-02, the Commonwealth Agency Recycling Office (CARO) completed a statewide survey to determine the degree of recycling occurring at each agency location. This will be an excellent tool in coordinating the state's recycling effort. CARO monitors the loading docks of state office buildings in Harrisburg to ensure that recyclable materials have been separated from trash and collected properly.

In 2002, CARO was authorized to secure obsolete computers from state agencies, destroy all hard memory drives to maintain confidentiality of data, and recycle the computers. The Department of General Services (DGS) has completed a Memorandum of Understanding (MOU) with Unicor, the Federal Correctional Industry Program that provides no-cost recycling of all Commonwealth computer equipment and all other obsolete electronics. With the opening of a new Unicor electronics operation in Lewisburg, Pennsylvania, it is now practical for state agencies to deliver equipment themselves whenever it suits their needs. The MOU represents a tremendous cost-saving to the state.

The Commonwealth added shredded confidential papers to its program. In Harrisburg, DGS collects all such paper and uses a local vendor to deliver the shredded paper to the recycler. DGS is contracting with a mobile shredding service for agency locations outside of Harrisburg; the agreement provides for recycling.

DEP's Water Testing Lab produces approximately 300 polyethylene bottles a day. CARO collected the bottles and delivered them to the Department of Agriculture's pesticide container-recycling program.

The contract to purchase recycling containers for state agencies and Pennsylvania municipalities is now a multiple-award catalogue contract that makes available all manner of receptacles from eight vendors.



This display shows a variety of recycled products from Greenline Paper Company of York, Pennsylvania, one of the Commonwealth's contractors for office paper supplies. Besides a wide range of office paper products, the company offers recycled computer disks, pencils, pens, paperclips, plastic trash and recycling bags, facial and toilet tissue, paper towels and luncheon napkins. For more information, visit Greenline's website at [steveb@greenlinepaper.com](mailto:steveb@greenlinepaper.com) . Photo courtesy of Greenline, Inc.

**PENNSYLVANIA MATERIALS RECOVERY FACILITIES (MRF) SURVEY.** In 2002, DEP surveyed public and private MRFs in order to update its information on facility capacities, processing methods, supplies, markets and assistance needs. A database of survey results has been completed and the information is being used for other projects.

# COMPOSTING



**MUNICIPAL COMPOSTING PROGRAMS.** Pennsylvania communities that are mandated to recycle also are required to collect and manage leaf waste. Most have access to municipal composting programs, which are funded under Act 101, §902 recycling program grants. Both mandated and nonmandated communities can apply for the grants to establish compost sites and increase volumes of materials composted at existing sites. There are hundreds of uses for compost, from backyard gardens and flower beds to landscaping and even constructing wetlands and natural filters for stormwater. Compost not only adds organic material to the soil, it contains microbes that break down impurities in water and helps retain water during periods of drought.

A large variety of backyard composters, most made of recycled materials, are available commercially. Materials to build your own composting bin are available at most home improvement and building supply stores. *DEP file photos.*

In 2001, municipal composting programs collected 427,042 tons of yard waste for composting and 67,093 tons of food waste for composting or animal feed. In 2002, local programs collected 426,725 tons of yard waste and 71,646 tons of food waste.

DEP has developed guidelines for using compost for erosion and sedimentation controls and has developed a general permit for composting source-separated food waste on farms. These types of operations allow farmers to receive a tipping fee for each load of food waste. The farmers then compost the waste and use it as fertilizer.

**COMPOSTING CONFERENCE.** DEP, in partnership with the professional Recyclers of Pennsylvania (PROP), the Pennsylvania Compost Association and the Pennsylvania Association of Sustainable Agriculture held a two-day conference, "Sustaining the Earth's Resources: Advances in the Organics Recycling Industry," in State College in May 2002. The conference addressed the diversion of organic wastes from supermarkets and cafeterias, compost quality and testing, updates on the herbicide Clopyralid, and innovative uses of compost. Speakers included nationally known recycling and composting experts Nora Goldstein and Robert Rynk from *Biocycle, The Journal of Composting and Organics Recycling*. Conference participants had the opportunity to discuss organics composting with industry representatives and to visit two composting operations located in the State College area.

Recycling businesses include those that design, manufacture and sell the special equipment needed for municipal and commercial composting. This kind of equipment, new or used, can be purchased or rented from companies like Stephenson Equipment, Inc. of Harrisburg, Pennsylvania. *Photos courtesy of Stephenson Equipment.*



◀ This leaf vacuum truck can be operated by just one person.



Wood chipping on a grand scale, this wood chipper/mulcher is known as "The Beast" ▶

**COMPOSTING GRANT.** In May 2002, DEP announced 31 grant awards to three counties and 28 municipalities, as shown in Table 9.

Table 9

**Act 101, Section 902**

**COMPOST INFRASTRUCTURE DEVELOPMENT GRANTS (May 2002)**

COUNTY	MUNICIPALITY	AMOUNT
Allegheny	Forest Hills Boro	69,677
Allegheny	Town Of Mccandless	278,003
Allegheny	City Of Mckeesport	30,000
Allegheny	Robinson Twp	269,000
Allegheny	West Mifflin Boro	89,000
Beaver	Brighton Twp	211,525
Beaver	Fallston Boro	41,679
Beaver	New Brighton Boro	25,488
Berks	Maidencreek Twp	36,653
Blair	Antis Twp	52,344
Blair		382,000
Bucks	Bristol Twp	\$208,800
Bucks	Lower Makefield Twp	372,478
Cambria	City Of Johnstown	35,000
Centre	State College Boro	443,712
Clearfield	Clearfield Boro	20,699
Crawford	City Of Titusville	113,791
Cumberland	Camp Hill Boro	18,060
Cumberland		359,782
Cumberland	East Pennsboro Twp	289,720
Lackawanna	Blakely Boro	121,621
Lackawanna	Clarks Summit	20,000
Lackawanna	Old Forge Boro	117,720
Lackawanna	City Of Scranton	930,000
Lawrence	New Wilmington Boro	86,152
Lebanon	City Of Lebanon	35,000
Lebanon	North Lebanon Twp	42,500
Lehigh		20,000
Northampton	City Of Bethlehem	225,000
Washington	Carroll Twp	130,612
Westmoreland	City Of Monessen	110,791
	<b>Total</b>	<b>\$5,186,807</b>

**ORGANICS RECYCLING TASK FORCE.** The Organics Recycling Task Force — comprised of representatives from nonprofit groups, businesses, local governments and DEP — presented its report on increasing organic recycling to DEP in August 2002. The report included recommendations on how to develop organic recycling as a sound waste management method for homes, farms, communities, schools and industry. As a follow-up to the report, DEP began to solicit proposals for a special round of grants targeted only for composting and organics recycling projects. A total of \$3 million to \$5 million will be available. Among the task force’s recommendations are:

- Identifying the generators of organic materials, the types and quantities of organic materials generated, and the organic/recycling facilities in the Commonwealth;
- Promoting organics recycling in schools;

- Extending the 2004 sunset date for the recycling fee to support these activities; and
- Staffing a section within DEP to coordinate all organics recycling issues in the Commonwealth.

For more composting information, see “Recycling Market Development” (below) or visit <http://www.dep.state.pa.us> (DEP Keyword "composting").

## RECYCLING MARKET DEVELOPMENT

DEP’s Recycling Markets Section is responsible for the Commonwealth's recycling market development initiatives, including composting, market development technical assistance, and buy-recycled outreach and promotion. A major initiative of the section is the establishment of a Recycling Market Development Center that will facilitate business-to-business relationships in order to maximize the use of recycled feedstock by Pennsylvania businesses and manufacturers.

Table 10

### RECYCLED PRODUCT MANUFACTURERS IN PENNSYLVANIA

Type of Recycled Products	Number of Manufacturers
Automotive Supplies	10
Bottles & Containers	9
Building Materials	49
Cans & Metal Products	5
Clothing & Accessories	10
Home & Yard Supplies	23
Packaging Materials	8
Paper & Office Supplies	27
Recycling Containers	3
<b>TOTAL</b>	<b>144</b>



These recycled products were manufactured using materials collected in Pennsylvania and elsewhere. The products shown and the materials used to make them are as follows:

Product	Material(s) Used
Carpet Padding	Plastic
Mat	Tires
Plastic Scrubber Pad	Plastic
Aluminum Can	Aluminum
Steel Can	Steel
Toy	Plastic
Molded Packing Product	Newspaper
Recycling Bin	Plastic, Tires
Briefcase	Plastic
Solid And Hollow Lumber	Plastic & Wood
Notepaper	Paper
Glass Bottle	Glass

*Photo from DEP photo file.*

The development and enhancement of recycling markets is crucial to the success of Pennsylvania’s recycling program. Without markets, programs fail, which is why DEP continues to devote its efforts toward market development initiatives. The Recycling Markets Section’s major initiatives are as follows:

**RECYCLED PRODUCT DIRECTORY.** During 2002, the Pennsylvania Resources Council (PRC) finished updating the online version of their Recycled Product Directory in order to help individuals buy recycled-content products.

**MARKET DEVELOPMENT WEBSITE.** The sortable Market Development Directory of recycling facilities has been added to the recycling website in order to assist local governments, companies, organi-

zations and individuals with locating facilities that will accept their recyclables. Ultimately, the website will provide a wealth of material-specific recycling information. DEP works with county coordinators, recycling directories and electronic directories to keep the database current, and encourages electronic submissions from the public to update the database. The site also contains listings of Pennsylvania's material recovery facilities (MRFs) and cullet and plastics processors. Recent enhancements to the markets website include the Unique Recyclables Facility List, market information and marketplace profiles.

**WASTE COMPOSITION STUDY AND RECYCLABLES COMPOSITION STUDY.** DEP has completed a \$500,000 waste composition study and recyclables composition study to characterize the municipal waste generated in Pennsylvania. Understanding the waste stream and its recyclable components is crucial to targeting resources, spending funds wisely and developing an effective recycling program. To obtain a comprehensive profile, waste from residential and commercial generators in urban, suburban and rural areas has been sorted and weighed in all six DEP regions during each of the last four seasons. The waste composition study provides more accurate data on types of waste generated by Commonwealth residents. The recyclables composition study characterizes various recovered material streams and reject/residue streams at MRFs across Pennsylvania. Both studies will help with future recycling collection and market development efforts.

R. W. Beck, Inc., the contractor for the Municipal Waste Composition Study, completed the summer and fall sorts in 2001. In 2002, the winter and spring sorts were completed, along with the first phase of a Recycled Materials Composition Study. Sorting took place at one-week intervals, on random samples of Pennsylvanian generated waste, which was sorted and weighed to determine percentages of 38 different waste categories. The sorted waste was generated from commercial and residential areas and consisted of urban, suburban and rural area samples. Preliminary results show that organic materials are a substantial part of the waste stream, which further supports DEP's compost initiatives, as well as the enhancement of the composting program.

The U.S. Environmental Protection Agency analyzed the U.S. municipal waste stream in 2000. The breakdown of waste materials before recycling is shown in Table 11.



Volunteers from Professional Recyclers of Pennsylvania (PROP), staff of R.W. Beck and others conduct a waste sort at Imperial Landfill in Allegheny County for the Waste Composition Study. *Photo courtesy of R. W. Beck, Inc.*

Table 11  
**CHARACTERIZATION OF U.S.  
MUNICIPAL WASTE STREAM BEFORE RECYCLING, 2000**

Materials	Percentage of Waste Stream
Paper	37.4
Yard Waste	12.0
Food Waste	11.2
Plastics	10.7
Metals	7.8
Rubber, Leather & Textiles	6.7
Glass	5.5
Wood	5.5
Other	3.2
<b>TOTAL</b>	<b>100.0</b>

Source: U.S. EPA

Table 12  
**CHARACTERIZATION OF PENNSYLVANIA  
MUNICIPAL WASTE STREAM BEFORE RECYCLING**

Materials	Percentage of Waste Stream
Glass	3.0
Inorganics	12.7
Metals	5.4
Paper	33.3
Plastic	11.3
Organics	34.2

**RECYCLING MARKETS CENTER.** DEP is soliciting grant applications from nonprofit groups and universities to develop and maintain a Pennsylvania Recycling Markets Center that will expand the use of recycled materials in manufacturing, help recyclers sell their products, and serve as a recycling information clearinghouse. The winning applicant would have a five-year contract to run the center.

The center will research and maintain data on market trends, promote new processing technologies, and stimulate demand for recycled products. In providing support to the broad spectrum of the recycling industry—generators, haulers, processors, manufacturers and end-users—the center is expected to create greater demand by manufacturers and overcome market barriers and inefficiencies, thereby increasing the amount of materials collected and creating more jobs. The ultimate goal is to promote secure, robust and sustainable markets for recyclable materials.

The state’s recycling fee, which was extended through 2008 by Act 175 of 2002, will fund the program. In addition to the contract to develop the Recycling Markets Center, there are two new market development grants:

(1) **Recycling Markets Infrastructure Development grants** offer up to \$250,000 in reimbursements to for-profit and nonprofit entities for equipment costs associated with increasing the use of Pennsylvania-generated recycled material content in products. A total of \$500,000 in grants is available. Grant applications must be submitted by Jan. 30, 2004.

(2) **Composting Infrastructure Development grants** will award up to \$75,000 in reimbursements to for-profit and nonprofit entities for equipment costs associated with increasing the use of food, yard and certain types of residual wastes. A total of \$225,000 is available for this program.

Both grant programs require a 20 percent match from the applicant.

The market development grants, and the creation of the center, were the result of insights and suggestions by a group of stakeholders--representatives of recycling, waste and manufacturing concerns and other interested persons--who met to help plan the future of recycling in Pennsylvania at three Recycling Markets Development Summits beginning in 1999.

**RECYCLING FINANCE SEMINAR.** In October 2001, DEP sponsored a recycling finance seminar targeting business development specialists, including bank loan officers; state and local economic developers; public, private and nonprofit business development service providers (i.e., small business development centers); regional development corporations; and consultants. The seminar agenda included:

- an overview of Pennsylvania's recycling industry, the opportunities it offers to the state's economy, and the size and economic value of the Northeast region's recycling industry;
- a presentation on why a generic business plan is not effective for recycling firms and the essential elements necessary to be included in a recycling firm's written materials (e.g., strategies for dealing with volatile markets, regulatory issues and their impact, and cost/revenue considerations);
- state, federal and private financing, and other resources available specifically for recycling businesses; and,
- a panel discussion with a successful recycling entrepreneur and the financier on how they were able to arrange financial backing.

Seminar co-sponsors were the Northeast Recycling Council (NERC), Manufacturing Technology & Industrial Resource Center (MANTEC), the Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO), the Pennsylvania Department of Community and Economic Development, the Pennsylvania Small Business Development Centers, the Pennsylvania Technical Assistance Program (PENNTAP), and Quantum Management Services, Inc.

**OTHER COMMONWEALTH AGENCIES.** DEP works with a number of other Commonwealth agencies to further recycling in the state, including:

- **Pennsylvania Department of Transportation (PENNDOT).** For information on what PENNDOT is doing to encourage recycling in transportation projects, visit their website at [www.dot.state.pa.us](http://www.dot.state.pa.us) and select Bureau of Environmental Quality. This site contains the Strategic Recycling Plan, which was adopted in 2000, as well as information on past and future recycling efforts. Over the past several years, in cooperation with DEP, PENNDOT has used the following recycled materials in transportation projects: scrap tires, fly ash, glass cullet, steel slag, plastic, reclaimed Portland cement concrete, reclaimed asphalt, reclaimed aggregate, spent foundry sand, blast furnace slag, woodchip compost and other compost, aluminum, shingle tabs, cellulose fiber and biosolids. Demonstration projects at more than 10 locations during 2002 used plasphalt — paving material containing recycled plastic. Another project used glass cullet as pipe backfill. DEP is coordinating with PENNDOT for the use of about 800,000 waste tires at a bridge approach in Armstrong County. These waste tires are coming from two cleanup sites funded under the DEP's waste tire program for municipalities.





PENNDOT uses highway sound barriers made of recycled materials and filled with tire chips along Interstate 81, near Harrisburg (Colonial Park). DEP file photos.



- **Pennsylvania Department of Agriculture (PDA).** During 2001, the Plastic Pesticide Container Recycling (PPCR) Program experienced continued growth in both the number of recycling locations available and the quantity of containers recycled. The collection system depends on a network of pesticide distributors and/or commercial pesticide application businesses to accept clean, empty plastic pesticide containers from all types of pesticide applicators, regardless of point-of-purchase. There are a total of 131 locations in 51 counties to collect plastic pesticide containers. From April through December 2001, 86,774 pounds of plastic pesticide containers were collected and granulated into chips by PDA staff. The 86,774 pounds of pesticide containers recycled in 2001 represents a 25 percent increase over the 2000 season. The PPCR program has recycled 324,912 pounds of plastic pesticide containers since the program began in 1994. Program growth has been rapid, with the addition of new collection partners and expansion of the program into all regions of the state in 2000. When fully operational, the program will serve as a model for establishing other programs across the nation.
- **Pennsylvania Department of Conservation and Natural Resources, Bureau of State Parks.** The Bureau of State Parks has been promoting the use of recycled materials, such as tire chips on playgrounds and trails. A paving project to compare the use of plasphalt with conventional asphalt was conducted during 2002 (this was one of PENNDOT's 10 demonstration projects). DCNR's web address is <http://www.dcnr.pa.us>.

**NATIONAL ELECTRONICS PRODUCT STEWARDSHIP INITIATIVE (NEPSI) AND ELECTRONICS RECYCLING (eCycling).** Since 2001, as part of its eCycling effort, DEP has worked in partnership with EPA Region III, Delaware, Maryland, Virginia, West Virginia, and the District of Columbia to recycle unwanted computers, computer equipment and televisions. Environmental officials in all of these states have been working with electronics manufacturers, electronics retailers, waste management companies, and electronics recyclers to recycle obsolete equipment collected from residents and small businesses in the Mid-Atlantic States. Two countywide electronics collections were held in the Commonwealth during 2001. There were five countywide collections during 2002 – in Butler, Centre, Chester and Lackawanna counties, and Lancaster County, which has a permanent collection site.

DEP also has been participating in the National Electronic Product Stewardship Initiative (NEPSI) dialog toward developing a national policy on electronics product management (<http://eerc.ra.utk.edu/clean/nepsi/>). This group of government employees, nongovernment organizations, and electronic product manufacturers has been trying to come to an agreement regarding end-of-life management of electronics equipment. The concentrations of metals in these products are too high to landfill safely, and must be recycled to be managed effectively.

For more information, visit DEP's electronics website: (<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/Hhw/Electronics/Home.htm>).

## RECYCLING EDUCATION

A key goal of Act 101 is to educate Pennsylvania residents about the benefits of waste reduction and recycling. DEP uses media campaigns, classroom training and its recycling website to support local educational programs and statewide initiatives.

**RECYCLING WEBSITE.** Pennsylvania's recycling web pages are among the most frequently visited features of DEP's website. The recycling home page has been, consistently, the most accessed site for the Bureau of Land Recycling and Waste Management. The recycling pages are a comprehensive resource for waste reduction, recycling and composting information. They include Internet versions of DEP's printed materials, multi-media productions, PowerPoint presentations, recycling program listings, a searchable database of recycled products, and links to other resources. The Recycling Site Map and use of DEP Keyword terms — such as *recycling*, *composting*, *litter prevention* and *recycling technical assistance* — on the DEP home page provide assistance in accessing information. The site includes downloadable brochures that local recycling coordinators can adapt for their programs. Visitors to the "Recycling Coordinator's Corner" will find the generic brochures as well as news on recycling grant programs, technical assistance and recycling-related contests. Visit the main page at the recycling website at <http://www.dep.state.pa.us> (DEP Keyword "recycling").

**WASTE WATCHER AWARDS** were presented to 59 winners in 2002. Award categories included waste reduction, reuse, recycling, recycling market development, and recycling education. For a list of the winners, visit <http://www.dep.state.pa.us> (DEP Keyword "waste watcher"). The awards program is sponsored by DEP, PROP and Pennsylvania Waste Industries Association (PWIA).



Waste Watcher Awards presentations, 2002. DEP file photo.

DEP sponsored the fourth annual **ENVIRONMENTAL JOURNALISM AND PSA CONTEST** in 2002, challenging high school students to write articles, create editorial cartoons, or submit photos about recycling for their school newspapers. In the Journalism category, DEP awarded \$2,000 scholarships in six categories and a \$2000 prize to a high school newspaper club for their composting entries. The top three entries in the PSA contest received \$2000, \$500 and \$300 respectively for their school's media program. The students' work can be viewed at <http://www.dep.state.pa.us> (DEP Keyword "student contests").

The 2002 Recycling Poster Calendar Contest, sponsored by DEP and the Department of Education, began in August 2002. To view a gallery of student artwork, visit <http://www.dep.state.pa.us> (DEP Keyword "2002 poster contest").

# Centre County Solid Waste Authority INTERPRETIVE CENTER

Centre County Solid Waste Authority (CCSWA) uses its Interpretive Center, located at the Authority's complex in College Township, to educate area school students, community groups and professional associations about the value and process of recycling. A former building at the site was deconstructed and much of the material recycled to build the center. Using a "cradle to grave" approach, the CCSWA landfilled only 750 pounds of demolition material from the old building. The new building was constructed with brushed aluminum, ensuring scrap value upon its eventual deconstruction.



*Photo courtesy of Centre Co. Solid Waste Authority*

Table 13

## RECYCLED MATERIALS USED IN INTERPRETIVE CENTER

Building Element	Material(s) Used
Cement blocks	Recycled fly ash from cement kilns
Paving	Recycled asphalt
Paving base and binder course	Mixed glass cullet (10 percent)
Siding	Recycled-content aluminum
Landscaping	Recycled wood chips, compost from State College Borough's program
Vestibule and library flooring	Recycled tires
Bathroom flooring	Tiles from recycled glass
Multi-purpose room flooring	Linoleum (from flax, a sustainable material)
Wallboard	Recycled paper (National Gypsum, Milton, PA)
Ceiling tile	Recycled paper and ceiling tile (Armstrong World Industries, Lancaster, PA)
Window sills, bathroom stalls, some counters	Recycled milk jugs & detergent bottles (Santana, Scranton, PA)
Cupboards, some counters	Pressed wheat straw (a waste product) coated with recycled vinyl
Venetian blinds	Recycled-content aluminum
Chairs, other furniture	Recycled plastic, with recycled soda bottle upholstery (Environmental Interiors, Harrisburg, PA)
Tables, desk and filing drawers	Pressed wheat straw with recycled-content steel bases
Corkboards	Sustainable-harvested cork
Some kitchen appliances	Re-used appliances

**ENVIRONMENTAL EDUCATION (EE) GRANTS.** Act 101 funds grants to Pennsylvania schools to help them incorporate recycling, waste reduction and litter prevention into their curricula, in support of the Environment and Ecology State Academic Standards. Environmental education develops an awareness of nature and how human processes such as waste management and recycling impact on it, and promotes an understanding of the need for environmental stewardship. For more information, visit <http://www.state.pa.us> (DEP Keyword "environmental education grants program").

**PAY-AS-YOU-THROW (PAYT)** programs charge residents for trash collection based on the amount of material discarded, instead of a flat-rate fee. PAYT encourages residents to use waste reduction, recycling and composting to reduce their collection expenses. Two Pennsylvania communities received the 2002 Waste Watcher Award based on the success of their PAYT programs:

- **Snow Shoe Township, Centre County**, a rural township of fewer than 1,500 households, has provided residents with a PAYT program since 1992. For \$80 per year, residents can put out one bag of trash per week. Stickers for additional units of trash can be purchased for \$2 each. One benefit of the program has been the adoption of an ordinance requiring anyone occupying a dwelling for more than 10 days per year to have the township's trash collection service, ensuring that all residents have a basic level of service to discourage illegal dumping. Elderly and underprivileged residents benefit from the lower disposal costs that result from reducing waste and using convenient recycling drop-off locations provided by the Centre County Solid Waste Authority.
- **Douglass Township, Montgomery County**, recognized the benefit of using financial incentives to encourage their residents to recycle when they began their PAYT program in 1991. Residents buy specially marked green bags for their trash at convenient retail outlets. Ninety-seven percent of the residents participate in curbside recycling, keeping their waste disposal costs low by recycling 45 percent of their trash each year. The township also offers free composting bins in exchange for residents' burn barrels.

For more information, visit DEP's website (DEP Keyword "pay as you throw" or "waste watcher") or e-mail Greg Harder ([gharder@state.pa.us](mailto:gharder@state.pa.us)).

**AMERICA RECYCLES DAY (ARD).** November 15 is America Recycles Day. PROP and DEP are partnering to provide recycling coordinators with the tools they will need to plan and hold an ARD event. PROP has created a new ARD web page to assist those who are planning events, including downloadable sponsor logos, pledge cards and links to other events planned in the state. Information on national prizes and on-line pledging are available on the national ARD website.



Logos representing ARD and sponsoring businesses — Home Depot, Staples, Waste Management and Aluminum Can, Inc. *Photos courtesy of the National ARD Committee.*

**LITTER PREVENTION.** DEP continues to support PA CleanWays and the Pennsylvania Resources Council (PRC), both nonprofit organizations dedicated to litter prevention. PA CleanWays has established county chapters to adopt roadways for litter clean-ups and to remedy open-dumping problems, and

it offers educational support through speakers, publications and school programs. DEP also provides the toll-free Litterbug Hotline -- 1-888-LITTERBUG -- for information on solving littering problems.

In June 2001 and July 2002, the 13<sup>th</sup> and 14<sup>th</sup> annual River Sweep events were held in the DEP Southwest region as part of the largest annual cleanup effort in the United States, winding along the Ohio River and its tributaries in Pennsylvania, Ohio, West Virginia, Kentucky, Indiana and Illinois. The event combines the efforts of the entire community, including loyal repeat participants, such as Allegheny County Sportsman's League and Friends of the Riverfront, along with families and neighborhood groups. More than 1,100 volunteers participated in the Pittsburgh region's River Sweep in June 2001. They picked up 3,000 tires and 2,350 bags of garbage at sites in nine counties during the four-hour event.

Year	Number of Volunteers	Number of Tires	Number of Bags of Trash
2002	1,100	3,000	2,350
2003	650	2,000	500

Pennsylvania corporate sponsors for the 2003 event included: AK Steel, Tri-State River Products, BASF, Dominion, Duquesne Light Co., Koppers, ExxonMobil, NOVA Chemical Co., Neville Chemical Co. and Toyota.

Contributors include: Giant Eagle, Wal-Mart, Sam's Club, Evey True Value, Home Depot, Coca-Cola, Snyder's of Berlin, Weavertown Environmental Group, Waste Management Inc., J.J. Brunner, William H. Martin, Pittsburgh City Parks, Evergreen Landfill, Republic Waste, Beaver County Waste Department, BFI, Westmoreland Waste and CBF, Inc.

For more information on the River Sweep, contact Betsy Mallison at 412-442-4182.

**PENNSYLVANIA RECYCLING HOTLINE.** The state's toll-free Recycling Hotline — **1-800-346-4242** — has operated since 1984 to assist Pennsylvanians who need to know where to recycle. Over the years, DEP has expanded the hotline's services to take requests for literature on recycling, recycled products, used oil recycling and household hazardous waste. The hotline provides feedback on the reach of DEP's print and media advertising efforts, as well as weekly reports on calling trends, including the origin and nature of calls.

**The RECYCLING PROFESSIONAL CERTIFICATION PROGRAM** has received an award from the University Continuing Education Association (UCEA) for outstanding achievement in the field of continuing and adult education. UCEA is one of the oldest college and university associations in the United States. The certification program was selected to receive a UCEA Region II award in the category of outstanding non-credit program development for the public/private partnership between DEP, the Professional Recyclers of Pennsylvania (PROP) and Penn State-Altoona. UCEA awards recognize originators of creative, innovative, or efficient programs, activities and services in the field of continuing education. For more information on PROP's certification classes, visit <http://www.proprecycles.org> .

More than 50 recycling professionals graduated from the first class on August 5, 2002. There are currently 442 recycling professionals from across the state enrolled in the program.

**WASTE REDUCTION, REUSE WEBCAST.** DEP, in cooperation with GreenWorks TV, carried a live webcast on waste reduction and reuse in April 2002 as the third annual professional development course offered by PROP, with support from DEP. The program examined how waste reduction and reuse strate-

gies impact recycling and waste management programs. The first segment of the two-hour program examined recent trends in waste reduction. Al Fralinger of the Public Service Enterprise Group (PSEG) showed how employing resource management contract techniques has helped to reduce costs for his company's 100 locations in New Jersey. The GreenWorks TV award-winning video "Choose to Reuse" led into the reuse segment of the program. Julie Rhodes of the Reuse Development Organization (ReDO), shared her perspective on the national reuse movement. Mike Mazick, chairman of the board of Harrisburg's CHANNELS Food Rescue, and Mike Gable, manager of Pittsburgh's Construction Junction reuse center talked about the challenges their groups face on a day-to-day basis. Laura Cohen of the Philadelphia-based Clean Air Council displayed the new "Use it Again Pennsylvania Guides" and explained their development and use. Visit [www.proprecycles.org](http://www.proprecycles.org) for more information on course credit. For more information on Waste Reduction or Reuse, visit [www.dep.state.pa.us](http://www.dep.state.pa.us) (DEP Keyword "waste reduction") or (DEP Keyword "reuse").

**RECYCLING TECHNICAL ASSISTANCE.** DEP is in its fourth year of providing recycling technical assistance to local governments for improving recycling efficiency. The program is conducted in partnership with the Pennsylvania Department of Community and Economic Development Center for Local Government Services, the Pennsylvania State Association of Township Supervisors and the Solid Waste Association of North America. The technical assistance is provided at no cost to the local government. More than 107 project reports are posted on DEP's website at <http://www.dep.state.pa.us> (DEP Keyword "recycling technical assistance").

## **MUNICIPAL WASTE MANAGEMENT PLANNING**

### **GENERATION & DISPOSAL**

DEP obtains statewide municipal waste management data from county recycling coordinators, who report county waste generation, disposal and recycling information annually. Before Act 101, there was no reliable way to obtain this data. Now, with recycling fee reports from disposal facilities and the recycling performance grant, DEP can even verify much of the information.

"Disposal plus recycling" is the simplest and most-used formula to obtain municipal waste generation figures. Disposal data, however, may be impacted by other factors, such as multi-county routes and the location of transfer facilities that mix county and even out-of-state wastes; this poses a problem in determining waste origin. Disposal data also do not include trash and yard waste disposed by illegal dumping and open-air burning. Such difficulties have had significant impact on our ability to obtain accurate data. DEP has concluded that providing the counties with a common factor with which to calculate generation, much like the factor used for calculating payment under the 904 grant program, offers the most consistent, viable method for reporting generation.

The United States Environmental Protection Agency (EPA) has published national average generation rates since 1968. The rate for 2001 was 0.82 tons per person per year. Compared to all other states, Pennsylvania falls in the higher levels of industrialization, affluence and tourism, all of which tend to push generation slightly higher than average. Regardless of the accuracy problems in each individual year, trends in reported generation appear to indicate that Pennsylvania's generation should be just slightly less than 11,000,000 tons. Character and economics considered, DEP has decided to use 0.87 tons per person per year as the official generation for 66 of the 67 counties and 1.0 tons per person per year for Philadel-

phia. Using this factor for calculation, the municipal waste generation for 2001 and 2002 was 10,881,798 tons.

Every year, there is some discrepancy between what was generated and recycled and what was disposed in Pennsylvania. In 2001, municipal waste facilities reported receiving 9,477,158.8 tons for disposal. County recycling coordinators reported recycling 3.9 million tons. In 2002, disposal was reported at 9,999,577 tons and recycling at 4.1 million tons.

## MUNICIPAL WASTE IMPORTS & EXPORTS

Municipal waste generated in Pennsylvania generally is disposed at facilities located within the state. For a listing of municipal waste landfills and waste-to-energy facilities, visit <http://www.dep.state.pa.us> (DEP Keyword "landfill list").

Over the past several years, there has been a consistent amount of waste disposed at facilities in Ohio and West Virginia, along Pennsylvania's borders. Pennsylvania consistently ships approximately 350,000 tons of waste to out-of-state disposal facilities.

At the same time, out-of-state haulers transported 12.4 million tons of waste into Pennsylvania for disposal in 2001 and 11.6 million tons in 2002 (Table 12). This accounted for 46.6 and 45.3 percent of the total municipal waste disposed in the state, respectively, compared to 27 percent in 1989. Most out-of-state waste is imported from New York and New Jersey. In 2001, Pennsylvania imported 5.8 million tons from New York and 5.2 million tons from New Jersey. In 2002, Pennsylvania imported 4.8 million tons from New York and 5.7 million tons from New Jersey. Table 15 contains a state-by-state listing.

## COUNTY MUNICIPAL WASTE MANAGEMENT PLAN REVISIONS



Special-purpose vehicles collect materials from residents and transport them to processing facilities. Companies that design, manufacture and/or sell recycling equipment have become part of the recycling infrastructure. *Photo courtesy of Allegheny County.*

Act 101 requires counties to submit plan revisions to DEP by the time their remaining disposal capacity is reduced to three years. As of September 1, 2002, 34 have been approved, 24 are in development, six counties have organized a Solid Waste Advisory Committee, but have not begun developing the plan, and two have plans that remain in force.

In FY 2001-02, DEP approved a total of \$338,731 in Act 101, Section 901 grants to support the revision of county municipal waste management plans, and a total of \$509,171 in FY 2002-03. These grants pay for 80 percent of the approved cost of developing a plan, including feasibility and related studies.

Table 14-A

**MUNICIPAL SOLID WASTE DISPOSED, 2001**

ORIGIN	MUNICIPAL	RESIDUAL	SLUDGE	ICW*	C/D**	ASH	ASBESTOS	TOTALS
PENNSYLVANIA	9,477,158.8	1,913,089.7	563,774.2	55,613.4	1,342,877.8	765,529.7	41,713.2	14,159,756.8
OUT-OF-STATE	10,666,089.9	759,188.6	113,123.8	12,036.3	780,880.1	152,407.5	121,220.2	12,376,966.0
TOTALS	20,143,248.7	2,672,278.3	676,898.0	67,649.7	2,123,757.9	917,937.2	162,933.4	26,536,722.8
PERCENT IMPORT	53.0 %	28.4 %	16.7 %	17.8 %	36.8 %	16.6 %	74.4 %	46.6 %
TYPE AS % OF TOTAL	75.9 %	10.1 %	2.6 %	0.3 %	8.0 %	3.5 %	0.6 %	---

Table 14-B

**MUNICIPAL SOLID WASTE DISPOSED, 2002**

ORIGIN	MUNICIPAL	RESIDUAL	SLUDGE	ICW*	C/D**	ASH	ASBESTOS	TOTALS
PENNSYLVANIA	9,613,249.9	1,776,428.5	584,952.0	61,440.3	1,333,105.8	736,260.8	33,604.0	14,139,041.3
OUT-OF-STATE	9,999,557.8	736,775.2	92,020.9	8,469.1	636,066.2	133,023.8	88,292.2	11,694,205.2
TOTALS	19,612,807.7	2,513,203.7	676,972.9	69,909.4	1,969,172.0	869,284.6	121,896.2	25,833,246.5
% IMPORT	51.0%	29.3%	13.6%	12.1%	32.3%	15.3%	72.4%	45.3%
TYPE AS % OF TOTAL								

\*ICW -- Infectious Chemotherapeutic Waste

\*\*Constr/Demo -- Construction/Demolition Waste

Table 15-A

**WASTE IMPORTS BY ORIGIN, 2001**

ORIGIN	MUNICIPAL	RESIDUAL	SLUDGE	ICW*	CD**	ASH	ASBESTOS	TOTALS
ALABAMA	9.0	0.4	0.0	0.0	0.0	0.0	0.0	9.4
CALIFORNIA	0.0	148.1	0.0	0.0	0.0	0.0	0.0	148.1
CONNECTICUT	482,049.0	31,688.6	7,976.8	0.0	152,263.0	0.0	16,100.5	690,077.9
DELAWARE	51,288.3	8,410.7	1,715.8	0.0	189.2	0.0	500.2	62,104.2
DC	24,664.9	164.2	0.0	0.0	3.4	0.0	5,329.4	30,161.9
FLORIDA	0.0	531.3	0.0	0.0	0.0	0.0	0.0	531.3
GEORGIA	0.0	198.3	0.0	0.0	0.0	0.0	0.0	198.3
ILINOIS	0.0	37.9	0.0	0.0	0.0	0.0	0.0	37.9
KENTUCKY	0.0	1,067.6	0.0	0.0	0.0	0.0	0.0	1,067.6
MAINE	0.0	0.0	0.0	0.0	0.0	0.0	1,240.9	1,240.9
MARYLAND	361,710.5	101,668.4	12,168.9	639.0	5,594.8	401.7	13,231.1	495,414.4
MASSACHUSETTS	13,750.5	10,960.3	1,023.2	0.0	67.1	2,069.0	22,912.1	50,782.2
MISSOURI	0.0	38.4	0.0	0.0	0.0	0.0	26.1	64.5
NEW HAMPSHIRE	34,349.4	0.0	0.0	0.0	0.0	0.0	1,053.6	35,403.0
NEW JERSEY	4,763,449.8	501,574.0	29,988.4	3,222.0	350,043.3	143,125.7	10,502.6	5,801,905.8
NEW YORK	4,804,933.0	57,849.9	56,257.8	6,634.1	262,015.4	6,811.1	41,058.3	5,235,559.6
NORTH CAROLINA	0.0	1,238.2	0.0	0.0	0.0	0.0	0.0	1,238.2
NORTH DAKOTA	11,682.8	29.8	0.0	0.0	0.0	0.0	0.0	11,712.6
OHIO	61,018.8	16,248.2	2,929.1	0.0	2,799.9	0.0	5,050.6	88,046.6
PUERTO RICO	0.0	997.9	0.0	0.0	0.0	0.0	0.0	997.9
RHODE ISLAND	88.8	815.8	0.0	0.0	0.0	0.0	1,215.6	2,120.2
SOUTH CAROLINA	0.0	109.2	0.0	0.0	0.0	0.0	0.0	109.2
TENNESSEE	0.0	7.3	0.0	0.0	0.0	0.0	0.0	7.3
VERMONT	0.0	0.0	0.0	0.0	0.0	0.0	186.0	186.0
VIRGINIA	4,481.0	2,848.3	0.0	0.0	2,150.1	0.0	2,089.2	11,568.6
WEST VIRGINIA	52,614.1	22,551.9	1,063.8	1,541.2	5,753.9	0.0	724.0	84,248.9
WISCONSIN	0.0	3.9	0.0	0.0	0.0	0.0	0.0	3.9
<b>TOTALS</b>	<b>10,666,089.9</b>	<b>759,188.6</b>	<b>113,123.8</b>	<b>12,036.3</b>	<b>780,880.1</b>	<b>152,407.5</b>	<b>121,220.2</b>	<b>12,604,946.4</b>

\*ICW — Infectious Chemotherapeutic Waste

\*\*Constr/Demo — Construction/Demolition Waste



Table 15-B  
**WASTE IMPORTS BY ORIGIN, 2002**

ORIGIN	MUNICIPAL	RESIDUAL	SLUDGE	ICW	CD	ASH	ASBESTOS	TOTAL
ARKANSAS	0.0	126.2	0.0	0.0	0.0	0.0	0.0	126.2
CANADA	0.0	61.9	0.0	0.0	0.0	0.0	0.0	61.9
CALIFORNIA	0.0	53.1	0.0	0.0	0.0	0.0	0.0	53.1
CONNECTICUT	444,369.0	32,297.3	7,836.8	0.0	22,359.5	0.0	12,296.7	519,159.3
DELAWARE	51,973.6	14,226.6	1,275.4	0.0	111.7	0.0	572.3	68,159.6
DC	0.0	6.0	0.0	0.0	0.0	0.0	4,575.4	4,581.4
FLORIDA	0.0	571.2	0.0	0.0	0.0	2,344.9	0.0	2,916.1
GEORGIA	0.0	3,576.3	0.0	0.0	0.0	0.0	0.0	3,576.3
ILINOIS	0.0	4.3	0.0	0.0	0.0	0.0	0.0	4.3
INDIANA	0.0	0.0	0.0	0.0	0.0	0.0	4.4	4.4
KENTUCKY	0.0	451.9	0.0	0.0	0.0	0.0	0.0	451.9
MAINE	15.8	0.0	0.0	0.0	0.0	0.0	1,134.3	1,150.1
MARYLAND	239,858.4	115,125.9	7,451.6	0.0	10,912.8	0.0	11,093.3	384,442.0
MASSACHUSETTS	14,374.8	8,572.9	0.0	0.0	36.5	0.0	13,763.5	36,747.7
MICHIGAN	35.3	10.1	0.0	0.0	0.0	0.0	0.0	45.4
NEW HAMPSHIRE	36,608.8	0.0	0.0	0.0	41.0	0.0	1,149.6	37,799.4
NEW JERSEY	4,748,727.0	444,766.1	28,506.0	81.8	328,444.6	126,271.6	10,201.9	5,686,999.0
NEW YORK	4,347,527.2	93,306.8	41,840.2	6,860.5	262,317.5	4,407.3	26,260.0	4,782,519.5
NORTH CAROLINA	0.0	912.4	0.0	0.0	0.0	0.0	11.6	924.0
OHIO	41,057.5	10,696.1	1,088.6	0.0	2,208.6	0.0	1,281.1	56,331.9
PUERTO RICO	0.0	961.0	0.0	0.0	0.0	0.0	0.0	961.0
RHODE ISLAND	0.0	3,672.2	0.0	0.0	765.8	0.0	981.2	5,419.2
SOUTH CAROLINA	0.0	128.8	0.0	0.0	0.0	0.0	0.0	128.8
TENNESSEE	0.0	3.8	0.0	0.0	0.0	0.0	0.0	3.8
VERMONT	0.0	0.0	0.0	0.0	0.0	0.0	76.8	76.8
VIRGINIA	2,967.6	5,452.2	0.0	0.0	51.2	0.0	3,566.5	12,037.5
WEST VIRGINIA	72,020.7	1,790.2	4,022.3	1,526.8	8,817.0	0.0	1,323.6	89,500.6
WISCONSIN	22.1	1.9	0.0	0.0	0.0	0.0	0.0	24.0
	<b>9,999,557.8</b>	<b>736,775.2</b>	<b>92,020.9</b>	<b>8,469.1</b>	<b>636,066.2</b>	<b>133,023.8</b>	<b>88,292.2</b>	<b>11,694,205.2</b>

## STATE SOLID WASTE MANAGEMENT PLAN

Development of the Municipal Waste Chapter of the Commonwealth of Pennsylvania's Solid Waste Management Plan is back on track after having been interrupted for the development of the Act 175 Recycling Program Plan. A working draft can be viewed at [http://www.dep.state.pa.us/dep/subject/adv coun/solidwst/2002/Draft\\_State\\_Municipal\\_Waste\\_Plan.pdf](http://www.dep.state.pa.us/dep/subject/adv coun/solidwst/2002/Draft_State_Municipal_Waste_Plan.pdf).

## ACT 175 RECYCLING PROGRAM PLAN

The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101) marked a major change in Pennsylvania's approach to municipal waste. In addition to shifting planning responsibility to the county level, it established an ambitious program for recycling and waste reduction. Act 101 declares that waste reduction and recycling are preferable to the disposal or processing of municipal waste, and that removing certain materials from the municipal waste stream will decrease the flow of solid waste to municipal waste landfills, aid in the conservation and recovery of valuable natural resources, conserve

energy in the manufacturing process, and increase the supply of reusable materials for the Commonwealth's industries. Act 101 also recognizes that it is in the public interest to require certain municipalities to implement recycling programs to return valuable materials to productive use, conserve energy and protect municipal waste disposal capacity.

Act 101 was originally drafted, has been amended, and has been administered with the objective of making continuous improvement over time in the rate and cost-effectiveness of recycling and waste reduction. Act 101 established a goal that, by 1997, at least 25 percent of the municipal waste and source-separated recyclable materials generated in the state be recycled. When that goal was met, the Commonwealth set a new recycling goal of 35 percent, to be met by 2002. The Act also establishes a goal of reducing the per-capita weight or volume of municipal waste generated to a level below that which existed in 1988. The Department is now considering a new recycling or waste reduction goal for the Commonwealth.

Finally, in Act 175 of 2002, Pennsylvania renews this commitment. Act 175 amends Act 101, and provides as follows:

The Department shall develop a plan to assist municipalities in making recycling programs under this act financially self-sufficient and shall submit the proposed plan to the General Assembly within one year from the effective date of this section. The plan shall:

1. Include a market development program to be funded by the recycling fund.
2. Specifically address the extent to which municipal recycling programs under Act 101 can be sustained by restructuring the allocation of available recycling grants provided by Chapter 9.
3. Include recommendations to county recycling coordinators designed to encourage market development.
4. Identify the specific means, including legislative changes, that the Department intends to use to assist municipalities in making their recycling programs under this Act self-sufficient.

The Act 175 Recycling Program Plan is being developed pursuant to this requirement. In addition, it includes funding recommendations to assist municipalities to meet and further the goals of both Act 101 and Act 175. The plan was developed in consultation with the Recycling Fund Advisory Committee and the State Solid Waste Plan Subcommittee of SWAC. Their ideas, input and sharing of recycling information will help the Department to maximize environmental and economic benefits of recycling and waste reduction.

## **WASTE HAULER AUTHORIZATION**

Effective June 29, 2002, municipal and residual waste haulers need DEP authorization to use Pennsylvania waste disposal and processing facilities. Act 90, the "Waste Transportation Safety Act," was Pennsylvania's response to ever-increasing violations of state environmental and highway safety laws. In May 2001, surprise inspections of more than 40,000 trash trucks revealed that fully 86 percent of the trucks had safety violations; more than one-third were removed from service as unsafe vehicles.

To register vehicles, haulers must include a copy of the state registration for each vehicle, evidence of current inspection, current certificate of insurance and a fee of \$100 per truck and/or \$50 each per truck/trailer combination. Money from the registration fee will finance waste truck safety inspections. Each vehicle will receive a registration sticker.

Registration provides a tracking system for violators. Before, DEP could issue only tickets to the driver and a summary offense to the waste hauling company for violations. Now, a second violation could lead to a \$25,000 fine, and the company may not be allowed to haul waste in the state. The act empowers DEP to deny or revoke transporter authorizations.

For more information on Act 90, visit the PA PowerPort at [www.state.pa.us](http://www.state.pa.us), PA Keyword: “waste trucks.” For information on the new waste truck regulations, call toll-free 1-800-346-1932.

## WASTE TIRE HAULER AUTHORIZATION

Act 111 of July 10, 2002 requires waste tire haulers to obtain written authorization from DEP to use processing or disposal facilities. Municipal and residual processing or disposal facilities are prohibited from accepting waste from haulers who do not have valid authorization. DEP has the authority to deny, suspend, or revoke authorizations where the agency finds that the transporter has failed or continues to fail to comply with applicable laws and regulations. Waste tire haulers are to maintain a record of waste tires transported weekly. The records must be on DEP forms and include authorization number, number of waste tires transported and the company where the waste tires were delivered and disposed. These records must be maintained for five years and the information provided to DEP upon request.



**FROM WASTE TIRES TO PLAYGROUND.** Jonestown Borough, Lebanon County, used a \$50,000 grant and three tons of waste tires to build this playground, designed by Learning Structures, Inc of Portsmouth, New Hampshire. Community volunteers and more than 45 businesses participated in the project. *Photo courtesy of Borough of Jonestown, Lebanon Co.*

## HOUSEHOLD HAZARDOUS WASTE (HHW)

HHW collection in Pennsylvania is not mandatory. Collection events may be held by municipalities or private sponsors, as long as they register the program with DEP. Most collections are one-time events sponsored by counties or municipalities. A few sponsors hold collections on a continuous basis.

To date, programs in 30 communities have reported collecting 1,300 tons of HHW materials from 26,500 participants during FY 2002-03.

Table 16  
**HHW COLLECTION PROGRAMS**  
**Participation & Amount Collected, by Year**

FY	# of Participants/ Households	# of Communities	Tons of Materials Collected
2002-03	26,500*	30*	1,300*
2001-02	25,633	30	1,486
2000-01	28,172	22	1,548
1999-00	21,815	24	1,139
1998-99	26,351	21	1,441
1997-98	12,005	15	537
1996-97	11,300	12	500

*\*Figures are incomplete pending receipt of records of operations reports from the various program sponsors.*

Table #17  
**HHW MATERIALS COLLECTED, FY 2001-02 & 2002-03**

Materials Collected	Proportion of Waste Collected	
	FY 2001-02	FY 2002-03*
Paint -- Latex	28%	25%
Electronics	18%	15%
Paint -- Oil-based	13%	19%
Paint-related Products	9%	3%
Used Motor Oil	7%	5%
Flammable Liquids	7%	7%
Pesticides	4%	6%
Tires	0%	6%
Other (including corrosives & caustics, lead-acid batteries, asbestos)	14%	14%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

*\*Figures are incomplete pending receipt of records of operations reports from the various program sponsors.*

Materials collected at a HHW collection. *Photo from DEP files.*



Any sponsor who registers a HHW program with DEP is eligible to apply for reimbursement of part of the costs. Under Act 190 of 1996, the Small Business and Household Pollution Prevention Program Act, DEP reimburses up to 50 percent of eligible HHW program costs, not to exceed \$100,000 per county per FY. DEP gives funding priority to existing programs and those operated by counties, multi-county groups and first- and second-class cities, as required by Act 101.

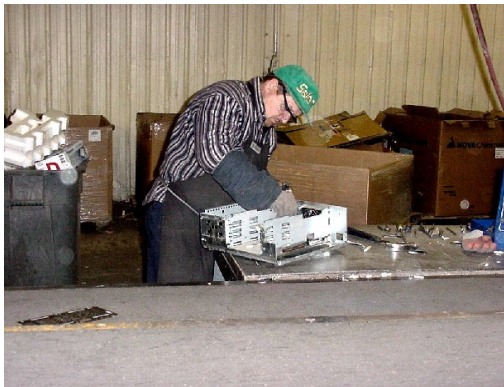
DEP awarded 23 Act 190 grants, totaling \$714,000, to 17 program sponsors in FY 2001-02 and 31 grants totaling \$706,084 to 21 program sponsors in FY 2002-03. Since 1994, 114 grants worth \$4 million have been awarded. There is no balance left from the original \$3 million in funding set aside for HHW collections under Act 155 of 1994, the Household Hazardous Waste Funding Act. DEP continues to fund HHW collections through Act 190.

Planning grants are available under Act 101, Section 901 to fund eligible costs of HHW education programs. Act 101 grant awards are listed on Page 30.

Act 111 of 2002 amended Act 190 of 1996 (The Waste Tire Act/Small Business and Household Pollution Prevention Program Act) by establishing the Waste Tire Collection Program. The Act provides funding to qualified collection program sponsors for reimbursement of eligible costs from waste tire collection programs approved by DEP. In response to this Act, DEP will work with counties and local municipalities to conduct waste tire collections beginning July 1, 2002 and continuing through July 1, 2006, with expenditures not to exceed \$250,000 per year. The grants may cover up to 100 percent of eligible collection, transportation and management costs. Other limitations will apply. The total grant amount awarded in FY 2002-03 was \$140,774.

**CHEMSWEEP.** DEP worked with the Pennsylvania Department of Agriculture to provide HHW collections to interested sponsors in conjunction with Chemsweep pesticide collections. In 2002, five HHW programs, sponsored by seven counties, collected 36,311 pounds of unwanted pesticides. More counties are expected to tag along on the Chemsweep program to offer HHW collections to residents in the future. For more information about Pennsylvania's Chemsweep program, visit PDA's website at <http://www.pda.state.pa.us>.

**ELECTRONICS RECYCLING.** Electronic discards -- including computers, monitors, televisions and audio equipment -- are characterized by a short product life-span due to rapidly changing technology. The average expected life of a Pentium computer, for example, is two to three years. Because of the relatively low replacement cost, broken or obsolete equipment commonly is discarded instead of repaired. Electronic equipment, however, contains metals such as lead, cadmium and mercury that, if not properly managed, can become hazardous waste.



Envirocycle, Inc., located in Hallstead, Pennsylvania is one of the largest recyclers of electronic

equipment and CRT glass in the U.S. The company has a nationwide collection program and serves more than 500 customers. In the dismantling line, items are sorted by common lots and like items dismantled together to streamline the process. Envirocycle's staff then removes and separates the equipment into raw materials, including steel, copper, aluminum, glass, plastic, circuit boards and power supplies. Envirocycle's dismantle line can handle tens of thousands of pounds in a single day. For more information, visit Envirocycle's website at <http://www.enviroinc.com>. *Photos courtesy of Envirocycle.*



DEP is working with the Northeast Recycling Council, EPA Region III and DEER2 (Demufacturing of Electronic Equipment for Reuse and Recycling) to

encourage the reuse, demanufacturing and recycling of used electronic equipment. The Recycling Markets Section has been instrumental in building an electronics recycling (eCycling) partnership between the other states in EPA Region III — Delaware, Maryland, Virginia, Washington D.C. and West Virginia — and electronics industry representatives, waste haulers and other waste management officials. The partnership will allow for economically feasible and environmentally friendly collections of electronic discards. Collections will be held as drop-off events in selected counties throughout Pennsylvania and the other Region III states, and will be eligible for HHW grants.

For more information on reducing the impact of used electronics on the waste stream, visit DEP’s website at <http://www.dep.state.pa.us> (DEP Keyword "dep electronic discards") or call 717 787-7382.

## PROGRAM FUNDING

Act 101 programs are financed by a \$2-per-ton recycling fee on all waste disposed in landfills or processed by resource recovery facilities in Pennsylvania. The Recycling Fee Collections table can be found at <http://www.dep.state.pa.us> (DEP Keyword "recycle fee 2002").

Counties and municipalities receive most of the funding to help pay for their solid waste management programs. Grant awards to date total more than \$381.0 million, with nearly \$230.5 million funding local recycling programs. For detailed grant information, visit <http://www.dep.state.pa.us> (DEP Keyword “grants database”).

The spending proposal for FY 2004-05 includes a budget of \$36 million for Section 902 recycling grants and \$21.5 million for Section 904 recycling performance grants. The two grant programs make up \$47.5 million of the proposed \$68 million budgeted for FY 2004-05. Table 18 presents DEP’s proposed budget. A more specific spending plan, with actual funds budgeted for programs, is available at DEP’s website — <http://www.dep.state.pa.us/dep/subject/adv coun/Recycle/Recycle.htm>

Table 18  
**PROPOSED BUDGET FY 2004-05**  
\$thousands

Program	Funding
Environmental Protection:	
Recycling Coordinator Reimbursement	\$1,300
Host Municipal Inspectors	375
Review of Permit Applications	10
Administration of Recycling Programs	1,500
County Planning Grants	850
Municipal Recycling Grants	36,000
Municipal Recycling Performance. Grants	21,500
Public Education/Technical Assistance	7,000
<b>Total</b>	<b>\$68,535</b>

## ACT 101 GRANTS

County Planning Grants (§901)	Reimburse 80 percent of the approved costs of preparing county municipal waste management plans and related studies. The grant also reimburses county expenses for HHW education.
Recycling Program Grants (§902)	Reimburse 90 percent of the approved costs of county and municipal recycling programs.
Recycling Coordinator Grants (§903)	Pay 50 percent of a county recycling coordinator's salary and approved expenses.
Recycling Performance Grants (§904)	Reward counties and municipalities for recycling results. The grants are based on population and type/weight of materials marketed.
Host Municipality Inspector Grants (§1102)	Reimburse host municipalities 50 percent of the approved costs to employ a certified landfill or resource recovery facility inspector.
Independent Permit Evaluation Grants (§1110)	Pay host municipalities up to \$10,000 for an independent engineering review of a landfill or resource recovery facility permit application.

Table 19  
**ACT 101 GRANT AWARDS**

TYPE GRANT	FY 2001-02		FY 2002-03	
	# of Awards	Amount Awarded	# of Awards	Amount Awarded
§901 Planning	4	\$ 338,721	8	\$ 509,171
§902 Recycling	92	25,105,420	138	27,364,046
§903 Coordinator	54	1,105,095	55	1,124,599
§904 Performance	719	18,931,332	*784	*23,140,112
§1102 Host Inspection	38	348,858	40	374,972
§1110 Permit Evaluation	4	36,825	0	0
<b>TOTALS</b>	<b>911</b>	<b>\$45,866,251</b>	<b>1025</b>	<b>\$52,512,900</b>

\*Projected

## USED OIL RECYCLING

Act 89 of 1982, the Used Oil Recycling Act, established a voluntary, statewide program to collect and recycle used motor oil generated by people who change their own oil. The program depends on the voluntary participation of service stations, garages and other sites that are able to accept used oil from the public. Currently, 840 sites in 61 counties accept used oil.

Do-it-yourself oil changers can obtain used oil recycling information at DEP's website at <http://www.dep.state.pa.us> (DEP Keyword "oil recycling") or by calling the Pennsylvania Recycling Hotline — 1- 800-346-4242 — which allows for toll-free calls from anywhere in Pennsylvania. Collection sites are listed by county and include addresses, telephone numbers and hours of operation. EARTH 911 also lists Pennsylvania collection sites at <http://pennsylvania.earth911.org>.

## SOLID WASTE RESOURCE RECOVERY DEVELOPMENT

Act 198 of 1974, the Solid Waste Resource Recovery Development Act, provides financial assistance to Pennsylvania municipalities or municipal authorities to develop resource recovery demonstration projects. To be eligible for funding, projects have to recover at least 50 percent of the solid waste entering the system in the form of energy or materials. Grants pay up to 75 percent of the costs of developing the projects.

Lycoming County received a demonstration grant in May 2002 to test and evaluate an effective anaerobic digestion process for a proposed 30-ton-per-day facility. The project involves the bench-scale testing of

four processes that compost the organic portion of the county’s municipal waste stream under anaerobic conditions. The facility is proposed for construction at the Lycoming County Resource Management Services landfill. The facility will sell the methane produced by the anaerobic digestion process to the federal prison at Allenwood for its heating system.

DEP has received the following requests for Act 198 grants:

<b>Applicant</b>	<b>Partner</b>	<b>Demonstration Project</b>
Cumberland Co.	Enviro-Products Inc.	A regional education project to divert construction demolition waste from landfills to a regional processing center.
Liberty Twp.	RecycALL Inc.	A manufacturing process that utilizes mixed glass cullet, which would otherwise be landfilled, as a raw material.
City of Philadelphia	White Dog Cafe	On-site composting of food waste in an urban setting to develop a better understanding of the needs and issues of such an operation.

Cumberland County in conjunction with Enviro-Products Inc. is requesting grant funds to develop and establish and demonstrate a regional education project for the diversion of construction demolition waste from landfills to a regional processing center.

Liberty Township, in conjunction with RecycALL Inc., is requesting grant funds to develop and demonstrate a manufacturing process that would utilize mixed broken glass cullet, that would otherwise be landfilled, as a raw material.

The City of Philadelphia, in conjunction with The White Dog Cafe, is requesting grant funds to establish a demonstration of on-site composting of food waste in an urban setting in order to understand the needs and issues of such an operation.



Recycling



*in Pennsylvania*

# Appendices

## WASTE GENERATION & RECYCLING, 2001\*

County	Population (2000)	Tons MSW Generated Normalized to .87 tons per/person/year	Lb./Person/Day MSW Generated	Tons Recycled	Recycling Rate
Adams	91,292.0	79,424.0	4.76	8,714.3	11.0
Allegheny	1,281,666.0	1,115,049.4	4.76	223,632.4	20.1
Armstrong	72,392.0	62,981.0	4.76	12,140.0	19.3
Beaver	181,412.0	157,828.4	4.76	64,754.6	41.0
Bedford	49,984.0	43,486.1	4.76	10,990.0	25.3
Berks	373,638.0	325,065.1	4.76	63,085.1	19.4
Blair	129,144.0	112,355.3	4.76	28,707.0	25.6
Bradford	62,761.0	54,602.1	4.76	11,114.6	20.4
Bucks	597,635.0	519,942.5	4.76	116,526.1	22.4
Butler	174,083.0	151,452.2	4.76	35,677.5	23.6
Cambria	152,598.0	132,760.3	4.76	76,896.3	57.9
Cameron	5,974.0	5,197.4	4.76	898.8	17.3
Carbon	58,802.0	51,157.7	4.76	3,197.4	6.3
Centre	135,758.0	118,109.5	4.76	90,263.4	76.4
Chester	433,501.0	377,145.9	4.76	140,047.0	37.1
Clarion	41,765.0	36,335.6	4.76	10,890.0	30.0
Clearfield	83,382.0	72,542.3	4.76	16,085.5	22.2
Clinton	37,914.0	32,985.2	4.76	9,399.5	28.5
Columbia	64,151.0	55,811.4	4.76	10,712.2	19.2
Crawford	90,366.0	78,618.4	4.76	14,127.3	18.0
Cumberland	213,674.0	185,896.4	4.76	48,092.7	25.9
Dauphin	251,798.0	219,064.3	4.76	49,970.8	22.8
Delaware	550,864.0	479,251.7	4.76	155,623.7	32.5
Elk	35,112.0	30,547.4	4.76	5,218.0	17.1
Erie	280,843.0	244,333.4	4.76	106,916.7	43.8
Fayette	148,644.0	129,320.3	4.76	31,599.5	24.4
Forest	4,946.0	4,303.0	4.76	943.0	21.9
Franklin	129,313.0	112,502.3	4.76	31,949.1	28.4
Fulton	14,261.0	12,407.1	4.76	183.2	1.5
Greene	40,672.0	35,384.6	4.76	18,668.6	52.8
Huntington	45,586.0	39,659.8	4.76	4,821.1	12.2
Indiana	89,605.0	77,956.4	4.76	13,717.4	17.6
Jefferson	45,932.0	39,960.8	4.76	10,676.7	26.7
Juniata	22,821.0	19,854.3	4.76	16,182.3	81.5
Lackawanna	213,295.0	185,566.7	4.76	95,953.3	51.7
Lancaster	470,658.0	409,472.5	4.76	188,469.0	46.0
Lawrence	94,643.0	82,339.4	4.76	24,713.5	30.0
Lebanon	120,327.0	104,684.5	4.76	44,967.7	43.0

County	Population (2000)	Tons MSW Generated Normalized to .87 tons per/person/year	Lb./Person/Day MSW Generated	Tons Recycled	Recycling Rate
Lehigh	312,090.0	271,518.3	4.76	136,992.1	50.5
Luzerne	319,250.0	277,747.5	4.76	152,504.6	54.9
Lycoming	120,044.0	104,438.3	4.76	38,098.2	36.5
McKean	45,936.0	39,964.3	4.76	2,966.4	7.4
Mercer	120,293.0	104,654.9	4.76	39,211.0	37.5
Mifflin	46,486.0	40,442.8	4.76	10,246.4	25.3
Monroe	138,687.0	120,657.7	4.76	32,442.7	26.9
Montgomery	750,097.0	652,584.4	4.76	128,263.3	19.7
Montour	18,236.0	15,865.3	4.76	1,437.6	9.1
Northampton	267,066.0	232,347.4	4.76	157,481.2	67.8
Northumberland	94,556.0	82,263.7	4.76	7,842.1	9.5
Perry	43,602.0	37,933.7	4.76	215.9	0.6
Philadelphia*	1,517,550.0	1,517,550.0	5.47	880,619.6	58.0
Pike	46,302.0	40,282.7	4.76	1,880.0	4.7
Potter	18,080.0	15,729.6	4.76	2,471.5	15.7
Schuylkill	150,336.0	130,792.3	4.76	64,512.5	49.3
Snyder	37,546.0	32,665.0	4.76	4,396.3	13.5
Somerset	80,023.0	69,620.0	4.76	2,506.0	3.6
Sullivan	6,556.0	5,703.7	4.76	504.3	8.8
Susquehanna	42,238.0	36,747.1	4.76	3,442.6	9.4
Tioga	41,373.0	35,994.5	4.76	4,310.3	12.0
Union	41,624.0	36,212.9	4.76	5,433.1	15.0
Venango	57,565.0	50,081.6	4.76	3,585.2	7.2
Warren	43,863.0	38,160.8	4.76	9,237.2	24.2
Washington	202,897.0	176,520.4	4.76	86,488.2	49.0
Wayne	47,722.0	41,518.1	4.76	8,930.2	21.5
Westmoreland	369,993.0	321,893.9	4.76	11,993.9	3.7
Wyoming	28,080.0	24,429.6	4.76	5,395.6	22.1
York	381,751.0	332,123.4	4.76	132,700.0	40.0
Add'l tires recycled				35,384.0	
Add'l 904 Tonnage				46,303.2	
Add'l steel (ISRI**)				111,727.0	
<b>TOTALS</b>	<b>12,281,054</b>	<b>10,881,798.5</b>	<b>4.77</b>	<b>3,926,047.5</b>	<b>36.1</b>

\* Generation for Philadelphia is 1 ton per person per year

\*\*ISRI - Institute of Scrap Recycling Industries

## Waste Generation & Recycling, 2002

	County	Population (2000)	Tons MSW Generated Normalized to .87 tons per/person/year	Tons Recycled	Recycling Rate
1	Adams	91,292.00	79,424.00	7,666.4	9.7
2	Allegheny	1,281,666.00	1,115,049.40	204,413.5	18.3
3	Armstrong	72,392.00	62,981.00	16,516.8	26.2
4	Beaver	181,412.00	157,828.40	62,283.9	39.5
5	Bedford	49,984.00	43,486.10	2,338.1	5.4
6	Berks	373,638.00	325,065.10	54,418.1	16.7
7	Blair	129,144.00	112,355.30	25,367.1	22.6
8	Bradford	62,761.00	54,602.10	12,001.0	22.0
9	Bucks	597,635.00	519,942.50	143,259.6	27.6
10	Butler	174,083.00	151,452.20	27,352.8	18.1
11	Cambria	152,598.00	132,760.30	13,005.3	9.8
12	Cameron	5,974.00	5,197.40	252.0	4.8
13	Carbon	58,802.00	51,157.70	4,542.5	8.9
14	Centre	135,758.00	118,109.50	108,804.6	92.1
15	Chester	433,501.00	377,145.90	203,276.3	53.9
16	Clarion	41,765.00	36,335.60	30,311.7	83.4
17	Clearfield	83,382.00	72,542.30	15,395.3	21.2
18	Clinton	37,914.00	32,985.20	9,541.6	28.9
19	Columbia	64,151.00	55,811.40	7,838.7	14.0
20	Crawford	90,366.00	78,618.40	12,310.6	15.7
21	Cumberland	213,674.00	185,896.40	42,490.4	22.9
22	Dauphin	251,798.00	219,064.30	44,959.0	20.5
23	Delaware	550,864.00	479,251.70	158,108.7	33.0
24	Elk	35,112.00	30,547.40	5,482.7	17.9
25	Erie	280,843.00	244,333.40	58,574.2	24.0
26	Fayette	148,644.00	129,320.30	28,299.8	21.9
27	Forest	4,946.00	4,303.00	1,028.0	23.9
28	Franklin	129,313.00	112,502.30	34,035.5	30.3
29	Fulton	14,261.00	12,407.10	104.1	0.8
30	Greene	40,672.00	35,384.60	6,559.1	18.5
31	Huntingdon	45,586.00	39,659.80	8,269.4	20.9
32	Indiana	89,605.00	77,956.40	8,894.4	11.4
33	Jefferson	45,932.00	39,960.80	7,905.4	19.8
34	Juniata	22,821.00	19,854.30	280.6	1.4
35	Lackawanna	213,295.00	185,566.70	95,767.1	51.6
36	Lancaster	470,658.00	409,472.50	163,925.3	40.0
37	Lawrence	94,643.00	82,339.40	11,518.5	14.0
38	Lebanon	120,327.00	104,684.50	49,896.9	47.7
39	Lehigh	312,090.00	271,518.30	134,520.0	49.5
40	Luzerne	319,250.00	277,747.50	170,895.3	61.5
41	Lycoming	120,044.00	104,438.30	41,363.9	39.6
42	Mckean	45,936.00	39,964.30	2,367.7	5.9
43	Mercer	120,293.00	104,654.90	15,243.7	14.6
44	Mifflin	46,486.00	40,442.80	11,908.3	29.4
45	Monroe	138,687.00	120,657.70	31,484.8	26.1
46	Montgomery	750,097.00	652,584.40	186,852.8	28.6
47	Montour	18,236.00	15,865.30	885.5	5.6
48	Northampton	267,066.00	232,347.40	71,544.8	30.8
49	Northumberland	94,556.00	82,263.70	20,144.1	24.5

County	Population (2000)	Tons MSW Generated Normalized to .87 tons per/person/year	Tons Recycled	Recycling Rate	
50	Perry	43,602.00	37,933.70	366.3	1.0
51	Philadelphia*	1,517,550.00	1,517,550.00	921,425.5	60.7
52	Pike	46,302.00	40,282.70	2,473.7	6.1
53	Potter	18,080.00	15,729.60	6,506.7	41.4
54	Schuylkill	150,336.00	130,792.30	90,875.9	69.5
55	Snyder	37,546.00	32,665.00	4,582.4	14.0
56	Somerset	80,023.00	69,620.00	3,143.6	4.5
57	Sullivan	6,556.00	5,703.70	501.7	8.8
58	Susquehanna	42,238.00	36,747.10	3,999.3	10.9
59	Tioga	41,373.00	35,994.50	4,331.8	12.0
60	Union	41,624.00	36,212.90	6,610.1	18.3
61	Venango	57,565.00	50,081.60	3,962.9	7.9
62	Warren	43,863.00	38,160.80	8,292.6	21.7
63	Washington	202,897.00	176,520.40	97,805.5	55.4
64	Wayne	47,722.00	41,518.10	8,548.0	20.6
65	Westmoreland	369,993.00	321,893.90	72,634.8	22.6
66	Wyoming	28,080.00	24,429.60	4,991.0	20.4
67	York	381,751.00	332,123.40	175,755.0	52.9
68	ISRI Additional	0.00	0.00	0.0	0.0
	<b>Totals</b>	<b>12,281,054.00</b>	<b>10,881,798.06</b>	<b>3,791,012.7</b>	<b>34.8</b>

\* Philadelphia 1.0 Normalization

**ACT 101, §901  
PLANNING GRANTS  
FY 2001-02**

<b>COUNTY</b>	<b>PROJECT</b>	<b>AMOUNT</b>
Berks	HHW education	\$ 4,697
Mifflin	Plan revision	141,993
Montgomery	Plan revision	157,914
Warren	Plan revision	34,117
<b>TOTAL</b>		<b>\$338,721</b>

**ACT 101, §901  
PLANNING GRANTS  
FY 2002-03**

<b>County</b>	<b>Amount Requested</b>
Bradford, Sullivan, Tioga	\$ 1,232
Clinton	34,000
Armstrong	52,400
Mercer	24,234
Luzerne	41,132
Bedford, Fulton, Huntingdon	175,713
Philadelphia	136,000
Crawford	44,460
<b>TOTAL</b>	<b>\$509,171</b>

**ACT 101, §902**  
**RECYCLING PROGRAM GRANTS**  
**FY 2001-02**

#	Municipality	County	Project	Award
<b>SOUTHEAST REGION</b>				
1	Bristol Twp	Bucks	Yard waste collection	\$ 208,800
2	Lower Makefield Twp	Bucks	Yard waste composting	372,478
3	Chester Co.	Chester	Recycling education	85,892
4	Upper Uwchlan Twp	Chester	Curbside recycling	2,557
5	West Whiteland Twp	Chester	Curbside recycling & recycling education	7,923
6	Delaware Co.	Delaware	Drop-off recycling & recycling education	14,108
7	Radnor Twp	Delaware	Curbside recycling	71,397
8	Lansdale Borough	Montgomery	Recycling education	11,349
9	Upper Dublin Twp	Montgomery	Curbside recycling	120,218
10	Upper Merion Twp	Montgomery	Curbside recycling	159,319
11	City of Philadelphia	Philadelphia	Curbside recycling & recycling education	2,000,000
<b>NORTHEAST REGION</b>				
12	Blakely Borough	Lackawanna	Yard waste collection	121,621
13	Clarks Summit Boro.	Lackawanna	Curbside recycling & yard waste collection	26,063
14	Lackawanna Co.	Lackawanna	Recycling center	1,087,386
15	Old Forge Borough	Lackawanna	Yard waste collection	117,720
16	City of Scranton	Lackawanna	Curbside recycling & yard waste collection	1,146,895
17	City of Allentown	Lehigh	Curbside & drop-off recycling	830,345
18	Lehigh Co.	Lehigh	Drop-off recycling & recycling education	218,095
19	Lehigh Co.	Lehigh	Yard waste composting & recycling education	38,007
20	Exeter Borough	Luzerne	Multi-municipal recycling program	775,150
21	East Stroudsburg Boro.	Monroe	Curbside recycling & recycling center improvements	95,499
22	Monroe Co.	Monroe	Drop-off Recycling & recycling education	59,507
23	City of Bethlehem	Northampton	Curbside recycling & yard waste collection	813,162
24	Lower Nazareth Twp	Northampton	Curbside & public area recycling	8,043
25	Williams Twp	Northampton	Curbside & public area recycling	22,568
26	Pike Co.	Pike	Drop-off recycling & recycling education	194,680
27	Schuylkill Co.	Schuylkill	Multi-co. drop-off recycling	213,254
28	Schuylkill Co.	Schuylkill	Drop-off recycling	276,478
29	Wyoming Co.	Wyoming	Drop-off recycling & recycling education	164,880
30	Maidencreek Twp	Berks	Multi-municipal yard waste collection	36,653
31	Antis Twp	Blair	Yard waste collection & recycling education	52,344
32	Blair Co.	Blair	Curbside recycling & yard waste composting	542,250
33	Camp Hill Borough	Cumberland	Yard waste collection & composting	18,060
34	Cumberland Co.	Cumberland	Yard waste collection & composting	359,782
35	East Pennsboro Twp	Cumberland	Yard waste collection & recycling education	289,720
36	Hampden Twp	Cumberland	Curbside recycling & recycling education	11,500
37	Dauphin Co.	Dauphin	Recycling education	66,270
38	Dauphin Co.	Dauphin	Recycling center	1,500,000
39	City of Harrisburg	Dauphin	Curbside recycling	370,333
40	Huntingdon Borough	Huntingdon	Curbside recycling & recycling education	84,300
41	Huntingdon Co.	Huntingdon	Drop-off recycling & recycling education	17,140
42	East Lampeter Twp	Lancaster	Curbside recycling & recycling education	9,289
43	Lancaster Co.	Lancaster	Curbside recycling & recycling education	61,276
44	Manheim Twp	Lancaster	Yard waste composting & recycling education	331,848
45	Upper Leacock Twp	Lancaster	Curbside recycling & recycling education	1,298
46	City of Lebanon	Lebanon	Curbside, drop-off & yard waste recycling	53,640
47	Lebanon Co.	Lebanon	Recycling education	72,362
48	North Lebanon Twp	Lebanon	Curbside, drop-off & yard waste recycling	58,618
49	Springettsbury Twp	York	Curbside recycling	11,092

#	Municipality	County	Project	Award
<b>NORTHCENTRAL REGION</b>				
50	Bradford Co.	Bradford	Recycling center improvements	\$ 527,620
51	Centre Co.	Centre	Recycling center improvements	1,128,023
52	State College Borough	Centre	Yard waste composting	443,712
53	Clearfield Borough	Clearfield	Yard waste collection	20,699
54	Clearfield Co.	Clearfield	Drop-off recycling & recycling education	56,659
55	Sandy Twp	Clearfield	Curbside recycling	168,538
56	Clinton Co.	Clinton	Recycling center improvements	571,500
57	Columbia Co.	Columbia	Recycling education	9,089
58	Lycoming Co.	Lycoming	Recycling center improvements	1,389,070
59	Coal Twp	Northumberland	Recycling center improvements	618,029
60	Kulpmont Borough	Northumberland	Curbside recycling	74,762
<b>SOUTHWEST REGION</b>				
61	Allegheny Co.	Allegheny	Office recycling & recycling education	712,375
62	Forest Hills Borough	Allegheny	Yard waste collection & composting	69,677
63	Town of McCandless	Allegheny	Yard waste collection	278,003
64	City of McKeesport	Allegheny	Curbside recycling & yard waste collection	107,195
65	Munic. of Monroeville	Allegheny	Curbside recycling	138,210
66	City of Pittsburgh	Allegheny	Curbside & institutional recycling	505,420
67	Robinson Twp	Allegheny	Yard waste composting	269,000
68	West Mifflin Borough	Allegheny	Curbside recycling & yard waste collection	295,495
69	Armstrong Co.	Armstrong	Recycling center improvements	308,701
70	Leechburg Borough	Armstrong	Materials processing equipment	22,589
71	Brighton Twp	Beaver	Yard waste composting	211,525
72	Fallston Borough	Beaver	Yard waste collection	41,679
73	New Brighton Borough	Beaver	Wood waste recycling	25,488
74	Cambria Co.	Cambria	Drop-off recycling	51,250
75	City of Johnstown	Cambria	Curbside recycling & yard waste collection	55,141
76	Fayette Co.	Fayette	Recycling education	14,309
77	Indiana Co.	Indiana	Recycling center improvements	373,030
78	Carroll Twp	Washington	Yard waste collection	130,612
79	Peters Twp	Washington	Curbside recycling & home composting	23,654
80	City of Monessen	Westmoreland	Yard waste collection	110,791
<b>NORTHWEST REGION</b>				
81	Butler Co.	Butler	Drop-off recycling	54,454
82	City of Titusville	Crawford	Yard waste collection & composting	113,791
83	Elk Co.	Elk	Drop-off recycling	131,899
84	City of Erie	Erie	Curbside recycling	288,702
85	Erie Co.	Erie	Recycling education	72,780
86	Franklin Twp	Erie	Curbside recycling	8,985
87	Millcreek Twp	Erie	Curbside recycling	211,433
88	Washington Twp	Erie	Curbside recycling	468,036
89	Jefferson Co.	Jefferson	Recycling education	25,163
90	Lawrence Co.	Lawrence	Drop-off recycling	1,381,011
91	New Wilmington Boro.	Lawrence	Yard waste collection	86,152
92	Mercer Co.	Mercer	Recycling education	300,000
92	<b>TOTAL</b>			<b>\$25,105,420</b>



**ACT 101, §903**  
**RECYCLING COORDINATOR GRANTS**  
**CALENDAR YEAR 2001**

<b>County</b>	<b>Amount Awarded</b>
Adams	\$23,146.07
Allegheny	26,193.63
Armstrong	11,573.03
Beaver	26,762.39
Bedford	4,275.90
Berks	24,554.78
Blair	13,135.36
Bradford	52,079.60
Bucks	28,001.07
Butler	10,295.37
Cambria	22,530.35
Carbon	25,904.74
Centre	38,476.32
Chester	27,190.35
Clearfield	12,743.66
Clinton	24,898.07
Columbia	24,295.77
Crawford	6,371.83
Cumberland	25,161.98
Dauphin	18,703.08
Delaware	21,519.85
Elk	10,661.94
Erie	16,772.93
Fayette	23,423.04
Franklin	3,067.95
Greene	9,747.75
Huntingdon	6,127.41
Indiana	23,656.16

<b>County</b>	<b>Amount Awarded</b>
Jefferson	14,800.64
Juniata	3,559.85
Lackawanna	27,256.45
Lancaster	37,570.86
Lawrence	22,280.78
Lebanon	26,398.94
Lehigh	24,342.59
Luzerne	30,466.76
Lycoming	28,549.36
Mercer	22,456.98
Monroe	20,584.42
Montgomery	3,842.87
Montour	4,999.98
Northumberland	22,647.26
Philadelphia	45,703.91
Pike	26,179.57
Schuylkill	21,316.80
Snyder	7,588.16
Sullivan	30,045.53
Susquehanna	17,588.02
Tioga	29,381.84
Union	8,794.01
Venango	23,745.86
Washington	6,719.55
Wayne	20,104.96
Westmoreland	16,898.38
<b>Total</b>	<b>\$1,105,094.68</b>

**ACT 101, §903**  
**RECYCLING COORDINATOR GRANTS**  
**CALENDAR YEAR 2002**

<b>County</b>	<b>Amount Awarded</b>
Adams	\$ 26,438.80
Allegheny	25,045.90
Armstrong	15,768.11
Beaver	31,507.57
Bedford	8,532.65
Berks	24,440.34
Blair	16,308.16
Bradford	23,946.19
Bucks	22,513.82
Butler	17,896.50
Cambria	30,194.14
Carbon	24,954.73
Centre	40,746.91
Chester	29,916.96
Clearfield	13,798.11
Clinton	28,591.13
Columbia	8,581.61
Crawford	25,744.44
Cumberland	15,749.36
Dauphin	22,920.45
Delaware	20,609.88
Elk	12,771.28
Erie	22,945.45
Fayette	23,050.06
Greene	9,099.95
Huntingdon	7,917.24
Indiana	24,724.50

<b>County</b>	<b>Amount Awarded</b>
Jefferson	18,631.65
Juniata	12,362.25
Lackawanna	28,572.98
Lancaster	41,707.54
Lawrence	25,669.90
Lebanon	30,379.08
Lehigh	26,643.15
Luzerne	30,578.30
Lycoming	29,958.75
Mckean	20,648.14
Mercer	25,016.33
Monroe	19,025.92
Montgomery	5,259.93
Northumberland	16,634.36
Philadelphia	45,879.60
Pike	6,760.55
Schuylkill	22,109.72
Snyder	7,204.41
Sullivan	30,964.55
Susquehanna	18,547.62
Tioga	17,313.58
Union	8,469.05
Venango	12,969.37
Warren	2,510.23
Washington	6,174.18
Wayne	19,465.81
Westmoreland	20,428.11
<b>Total</b>	<b>\$1,124,599.27</b>

**ACT 101, §904**  
**RECYCLING PERFORMANCE GRANTS**  
**CALENDAR YEAR 2001**

COUNTY	GRANTEE	GRANT AWARD
Adams	Adams Co.	\$15,264
	Conewago Twp	3,044
	Gettysburg Bor.	2,914
	McSherrystown Bor.	1,918
	<b>Subtotal 4 grants</b>	<b>\$23,141</b>
Allegheny	Aleppo Twp	\$1,337
	Allegheny Co.	923
	Baldwin Bor.	13,320
	Bethel Park Munic.	13,736
	Carnegie Bor.	4,524
	Dormont Bor.	6,818
	Findlay Twp	7,687
	Forest Hills Bor.	6,966
	Fox Chapel Bor.	4,441
	Franklin Park Bor.	10,559
	Glassport Bor.	372
	Hampton Twp	21,801
	Harrison Twp	2,715
	Indiana Twp	7,090
	Ingram Bor.	1,063
	Kennedy Twp	17,706
	Marshall Twp	26,109
	McCandless Town	56,356
	Monroeville Munic.	73,102
	Mt. Lebanon Munic.	21,269
	North Fayette Twp	11,169
	North Versailles Twp	401
	Oakmont Bor.	2,619
	Ohio Twp	5,414
	Penn Hills Munic.	54,750
	Pine Twp	11,589
	Pittsburgh City	347,402
	Plum Bor.	4,333
	Richland Twp	33,071
	Robinson Twp	7,554
	Ross Twp	81,017
	Scott Twp	7,900
	Sewickley Hills Bor.	81
	Shaler Twp	72,101
	South Fayette Twp	4,730
	Stowe Twp	576
	Swissvale Bor.	2,919
	Tarentum Bor.	5,592
	Thornburg Bor.	1,284
	Upper St. Clair Twp	21,226
	West Deer Twp	7,562
	West Mifflin Bor.	30,853
	West View Bor.	8,783
	Whitehall Bor.	11,623
	Wilkins Twp	788
	Wilkesburg Bor.	6,047
	<b>Subtotal 46 grants</b>	<b>\$1,039,275</b>

COUNTY	GRANTEE	GRANT AWARD
Armstrong	Armstrong Co.	\$20,964
	Kittanning Bor.	1,261
	Leechburg Bor.	17,789
		<b>Subtotal 3 grants</b>
Beaver	Aliquippa City	\$1,269
	Baden Bor.	4,081
	Beaver Bor.	1,144
	Beaver Co.	10,675
	Beaver Falls City	4,737
	Brighton Twp	15,524
	Center Twp	7,649
	Chippewa Twp	11,374
	Conway Bor.	123
	Economy Bor.	5,757
	Franklin Twp	5,786
	Freedom Bor.	223
	Greene Twp	371
	Hanover Twp	282
	Hopewell Twp	9,251
	Marion Twp	33
	Midland Bor.	402
	Monaca Bor.	2,719
	New Brighton Bor.	3,582
	New Sewickley Twp	9,945
	North Sewickley Twp	1,604
	Patterson Heights Bor.	138
	Patterson Twp	2,447
	Raccoon Twp	294
	South Beaver Twp	124
	Vanport Twp	1,335
	White Twp	1,045
	<b>Subtotal 27 grants</b>	<b>\$101,914</b>
Berks	Amity Twp	\$32,499
	Bally Bor.	1,064
	Berks Co.	6,246
	Bern Twp	5,277
	Bernville Bor.	477
	Colebrookdale Twp	34,660
	Cumru Twp	38,752
	Exeter Twp	95,599
	Hamburg Bor.	5,149
	Kenhorst Bor.	12,178
	Kutztown Bor.	6,470
	Laureldale Bor.	15,375
	Leesport Bor.	1,024
	Lenhartsville Bor.	20
	Mohnton Bor.	4,619
	Mount Penn Bor.	2,467
	Muhlenberg Twp	97,429
	Reading City	146,227
	Robesonia Bor.	793
	Shillington Bor.	3,333

COUNTY	GRANTEE	GRANT AWARD	
Berks <i>cont'd</i>	Shoemakersville Bor.	\$1,055	
	Sinking Spring Bor.	1,482	
	Spring Twp	52,007	
	St. Lawrence Bor.	4,921	
	Washington Twp	172	
	West Lawn Bor.	1,809	
	West Reading Bor.	10,094	
	Womelsdorf Bor.	909	
	Wyomissing Bor.	92,116	
	Wyomissing Hills Bor.	9,349	
	<b>Subtotal 30 grants</b>	<b>\$683,573</b>	
	Elk	Elk Co.	\$27,926
		<b>Subtotal 1 grant</b>	<b>\$27,926</b>
Erie	Edinboro Bor.	\$13,523	
	Erie City	283,467	
	Erie Co.	1,676	
	Fairview Twp	8,446	
	Girard Bor.	2,562	
	Girard Twp	3,640	
	Greenfield Twp	375	
	Harborcreek Twp	40,449	
	Lawrence Park Twp	5,169	
	Millcreek Twp	209,574	
	North East Bor.	752	
	Summit Twp	26,943	
	Venango Twp	412	
	Wesleyville Bor.	3,304	
	<b>Subtotal 14 grants</b>	<b>\$600,290</b>	
Fayette	Brownsville Twp	\$32	
	Bullskin Twp	836	
	Fairchance Bor.	661	
	Fayette Co.	1,310	
	Masontown Bor.	3,036	
	Nicholson Twp	124	
	North Union Twp	8,779	
	Point Marion Bor.	1,268	
	Smithfield Bor.	527	
	South Connellsville Boro.	1,951	
	Springhill Twp	55	
	Uniontown City	9,622	
	Washington Twp	1,495	
<b>Subtotal 13 grants</b>	<b>\$29,695</b>		
Franklin	Antrim Twp	\$11,097	
	Chambersburg Bor.	38,726	
	Greencastle Bor.	2,258	
	Hamilton Twp	946	
	Montgomery Twp	88,169	
	Washington Twp	21,269	
	Waynesboro Bor.	9,896	
<b>Subtotal 7 grants</b>	<b>\$172,361</b>		
Huntingdon	Huntingdon Bor.	\$1,735	
	Huntingdon Co.	53,212	
	<b>Subtotal 2 grants</b>	<b>\$54,947</b>	

COUNTY	GRANTEE	GRANT AWARD
Indiana	Blairsville Bor.	\$3,206
	Indiana Bor.	22,006
	Indiana Co.	6,839
	White Twp	46,495
	<b>Subtotal 4 grants</b>	<b>\$78,546</b>
Jefferson	Brockway Bor.	\$7,073
	Jefferson Co.	23,536
	<b>Subtotal 2 grants</b>	<b>\$30,609</b>
Juniata	Port Royal Bor.	\$89
	<b>Subtotal 1 grant</b>	<b>\$89</b>
Lackawanna	Archbald Bor.	\$31,843
	Blakely Bor.	18,279
	Carbondale City	15,568
	Clarks Green Bor.	4,540
	Clarks Summit Bor.	13,783
	Covington Twp	2,934
	Dalton Bor.	1,133
	Dickson City Bor.	38,887
	Dunmore Bor.	48,963
	Elmhurst Twp	366
	Greenfield Twp	501
	Jefferson Twp	1,675
	Jermyn Bor.	1,666
	Jessup Bor.	756
	Madison Twp	315
	Mayfield Bor.	8,824
	Moscow Bor.	3,780
	Newton Twp	1,411
	Old Forge Bor.	20,428
	Olyphant Bor.	131,427
	Ransom Twp	629
	Roaring Brook Twp	2,149
	Scott Twp	11,372
	Scranton City	129,852
	South Abington Twp	23,592
	Taylor Bor.	35,642
	Throop Bor.	32,030
<b>Subtotal 27 grants</b>	<b>\$582,345</b>	
Lancaster	Adamstown Bor.	\$1,013
	Akron Bor.	5,363
	Caernarvon Twp	912
	Christiana Bor.	1,025
	Columbia Bor.	12,888
	Denver Bor.	5,229
	East Cocalico Twp	53,102
	East Donegal Twp	4,242
	East Hempfield Twp	62,556
	East Lampeter Twp	64,984
	East Petersburg Bor.	10,502
	Elizabeth Twp	555
	Elizabethtown Bor.	30,084
	Ephrata Bor.	25,344
	Ephrata Twp	21,086
	Lancaster City	121,921
Lancaster Co.	10,205	

COUNTY	GRANTEE	GRANT AWARD	
Lancaster <i>cont'd</i>	Lancaster Twp	\$18,445	
	Lititz Bor.	37,060	
	Manheim Bor.	7,518	
	Manheim Twp	169,133	
	Manor Twp	25,935	
	Marietta Bor.	3,577	
	Millersville Bor.	11,667	
	Mount Joy Bor.	19,712	
	Mount Joy Twp	2,354	
	Mountville Bor.	1,265	
	New Holland Bor.	9,224	
	Penn Twp	3,883	
	Pequea Twp	2,850	
	Providence Twp	13,352	
	Quarryville Bor.	4,469	
	Rapho Twp	1,955	
	Salisbury Twp	11,329	
	Terre Hill Bor.	905	
	Upper Leacock Twp	25,159	
	Warwick Twp	41,623	
	West Earl Twp	5,171	
	West Hempfield Twp	41,561	
	West Lampeter Twp	21,001	
		<b>Subtotal 40 grants</b>	<b>\$910,157</b>
	Lawrence	Ellwood City Bor.	\$11,242
		Lawrence Co.	6,769
New Castle City		10,354	
New Wilmington Bor.		355	
Pulaski Twp		40	
Shenango Twp		1,497	
Union Twp		3,716	
Wampum Bor.		161	
		<b>Subtotal 8 grants</b>	<b>\$34,134</b>
Lebanon	Annville Twp	\$7,655	
	Cleona Bor.	1,484	
	Lebanon City	69,301	
	Lebanon Co.	105,959	
	N. Lebanon Twp	34,062	
	N. Londonderry Twp	4,443	
	Palmyra Bor.	11,940	
	S. Lebanon Twp	4,680	
	S. Londonderry Twp	1,422	
		<b>Subtotal 9 grants</b>	<b>\$240,944</b>
Lehigh	Allentown City	\$22,335	
	Catasauqua Bor.	8,108	
	Coplay Bor.	9,107	
	Emmaus Bor.	50,579	
	Fountain Hill Bor.	16,121	
	Hanover Twp	28,090	
	Macungie Bor.	4,932	
	N. Whitehall Twp	17,997	
	Salisbury Twp	38,748	
	Slatington Bor.	3,295	
	S. Whitehall Twp	127,072	
	Upper Macungie Twp	165,116	
	Upper Milford Twp	6,621	

COUNTY	GRANTEE	GRANT AWARD
Lehigh <i>cont'd</i>	Upper Saucon Twp	\$59,316
	Washington Twp	5,930
	Whitehall Twp	160,794
	<b>Subtotal 16 grants</b>	<b>\$1,224,161</b>
Luzerne	Ashley Bor.	\$4,195
	Dallas Twp	42,543
	Dorrance Twp	1,968
	Dupont Bor.	3,255
	Duryea Bor.	5,182
	Edwardsville Bor.	15,241
	Exeter Bor.	27,110
	Forty Fort Bor.	6,614
	Freeland Bor.	796
	Hanover Twp	53,132
	Hazleton City	21,715
	Hughestown Bor.	734
	Jenkins Twp	18,796
	Kingston Munic.	16,387
	Laflin Bor.	1,430
	Lake Twp	1,021
	Larksville Bor.	3,201
	Nanticoke City	33,228
	Newport Twp	5,294
	Pittston City	1,447
	Pittston Twp	1,447
	Plains Twp	46,533
	Plymouth Bor.	7,787
	Plymouth Twp	781
	Pringle Bor.	289
	Swoyersville Bor.	3,941
	West Hazleton Bor.	5,835
	West Pittston Bor.	18,203
	White Haven Bor.	1,390
	Wilkes-Barre City	153,540
	Wilkes-Barre Twp	53,002
	Wright Twp	10,082
	<b>Subtotal 32 grants</b>	<b>\$566,121</b>
Lycoming	Lycoming Co.	\$177,830
		<b>Subtotal 1 grant</b>
McKean	Bradford City	\$25,581
	Port Allegany Bor.	947
		<b>Subtotal 2 grants</b>
Mercer	Greenville Bor.	\$3,981
	Grove City Bor.	7,623
	Hermitage City	24,114
		<b>Subtotal 3 grants</b>
Mifflin	Lewistown Bor.	\$5,391
		<b>Subtotal 1 grant</b>
Monroe	Coolbaugh Twp	\$12,298
	E. Stroudsburg Bor.	91,148
	Eldred Twp	733
	Hamilton Twp	3,814
	Middle Smithfield Twp	9,667
	Monroe Co.	21,995
	Mount Pocono Bor.	3,343
	Pocono Twp	37,205

COUNTY	GRANTEE	GRANT AWARD
Monroe <i>cont'd</i>	Polk Twp	\$2,820
	Price Twp	846
	Ross Twp	2,240
	Smithfield Twp	6,688
	Stroud Twp	13,938
	Tobyhanna Twp	2,844
	Tunkhannock Twp	1,193
	<b>Subtotal 15 grants</b>	<b>\$210,770</b>
Montgomery	Abington Twp	\$204,545
	Ambler Bor.	10,008
	Cheltenham Twp	59,645
	Collegeville Bor.	3,643
	Douglass Twp	67,029
	East Norriton Twp	73,091
	Hatboro Bor.	5,970
	Horsham Twp	101,888
	Lansdale Bor.	32,281
	Limerick Twp	11,520
	Lower Merion Twp	248,736
	Lower Moreland Twp	18,940
	Lower Pottsgrove Twp	37,858
	Lower Providence Twp	24,786
	Lower Salford Twp	252,589
	Narberth Bor.	11,142
	New Hanover Twp	10,931
	Norristown Bor.	40,153
	North Wales Bor.	9,058
	Pennsburg Bor.	3,184
	Plymouth Twp	19,234
	Pottstown Bor.	62,707
	Rockledge Bor.	3,702
	Royersford Bor.	5,498
	Schwenksville Bor.	4,306
	Skippack Twp	31,719
	Springfield Twp	79,144
	Trappe Bor.	3,217
	Upper Dublin Twp	26,041
	Upper Gwynned Twp	75,936
	Upper Merion Twp	74,592
	Upper Moreland Twp	3,794
	Upper Pottsgrove Twp	9,479
	West Norriton Twp	24,000
	Whitemarsh Twp	56,625
	Whitpain Twp	23,037
<b>Subtotal 36 grants</b>	<b>\$1,730,026</b>	
Montour	Danville Bor.	\$5,840
	<b>Subtotal 1 grant</b>	<b>\$5,840</b>
Northampton	Allen Twp	\$3,855
	Bangor Bor.	8,051
	Bath Bor.	2,536
	Bethlehem City	280,002
	Bethlehem Twp	15,670
	Bushkill Twp	3,985
	East Allen Twp	5,352
	Easton City	16,283
	Forks Twp	66,077

COUNTY	GRANTEE	GRANT AWARD	
Northampton <i>cont'd</i>	Freemansburg Bor.	\$919	
	Hanover Twp	66,072	
	Hellertown Bor.	13,047	
	Lehigh Twp	4,522	
	Lower Mt. Bethel Twp	2,293	
	Lower Nazareth Twp	1,368	
	Lower Saucon Twp	4,332	
	Moore Twp	1,943	
	Nazareth Bor.	9,608	
	Northampton Bor.	31,742	
	Palmer Twp	159,998	
	Pen Argyl Bor.	3,150	
	Plainfield Twp	1,594	
	Roseto Bor.	1,993	
	Tatamy Bor.	1,271	
	Upper Mt. Bethel Twp	6,046	
	Walnutport Bor.	5,254	
	Washington Twp	4,536	
	West Easton Bor.	2,574	
	Williams Twp	397	
	Wind Gap Bor.	3,200	
	<b>Subtotal 30 grants</b>	<b>\$727,669</b>	
	Northumberland	Kulpmont Bor.	\$557
		Milton Bor.	24,092
		Northumberland Bor.	6,426
		Sunbury City	29,521
	<b>Subtotal 4 grants</b>	<b>\$60,597</b>	
	Perry	Marysville Bor.	\$2,654
		<b>Subtotal 1 grant</b>	<b>\$2,654</b>
	Philadelphia	Philadelphia City	\$1,758,491
<b>Subtotal 1 grant</b>		<b>\$1,758,491</b>	
Pike	Pike Co.	\$9,819	
	<b>Subtotal 1 Grant</b>	<b>\$9,819</b>	
Potter	Potter Co.	\$3,790	
	<b>Subtotal 1 Grant</b>	<b>\$3,790</b>	
Schuylkill	Coaldale Bor.	\$1,391	
	Frackville Bor.	2,823	
	Mahanoy City Bor.	1,664	
	Mechanicsville Bor.	191	
	Minersville Bor.	648	
	Pine Grove Twp	2,435	
	Pottsville City	9,898	
	Schuylkill Co.	66,939	
	Schuylkill Haven Bor.	5,918	
	Shenandoah Bor.	3,904	
	Tamaqua Bor.	4,044	
<b>Subtotal 11 Grants</b>	<b>\$99,854</b>		
Snyder	Beavertown Bor.	\$185	
	Freeburg Bor.	538	
	Mcclure Bor.	338	
	Middleburg Bor.	3,159	
	Monroe Twp	8,074	
	Penn Twp	490	
	Selingsgrove Bor.	7,242	

COUNTY	GRANTEE	GRANT AWARD
Snyder <i>cont'd</i>	Snyder Co.	\$3,130
	Union Twp	395
	<b>Subtotal 9 Grants</b>	<b>\$23,551</b>
Somerset	Seven Springs Bor.	\$444
	<b>Subtotal 1 Grant</b>	<b>\$444</b>
Sullivan	Dushore Bor.	\$1,095
	Eagles Mere Bor.	1,521
	Sullivan Co.	1,688
	<b>Subtotal 3 Grants</b>	<b>\$4,304</b>
Susquehanna	Brooklyn Twp	\$63
	Forest City Bor.	231
	Jessup Twp	36
	Lenox Twp	80
	Liberty Twp	92
	Rush Twp	38
	Silver Lake Twp	1,464
	Susquehanna Co.	16,330
	<b>Subtotal 8 Grants</b>	<b>\$18,333</b>
	Tioga	Mansfield Bor.
Tioga Co.		16,250
Wellsboro Bor.		8,103
<b>Subtotal 3 Grants</b>	<b>\$27,919</b>	
Union	East Buffalo Twp	\$7,615
	Lewisburg Bor.	4,933
	Union Co.	10,716
<b>Subtotal 3 Grants</b>	<b>\$23,264</b>	
Venango	Oil City City	\$10,581
	<b>Subtotal 1 Grant</b>	<b>\$10,581</b>
Warren	Warren City	\$2,116
	<b>Subtotal 1 Grant</b>	<b>\$2,116</b>
Washington	California Bor.	\$342
	Canonsburg Bor.	3,650
	Canton Twp	5,819
	Carroll Twp	4,876
	Cecil Twp	43,236
	Chartiers Twp	2,589
	Donora Bor.	1,230
	East Washington Bor.	1,616
	Mcdonald Bor.	919
	Peters Twp	10,406
	South Strabane Twp	11,950
	Washington City	8,507
	<b>Subtotal 12 Grants</b>	<b>\$95,140</b>
	Wayne	Honesdale Bor.
Wayne Co.		20,088
<b>Subtotal 2 Grants</b>		<b>\$27,798</b>
Westmoreland	Arnold City	\$6,840
	Derry Twp	708
	Greensburg City	17,784
	Jeannette City	5,267
	Monessen City	1,136
	Murrysville Munic.	9,522

COUNTY	GRANTEE	GRANT AWARD
Westmoreland <i>cont'd</i>	New Kensington City	\$12,147
	North Huntingdon Twp	7,040
	Rostraver Twp	23,309
	Scottdale Bor.	416
	Vandergrift Bor.	952
	Youngwood Bor.	737
	<b>Subtotal 12 Grants</b>	<b>\$85,859</b>
Wyoming	Tunkhannock Twp	\$1,271
	<b>Subtotal 1 Grant</b>	<b>\$1,271</b>
York	Carroll Twp	\$10,654
	Codus Twp	5,165
	Dallastown Bor.	5,764
	Dover Twp	15,402
	East Prospect Bor.	460
	Fairview Twp	60,463
	Franklintown Bor.	383
	Glen Rock Bor.	2,008
	Hallam Bor.	1,293
	Hanover Bor.	43,563
	Jackson Twp	1,445
	Jacobus Bor.	1,878
	Jefferson Bor.	232
	Lower Windsor Twp	288
	Manchester Twp	39,100
	Mt. Wolf Bor.	1,288
	New Freedom Bor.	3,549
	New Salem Bor.	276
	Newberry Twp	17,955
	Penn Twp	133,394
	Red Lion Bor.	14,542
	Seven Valleys Bor.	2,518
	Shrewsbury Bor.	10,434
	Shrewsbury Twp	7,409
	Spring Garden Twp	67,129
	Spring Grove Bor.	8,577
	Springettsbury Twp	91,043
	Springfield Twp	3,382
	Stewartstown Bor.	1,454
	Warrington Twp	1,153
	West Manchester Twp	82,140
	West York Bor.	6,268
	Windsor Bor.	2,115
	Windsor Twp	16,213
	Wrightsville Bor.	2,274
	Yoe Bor.	1,282
	York City	86,745
	York Twp	50,321
<b>Subtotal 38 Grants</b>	<b>\$799,559</b>	
<b>TOTAL 671 GRANTS</b>		<b>\$17,997,647</b>

**ACT 101, §1110**  
**PERMIT EVALUATION GRANTS**  
**FY 2001-02**

<b>MUNICIPALITY</b>	<b>COUNTY</b>	<b>FACILITY</b>	<b>AMOUNT</b>
Shade Twp	Somerset	Shade Landfill	\$10,000
Exeter Twp	Berks	Pioneer Crossing Landfill	10,000
Pine Twp	Columbia	White Pine Corp.	10,000
Washington Twp	Dauphin	Dauphin Meadows Landfill	6,825
<b>TOTAL</b>			<b>\$36,825</b>

**No §1110 grants awarded in FY 2002-03**





**Pennsylvania Department of Environmental Protection  
Bureau of Land Recycling & Waste Management  
Division of Waste Minimization & Planning  
717-787-7382**

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2520-BK-DEP2586 6/2004

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