### SOLID WASTE MANAGEMENT TRUST FUND

YEAR-TO-DATE REPORT JULY 1, 2007 THRU JUNE 30, 2008 (FY08)



PREPARED FOR
SENATE FINANCE COMMITTEE
HOUSE WAYS AND MEANS COMMITTEE



South Carolina Department of Health and Environmental Control

SUBMITTED BY
C. EARL HUNTER, COMMISSIONER
S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

in accordance with the

SOUTH CAROLINA SOLID WASTE POLICY AND MANAGEMENT ACT OF 1991

## INTRODUCTION

#### SOUTH CAROLINA

#### SOLID WASTE POLICY AND MANAGEMENT ACT OF 1991

DHEC's current solid waste program was established after the passage of the South Carolina Solid Waste Policy and Management Act of 1991 (Act).

The Solid Waste Management Trust Fund, as outlined in the Act, funds the program, which consists of planning, regulation development and compliance, permitting, enforcement, hydrogeology, the Office of Solid Waste Reduction and Recycling and all regional personnel.

This report, which is required by the Act (Section 44-96-120), describes the use of all funds allocated from the Solid Waste Management Trust Fund for fiscal year 2008 (FY08) or July 1, 2007 to June 30, 2008.

#### SOLID WASTE MANAGEMENT TRUST FUND

The Solid Waste Management Trust Fund consists of fee money received from the sale of lead-acid batteries, white goods (appliances), tires and oil. An explanation of the distribution of the fees is below.

The Batteries and White Goods Sub-Fund is used for DHEC activities related to solid waste including grants/contracts to local governments. Beginning carryover from FY07 totaled \$3,134,338.43. The yearly revenue minus the administrative overhead totaled \$3,701,805.32. DHEC operational expenses include salaries/benefits, supplies, equipment, travel, fixed charges, and contractual expenses. Contractual expenses include the S.C. Department of Commerce Recycling Market Development Advisory Council, contracts for the performance of training and certification programs, a statewide outreach and education campaign, numerous solid waste workshops and trainings for local governments, and an agronomy contract for land application research and analysis. Solid Waste Grants to local governments for recycling and waste reduction programs also were supported by this fund. Total expenditures of this fund for FY08 were \$4,042,822.70.

The **Waste Tire Trust Fund** is used for local government grants and operational expenses directly related to waste tires. Beginning carryover for the waste tire fund from FY07 totaled \$5,882,712.57. The yearly revenue minus the administrative overhead totaled \$2,218,787.95. Waste tire research projects, waste tire management grants, stockpiled tire grants, and automobile dismantler grants were made available to local governments upon approval of the Waste Tire Committee and Solid Waste Advisory Council (SWAC). A total of \$2,532,678.60 was spent during the FY08.

The **Petroleum Fund** is used for incentive programs that encourage the proper disposal and recycling of used motor oil and associated materials. The fund also provides grants to local governments, schools and colleges, as well as enabling public education programs and research. A total of \$3,470,189.05 carried over from FY07 revenue. The yearly revenue minus the administrative overhead totaled \$1,679,402.63. Total expenditures for FY08 totaled \$1,996,716.86.

# SOLID WASTE MANAGEMENT TRUST FUND BATTERIES AND WHITE GOODS SUB-FUND

JULY 1, 2007 - JUNE 30, 2008

(FY08)

FY2007 CARRY FORWARD BALANCE:		\$3,134,338.43
Revenues	Year-End FY2008	Remaining Commitments
Fees	\$3,851,646.54	\$0.00
Training Conference Fees	\$20,300.00	\$0.00
Refund of Prior Year Expenditures	\$617.08	\$0.00
Interest	\$156,631.64	\$0.00
Less: EQC Admin. Overhead	-\$327,389.94	\$0.00
Total Revenues	\$3,701,805.32	\$0.00
Expenditures	Year-End FY2008	Remaining Commitments
Salaries	\$1,742,338.88	
Fringe Benefits	\$514,261.04	
Agency Admin. Assessment	\$160,295.35	
Travel	\$29,279.88	\$255.18
Contractual	\$495,516.03	\$19,156.14
Supplies	\$72,877.24	\$18,260.15
Fixed Charges	\$17,043.47	\$6.59
Equipment	\$26,611.95	
Gasoline	\$37,084.94	\$43.24
Grant/Contracts	\$947,513.92	\$2,372,364.90
Total Expenditures	\$4,042,822.70	\$2,410,086.20
Projected Year-End Cash Balance		\$2,793,321.05
less Remaining Commitments		\$2,410,086.20
Projected Cash Balance		\$383,234.85

#### **BATTERIES AND WHITE GOODS SUB-FUND**

#### **DEFINITIONS**

#### **REVENUES**

Beginning Balance: Actual funds carried forward from previous fiscal year.

Fees: Funds received from the \$2 fee collected on the sale of white goods and lead-acid

batteries.

Training Conference Fees: Fees collected by DHEC for trainings.

Refund of Prior Year

Expenditures: Adjustment from prior year

Interest: Interest on white goods and lead-acid batteries fees.

Overhead: DHEC-EQC Administration expense to cover rent, phone, and utilities.

#### **EXPENDITURES**

Salaries: Personnel paid from solid waste funds. These include personnel involved in solid

waste planning, solid waste permitting, solid waste enforcement, solid waste compliance, solid waste hydrogeology, grants, public education, and district solid

waste consultants.

Fringe: Benefits for the positions described above.

Admin. Assessment: Overhead assessed by DHEC administration from salaries paid from white goods

and led-acid batteries.

Travel: Travel to training, workshops and conferences relating to solid waste issues.

Contractual: Includes funds from contracts relating to solid waste issues.

Supplies: Includes general office supplies and all office equipment under \$1,000.

Fixed Charges: Includes copy machines, equipment rental charges, meeting room rental,

automobile insurance, and membership dues.

Equipment: All equipment costing more than \$1,000, including office furniture, computers,

computer software and automobiles.

Gasoline: Gasoline and maintenance for state automobiles used by solid waste staff.

Grants: The amount awarded for solid waste grants to local governments for recycling and

source reduction projects.

# SOLID WASTE MANAGEMENT TRUST FUND WASTE TIRE TRUST FUND

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(FY08)

FY2007 CARRY FORWARD BALANCE:		\$5,882,712.57
Revenues	Year-End FY2008	Remaining Commitments
Fees	\$2,092,386.71	\$0.00
Refund of Prior Year Expenditures	\$16,200.00	\$0.00
Interest	\$288,054.09	\$0.00
Less: EQC Admin. Overhead	-\$177,852.85	\$0.00
Total Revenues	\$2,218,787.95	\$0.00
	Year-End	Remaining
Expenditures	FY2008	Commitments
Salaries	\$257,163.07	
Fringe Benefits	\$79,269.05	
Agency Admin. Assessment	\$23,658.92	<b>\$25</b> 0.04
Travel Contractual	\$9,427.67 \$107,840.89	\$258.81
Supplies	\$20,203.96	\$107,977.93 \$1,205.43
Fixed Charges	\$2,119.58	\$0.62
Equipment	\$160,389.74	Ψ0.02
Gasoline	\$22,654.28	\$62.93
Grant/Contracts	\$1,849,951.44	\$4,077,234.11
Total Expenditures	\$2,532,678.60	\$4,186,739.83
Projected Year-End Cash Balance		\$5,568,821.92
less Remaining Commitments		\$4,186,739.83
Projected Cash Balance		\$1,382,082.09

## WASTE TIRE TRUST FUND DEFINITIONS

#### **REVENUES**

Beginning Balance: Actual funds carried forward from previous fiscal year.

Refund of Prior Year

Expenditures: Adjustment from prior year

Fees: Allocation of \$ .44 from the \$2.00 fee collected on the sale of new tires.

Interest: Interest on the waste tire fees.

Overhead: DHEC-EQC Administration expense to cover rent, phone, and utilities.

#### **EXPENDITURES**

Salaries: Personnel paid from waste tire fees. These include those involved in waste tire

planning, waste tire permitting, waste tire enforcement, waste tire compliance, waste tire grants, waste tire public education and district waste tire consultants.

Fringe: Benefits for the positions described above.

Admin. Assessment: Overhead assessed by DHEC administration from salaries paid from waste tire

funds. This is to cover agency administration.

Travel: Travel to training, workshops and conferences relating to waste tire issues.

Contractual: Includes funds from contracts relating to waste tire issues.

Supplies: Includes general office supplies and all office equipment under \$1,000.

Fixed Charges: Includes copy machines, equipment rental charges, meeting room rental,

automobile insurance, and membership dues.

Equipment: All equipment costing more than \$1,000, including office furniture, computers,

computer software and automobiles.

Gasoline: Gasoline and maintenance for state automobiles used by solid waste staff.

Grants: The amount awarded for solid waste grants to local governments for recycling and

source reduction projects.

## SOLID WASTE MANAGEMENT TRUST FUND PETROLEUM FUND

## JULY 1, 2007 - JUNE 30, 2008 (FY08)

FY2007 CARRY FORWARD BALANCE:		\$3,470,189.05
Revenues	Year-End FY2008	Remaining Commitments
Fees	\$1,650,451.58	\$0.00
Refund of Prior Year Expenditures	\$2,708.06	\$0.00
Interest	\$166,531.38	\$0.00
Less: EQC Admin. Overhead	-\$140,288.39	\$0.00
Total Revenues	\$1,679,402.63	\$0.00
Expenditures	Year-End FY2008	Remaining Commitments
Salaries	\$398,094.38	
Fringe Benefits	\$118,035.48	
Agency Admin. Assessment	\$36,624.75	
Travel	\$2,370.95	\$255.18
Contractual	\$464,762.56	\$19,156.14
Supplies	\$63,544.36	\$18,260.15
Fixed Charges	\$4,775.81	\$6.59
Equipment	\$12,961.47	
Gasoline	\$7,321.66	\$43.24
Grant/Contracts	\$888,225.44	\$2,372,364.90
Total Expenditures	\$1,996,716.86	\$2,410,086.20
Projected Year-End Cash Balance		\$3,152,874.82
less Remaining Commitments		\$2,410,086.20
Projected Cash Balance		\$742,788.62

## PETROLEUM FUND DEFINITIONS

**REVENUES** 

Beginning Balance: Actual funds carried forward from previous fiscal year.

Fees: Funds received from the \$ .02 per quart fee collected on the sale of motor oil.

Refund of prior year: Adjustment from prior year.

Interest: Interest on white goods and lead-acid batteries fees.

Overhead: DHEC-EQC Administration expense to cover rent, phone, and utilities.

**EXPENDITURES** 

Salaries: Personnel paid from used oil funds. These include those involved in used oil

planning, used oil permitting, used oil enforcement, used oil compliance, used oil hydrogeology, used oil grants, used oil public education and district used oil

consultants.

Fringe: Benefits for the positions described above.

Admin. Assessment: Overhead assessed by DHEC administration from salaries paid from used oil

funds. This is to cover agency administration.

Travel: Travel to training, workshops and conferences relating to used oil issues.

Contractual: Includes funds for public education/information, research and incentive.

Supplies: Includes general office supplies, promotional supplies, printing and software under

\$1,000.

Fixed Charges: Includes rental fees, membership dues, automobile insurance, etc.

Equipment: All equipment costing more than \$1,000, including office furniture, computers,

computer software and automobiles.

Gasoline: Gasoline and maintenance for state automobiles used by solid waste staff.

Grants: The amount awarded for used oil grants to local governments, public/private

school grants and grants to colleges and universities.

#### PROJECT NARRATIVE

#### OFFICE OF SOLID WASTE REDUCTION AND RECYCLING

The S.C. Department of Health and Environmental Control's (DHEC) Office of Solid Waste Reduction and Recycling (Office) was created by the S.C. Solid Waste Policy and Management Act of 1991 (Act). The Office, in accordance with the Act, provides technical assistance, education and outreach programs and grant funding to local governments, schools, colleges and universities regarding solid waste management issues in South Carolina. The Office includes staff from the Solid Waste Planning and Grants Section and the Education/Technical Assistance Section.

## Grants and Trust Fund Administration Local Government, School and College Grants

There are five specific grant programs that provide funding to local governments, schools and colleges to implement source reduction and recycling programs. The Office provides the grant funds from the Solid Waste Management Trust Fund. Grants offered through this program are solid waste grants, waste tire grants and used oil grants as well as educational grants for schools and colleges/universities. The grant period for the fiscal year 2008 (FY08) is July 1, 2007 until June 30, 2008. Reimbursements and final reports are due 45 days after the end of the grant period. The FY09 grants were awarded just prior to the close of FY08. The FY08 grants for local governments were awarded prior to the close of FY07 and were included in the FY07 report. Waste Tire Grants are reviewed and approved by the Waste Tire Committee (WTC). In addition, all grant awards are approved by the state Solid Waste Advisory Council (SWAC).

**Note:** Grants are paid out on a reimbursement basis throughout the year. Grants are approved and awarded during one fiscal year but reimbursements to those grants may take place during a subsequent year. For this reason award amounts described will differ from the expenditures reported.

#### The Solid Waste Grant Program

The Solid Waste Grant Program is funded through fee money received from the sale of lead-acid batteries and white goods as stipulated in the Act. The Solid Waste grants are awarded to local governments that can demonstrate that they have a plan to help increase the state's recycling rate, reduce the per capita disposal rate, and/or reduce the risks to public health and the environment.

The FY09 Solid Waste grants were awarded at the end of FY08. Local governments could apply for funding to increase the collection of one or two specific commodities.

For the FY09 grant cycle, the Office offered assistance to local governments and regions for projects that demonstrate a positive impact on their efforts to reach the recycling and disposal goals. Local governments could use the funds to purchase the following:

- Containers: trailers, roll-offs, bins, roll-carts, etc.
- Recycling collection vehicles
- Site prep
- Baler
- Shed/Building and related expenses
- Other related equipment/supplies
- Electrical needs
- Outreach/education materials to promote recycling. This included workshops, direct mailings and printed material.

The SWAC approved a total of \$1,327,258 for FY09 Solid Waste grants. The SWAC also approved an additional \$472,034 for a second round of Solid Waste grants to be awarded in the next fiscal year.

#### **FY09 SOLID WASTE GRANTS**

GRANTEE	BUDGET	GRANTEE	BUDGET
Abbeville	\$38,561.00	Hampton	\$40,000.00
City of North Augusta	\$33,000.00	Horry	\$40,000.00
Anderson	\$12,463.00	Kershaw	\$40,000.00
Berkeley	\$40,000.00	Lancaster	\$40,000.00
Charleston	\$40,000.00	Lexington	\$39,485.00
Town of Kiawah Island	\$40,000.00	City of West Columbia	\$39,000.00
Cherokee	\$35,600.00	Newberry	\$40,000.00
Chester	\$40,000.00	Oconee	\$40,000.00
City of Chester	\$37,000.00	Seneca	\$22,718.00
Chesterfield	\$40,000.00	City of Forest Acres	\$8,525.00
Clarendon	\$40,000.00	Spartanburg	\$17,500.00
Colleton	\$35,000.00	Sumter	\$28,300.00
Hartsville	\$28,116.00	York	\$40,000.00
Dillon	\$30,000.00	City of Rock Hill	\$40,000.00
Dorchester	\$40,000.00	Three Rivers SWA	\$148,100.00
City of Florence	\$40,000.00	Tri County SWA	\$118,000.00
Greenville	\$15,890.00	,	
		TOTAL	\$1,327,258.00

#### Waste Tire Grant Program

The Waste Tire Grant Program is funded through the fee money received from the sale of tires as stipulated in the Act. The Waste Tire Grant program is made available annually to local governments to assist them in the implementation of their waste tire program. Funding helps local governments remediate stockpile tires, set up tire collection points, pay contractor costs for recycling waste tires and otherwise manage waste tires.

During FY08, the WTC and the SWAC approved Waste Tire grants for FY09 in the amount of \$2,374,270. The WTC and the SWAC also approved an additional \$200,000 during FY08 for modifications to existing Waste Tire grants.

#### **FY09 WASTE TIRE GRANTS**

GRANTEE	BUDGET	GRANTEE	BUDGET
Abbeville	\$46,761.00	Kershaw	\$10,000.00
Aiken	\$164,000.00	Lancaster	\$17,500.00
Anderson	\$28,480.00	Laurens	\$210,000.00
Beaufort	\$106,000.00	Lee	\$16,650.00
Berkeley	\$6,000.00	Lexington	\$6,000.00
Charleston	\$77,348.00	Marion	\$20,988.00
Cherokee	\$94,300.00	Marlboro	\$8,500.00
Chesterfield	\$23,000.00	Newberry	\$79,250.00
Clarendon	\$6,562.00	Oconee	\$80,000.00
Colleton	\$25,203.00	City of Seneca	\$4,000.00
Darlington	\$37,000.00	Pickens	\$8,392.00
Dillon	\$17,500.00	City of Easley	\$4,000.00
Dorchester	\$6,000.00	Spartanburg	\$55,990.00
Fairfield	\$27,230.00	Sumter	\$37,735.00
City of Johnsonville	\$4,000.00	City of Sumter	\$4,000.00
Georgetown	\$50,800.00	Williamsburg	\$40,000.00
Greenville	\$103,467.00	York	\$6,000.00
Greenwood	\$35,808.00	City of Rock Hill	\$5,000.00
Hampton	\$34,063.00	Three Rivers SWA	\$458,100.00
Horry	\$233,750.00	Tri-County SWA	\$91,000.00
Jasper	\$83,893.00	TOTAL	\$2,374,270.00

#### Asphalt Rubber Technology Service at Clemson University

In addition to the local government Waste Tire grants, DHEC, with WTC and SWAC approval, has awarded a multi-year applied research grant from the Waste Tire fund to Clemson University. The purpose of the grant is to address one of our nation's most important environmental issues by development and promotion

of waste tire recycling applications and technology. The funding supports the Asphalt Rubber Technology Service (ARTS) directed by the Clemson University Civil Engineering Department.

The mission of ARTS is to encourage the use of value-added solutions for scrap tire rubber. They provide technical assistance in the promotion, design, testing and use of scrap tire rubber in industrial products, pavements, construction uses and engineering uses. The program provides coordination, special projects administration, research, technology transfer and training. ARTS staff assists public works agencies in municipalities, county governments and state agencies to ensure they benefit from technology-based improvement in scrap tire applications. Assistance offered includes pass-through grant funding for the implementation of paving, construction and civil engineering projects at the state, county and city level.

During FY08, the WTC and the SWAC approved \$264,000 for staff funding and their activities and an additional \$396,807 for field demonstration projects and specific research projects as described below:

PROJECT	DESCRIPTION	AWARD
SCDOT Dreher Shoals Ph. 2	A portion of Dreher Shoals Road in the Irmo area of Lexington County will be paved using conventional HMA surface course over a Stress Absorbing Membrane Interlayer (SAMI) containing crumb rubber from scrap tires.	\$16,000
Warm Asphalt Study	The main objective of the research project is to investigate the performance of warm mix asphalt as compared to hot mix asphalt.	\$90,000
Miracle League: Greenwood	A baseball/softball field in the City of Greenwood will be resurfaced with Sofscape pavers to provide a surface that meets or exceeds all ADA requirements.	\$105,000
City of Seneca	A recreational track will be constructed consisting of a 5-inch-thick crushed aggregate base course, a 2-inch-thick hot mix asphalt intermediate course, and a 2-inch-thick surface course of recycled rubber surfacing.	\$5,500
Vestenamer Study	This project will evaluate the performance of crumb rubber modified (CRM) asphalt mixtures using Vestenamer materials compared to mixtures made with conventional wet-process CRM binder, polymer-modified binder and virgin (un-modified) binder.	\$120,000
Phase Angle Study	This project will evaluate the effect of several variables on binder performance of CRM asphalt binders.	\$50,000
Anderson County Environmental Education Center	The Anderson County Environmental Education Center will install various recycled rubber products and surfacing.	\$10,307

#### **Used Oil Grant Program**

Used Oil Grant funds are for the establishment and operation of used motor oil collection programs for do-it yourself oil changers, including collecting used motor oil, motor oil filters, motor oil bottles and oil/gas mixtures. Funding comes from the Petroleum Fund. Funds may be requested for equipment, maintenance supplies, contractual services, site preparation, public education and professional development. The SWAC approved funding of \$753,715 for the FY08 Used Oil grants.

The SWAC approved funding of **\$1,450,455** for FY09. The SWAC also approved an additional **\$261,723** for modifications to existing FY08 used oil grants.

#### **FY09 USED OIL GRANTS**

GRANTEE	BUDGET	GRANTEE	BUDGET
Abbeville	\$38,731.00	Horry	\$90,650.00
Aiken	\$48,000.00	Jasper	\$106,900.00
Anderson	\$53,400.00	Kershaw	\$36,750.00
Beaufort	\$67,352.00	Lancaster	\$21,160.00
Berkeley	\$18,510.00		\$123,000.00
Charleston	" -	Laurens	<u></u>
	\$19,400.00	Lexington	\$61.825.00
Cherokee	\$64,295.00	Marion	\$10,350.00
Chester	\$5,040.00	Marlboro	\$27,065.00
Chesterfield	\$29,657.00	Newberry	\$44,640.00
Clarendon	\$8,057.00	Oconee	\$76,500.00
Colleton	\$6,630.00	City of Seneca	\$4,000.00
Darlington	\$26,910.00	Pickens	\$29,800.00
Dorchester	\$18,600.00	City of Easley	\$5,632.00
Fairfield	\$16,625.00	Spartanburg	\$50,142.00
Florence	\$8,730.00	Sumter	\$18,690.00
City Of Johnsonville	\$4,000.00	City of Sumter	\$4,000.00
Georgetown	\$16,270.00	Williamsburg	\$4,500.00
Greenville	\$29,573.00	York	\$20,930.00
City of Greenville	\$4,000.00	City of Rock Hill	\$5,000.00
City of Simpsonville	\$13,605.00	Three Rivers SWA	\$140,716.00
Greenwood	\$6,040.00	Tri-County SWA	\$59,250.00
Hampton	\$5,530.00	TOTAL	\$1,450,455.00

#### **Recycling Education Grant Program**

The Recycling Education Grant Program is available to public and private schools or public school districts. Funding is from the Petroleum Fund. Grant funding may be used to purchase recycling containers, compost supplies, support materials for "Action for a cleaner tomorrow: A South Carolina Environmental Curriculum Supplement", or supplies for recycling clubs. All projects must contain a used oil awareness component promoting the responsible collection and recycling of used motor oil. Projects should be created, designed and implemented by students, teachers, principals or district personnel. Hands-on projects are encouraged.

The SWAC approved funding of \$46,371.66 for 45 applicants.

#### FY08 RECYCLING EDUCATION GRANTS

GRANTEE	BUDGET	GRANTEE	BUDGET
Anderson 1 Wren El	\$730.00	Lexington 4 Sandhills Mid	\$1,250.00
Anderson 5 Westside High	\$1,000.00	Lexington 5 Leaphart El	\$350.00
Beaufort Beaufort High	\$1,250.00	Lexington 5 Oak Pointe El	\$250.00
Beaufort McCracken Mid	\$1,226.00	Oconee West Oak Mid	\$1,250.00
Beaufort Right Choices	\$1,150.00	Oconee Seneca Mid	\$1,250.00
Berkeley Goose Creek High	\$1,250.00	Private Columbia Jewish Day Sch	\$1,250.00
Berkeley Sedgefield Middle	\$1,114.00	Private Covenant Christian	\$866.00
Chesterfield Pageland El	\$1,250.00	Private Montessori School Of Columbia	\$130.00
Clarendon 3 Walker Gamble El	\$250.00	Richland 1 Brennan El	\$1,250.00
DJJ Birchwood Hi	\$1,250.00	Richland 1 Crayton Mid	\$1,250.00
Greenville James L Mann Hi	\$1,250.00	Richland 2 Dent Mid	\$1,250.00
Greenville Mauldin Mid	\$1,250.00	Richland 2 Kelly Mill Mid	\$1,000.00
Greenville Mitchell Road El	\$685.00	Richland 2 Longleaf Mid	\$1,167.00
Greenville Riverside Mid	\$1,250.00	Richland 2 Spring Valley High	\$1,250.00
Greenville Southside High	\$1,250.00	Richland 2 Windsor El	\$1,250.00
Greenville Stone Academy	\$805.00	Spartanburg 1 Chapman High	\$1,250.00
Kershaw Lugoff Elgin Mid	\$1,250.00	Spartanburg 2 Chesnee High	\$1,170.00
Lexington 1 Lexington El	\$1,000.00	Spartanburg 6 Roebuck El	\$1,234.00
Lexington 1 Pleasant Hill Mid	\$982.00	York 2 Bethel El	\$752.66
Lexington 2 Herbert A. Wood El.	\$880.00	York 2 Clover Jr Hi	\$1,250.00
Lexington 3 Batesburg Leesville El	\$1,250.00	York 2 Crowders Creek Mid	\$840.00
Lexington 3 Batesburg Leesville Primary	\$250.00	York 4 Springfield El	\$1,040.00
Lexington 4 Sandhills El	\$1,250.00	TOTAL	\$46,371.66

#### Collegiate Recycling Grant Program

The Colleges and Universities Recycling Grant Program assists public and private institutions of higher education to establish or expand recycling and recycling education programs. Funds are made available from the Petroleum Fund.

The SWAC approved funding of \$222,950 for eleven colleges/universities.

#### FY08 COLLEGIATE RECYCLING GRANTS

GRANTEE	BUDGET	
Clemson University	\$25,000.00	
Columbia College	\$10,000.00	
Converse College	\$15,510.00	
Furman University	\$24,308.00	
Lander University	\$23,952.00	
MUSC	\$25,000.00	
Trident Tech	\$25,000.00	
USC	\$24,850.00	
USC Upstate	\$24,330.00	
USC School of Medicine	\$25,000.00	
Winthrop University	\$25,000.00	
TOTAL	\$222,950.00	

#### Education/Technical Assistance

#### **Education programs**

"Action for a cleaner tomorrow: A South Carolina Environmental Curriculum Supplement" ("Action"), a national award-winning kindergarten through 12th grade, activity-based, interdisciplinary curriculum supplement, continued to be the centerpiece educational effort of the Office. Developed by teachers and the Office in conjunction with the S.C. Department of Education and others, "Action" can serve as a starting place for introducing basic environmental education in the classroom. Topics include air, water, recycling, solid waste, energy and litter — most of which are South Carolina specific. The current edition, featuring 31 lessons, is the best of the best - the most frequently used lessons by teachers in the past 14 years. Each lesson provides the learning objective and background as well as teacher preparation time. The curriculum supplement is correlated to the state's science standards. "Action" is available only as part of a three-hour training provided by the Office and is offered to schools and school districts as well as student teachers in colleges and universities throughout the state at no cost.

Staff trained 2,451 teachers and environmental educators in 47 workshops in 41 counties during FY08. More than 47,000 teachers and other educators have been trained on the curriculum supplement since 1994. During the annual summer teacher's workshop held June 25, 2008, there was a record-setting attendance of 220 teachers.

"Action in the Classroom" is a program that targets fifth-grade students with an introduction to recycling in South Carolina. The basics of what happens when you throw something away and the 3 R's – reduce, reuse, recycle – are covered, as well as how you can buy recycled content products. The "My Bag" lesson from "Action for a cleaner tomorrow" is taught and examples of what can and should be recycled are shown.

The program, which is offered at no cost to schools, was presented to about 14,800 students and 534 teachers in more than 260 schools throughout South Carolina in FY08.

"The Green Driver Project" is a program that targets students in high school driver education classes with a basic introduction to the environmental impact of driving - lessons that will last a lifetime. Students learn the importance of used oil recycling, related air, water and energy conservation issues regarding the proper maintenance of their vehicles, litter prevention and safe driving. The award-winning video, "DHEC1: Behind the Oil Change" is shown during the presentation.

The program, which is offered at no cost, was presented to 14,778 students in 311 high schools throughout the state in FY08.

The **Resource Center** continues to play a vital role in the Office's education and technical assistance efforts. It houses many waste management periodicals, videos and other materials produced by the Office including "For Your Information" fact sheets and activity books. The Resource Center also is home to the Office's toll-free recycling hot line. In FY08, 2,964 calls were received and 390 information packages were mailed.

Outreach and Education from the Office is a constant priority. Through DHEC's Outreach and Education Committee, a variety of projects and in-house monthly messages are provided, along with assistance to other bureaus including staff-support to Champions of the Environment and Earth Gauge messages as well as events held for the public. During FY08, 20 recycling, composting and career day presentations were made to

elementary and high schools. Earth Day 2008 in April provided opportunities to distribute environmental educational material to hundreds of schools and DHEC regional offices.

The 13th annual **Recycle Guys Awards Program** was held in March recognizing the top recycling programs, projects and people throughout South Carolina. Madaline Braxton, Alysen Woodruff and Charley Butts were named Recycling Professionals of the Year. Ed Marr of the City of Greenville and Jim Minor of Beaufort County were named Solid Waste Directors of the Year for their work in support of waste reduction and recycling.

The City of Rock Hill was honored as the Outstanding Municipal Waste Reduction and Recycling Program. Clarendon County (less than 50,000 population), Pickens County (more than 50,000 and less than 150,000 population) and York County (more than 150,000 population) were named Outstanding County Waste Reduction and Recycling programs.

The S.C. Department of Transportation (State Agency), Charleston Air Force Base (Federal Facility) and Bob Jones University (College or University) were named Outstanding Waste Reduction and Recycling Programs in their respective categories. Dorchester County was honored as the Outstanding Local Government Used Oil Recycling Program.

Denise Applewhite of Conway Middle School was named Recycling Teacher of the Year while one of her students, Markquez A. Jamison, was named Recycling Student of the Year. St. Paul the Apostle Catholic School of Spartanburg and North Myrtle Beach High School were named Recycling Schools of the Year. Leadership York County (Class of 2007 Environmental Team) was named the Volunteer of the Year while Tina Harmer of York County was honored as the Most Valuable Player.

#### Training

During FY08, the Office developed the **S.C. Recycling Professionals Certification Training** program as part of its comprehensive education and outreach programs for local government solid waste professionals. The certification training covers a wide variety of topics and issues – ranging from collection and markets to public education and funding – that are critical to the success of any local recycling program. The training was designed to provide recycling professionals with the tools and resources to successfully manage sustainable recycling programs.

As part of the training program, a comprehensive training manual and certification exam were developed. The first S.C. Recycling Professionals Certification Training was held in September 2007. It lasted for three-and-a-half days and resulted in 63 individuals earning the designation of Certified S.C. Recycling Professional.

This certification training is the first step in this new professional development program. In addition to the initial certification training, the Office requires participants to receive a minimum of 45 contact hours (i.e., actual time spent in trainings, workshops, seminars, etc.) of recycling-related professional development every three years in order to maintain the designation of Certified S.C. Recycling Professional.

The S.C. Recycling Professionals Certification Training program was developed in conjunction with R.W. Beck, Inc. with Office staff providing oversight and content review. Assistance – including input and review – was provided by S.C. local government recycling coordinators.

The Office also held four solid waste management workshops as part of its professional development track: (1) mandatory certification training for Municipal Solid Waste (MSW) Landfill Managers and (2) MSW Landfill Supervisors as well as introducing (3) MSW Transfer Station Operators and (4) Construction and Demolition Debris Landfill Operators training in FY08.

The primary goal of these courses is to provide individuals who work as solid waste facility operators a professional training program designed to help improve operational practices at their facilities. The trainings increase awareness of the impact that the operational practices have on human health, safety and the environment. Through these annual trainings, participants gain insight on: operating a facility that is safe for employees and customers; maintaining regulatory compliance and environmental integrity at the facility; operating profitably and/or cost effectively; and improving industry standards through better operation by well-trained solid waste management professionals. In FY08, 115 individuals were trained in the four workshops.

Smart Gardening, formally known as GROW (Gardening and Recycling Organics Wisely) is a program that highlights solid waste reduction by teaching homeowners and schools about backyard composting. The Office offers workshops, printed material and technical assistance to increase composting awareness in South Carolina. One of the centerpieces is "A Green Guide to Composting, Landscaping and Gardening in South Carolina." This publication focuses on many issues including soil enrichment, native planting, smart watering, composting and minimizing use of chemical treatments. Smart Gardening workshops are three-hour sessions taught in partnership with staff, S.C. Master Gardeners, local Clemson Extension or Soil and Water Conservation agents. Participants receive the publication as part of the workshop. People who call the recycling hot line to ask about recycling yard trimmings can request a complimentary copy of a booklet, "Home Composting Made Easy". The Office servers as the state contact for the annual International Compost Awareness Week (ICAW) campaign, held each May.

In FY08, there were 12 composting workshops held, including Lexington (2), Orangeburg (3), Richland (4), Sumter (2) and York counties serving almost 400 residents and one elementary school grade.

The Office also offers **Recycling Center Attendant Training** to local governments to ensure that best management practices are used and that the attendants have the latest information and customer service skills. The attendants at manned convenience centers are the front line for county residents to get recycling and disposal information. The Office offers this training for any county or municipality that needs assistance to encourage good public relations and employee moral. The training includes Frequently Asked Questions from the Office's Web site with answers specific to the county. Each attendant is given a certificate of completion and is eligible to be nominated as the Recycling Attendant of the Year for the county with an award presented during the annual Recycle Guys Awards Program.

There were eight attendant training workshops in FY08 in Beaufort, Chester, Chesterfield, Dillon, Kershaw, Orangeburg (two) and Saluda counties with 235 attendants and 21 county personnel attending.

#### **Technical Assistance**

The statewide **used motor oil recycling program** targeting do-it-yourselfers (DIYers) continues to flourish. Through a combination of technical assistance and grant funding for local governments, the Office has helped develop one of the nation's most comprehensive used motor oil recycling programs targeting DIYers.

Since the program began in 1990, more than 14 million gallons of used motor oil have been collected from DIYers. There are currently more than 800 sites across South Carolina for the collection of used motor oil from DIYers. In addition, most counties collect used motor oil filters and motor oil bottles from DIYers for recycling. Filter and bottle recycling efforts, however, are not measurable as many counties collect and market used motor oil filters and motor oil bottles with other metals and plastics, respectively. With this being the case, not all filters and bottles that are being recycled are being counted directly.

The Office continues to provide local governments with oil bottle drain racks that hold up to 50 motor oil bottles for use at recycling centers and processing facilities. Draining the motor oil bottles makes them more marketable. Drained bottles can normally be mixed with other HDPE (#2) plastics for recycling. Since 2000, the Office has provided nearly 500 drain racks to local governments.

To assist farmers with the proper management of used motor oil generated on small farms, DHEC continues to encourage local governments to establish used motor oil recycling sites for farmers. Agricultural oil tanks typically hold 600 gallons of used motor oil and are fitted with a pump and hose in an effort to make it easier for farmers to deliver up to 55 gallons of used motor oil at one time. Such tanks are currently available at 56 sites in 40 counties.

South Carolina continues to expand its used motor oil recycling program by adding oil/gasoline mixture collection sites to the local government programs. The oil/gasoline mixture tanks are typically 500 gallons and are designed to accept oil, gasoline and oil/gasoline mixtures from lawn equipment and recreational vehicles. Oil/gasoline mixture collection sites have been established at 65 sites in 40 counties.

The Office continued to work with a member of the S.C. Legislature on **electronics waste** (e-waste) **recycling** legislation. Staff conducted research on e-waste laws throughout the United States, answered questions and met with the representative to discuss issues. The work resulted in legislation being reintroduced in 2008 along with two other e-waste bills. At the end of the legislative session, however, none of the bills advanced.

In addition, the Office worked with the same legislator to draft legislation that would amend the state's procurement code to require the purchase of computers, monitors and laptops that met the requirements of the **Electronic Product Environmental Assessment Tool** (EPEAT). EPEAT is an environmental procurement tool designed to help institutional purchasers evaluate, compare and select electronic equipment based on its environmental attributes. The legislation was introduced, but did not pass.

The **S.C. Smart Business Recycling** program (Smart Business) offers free technical assistance including printed materials, research, contacts and site visits to assess waste reduction and recycling opportunities. A kick-off press conference was held November 15th, 2007 as a part of America Recycles Day. The goal is not only to increase business recycling, but also to increase the number of businesses that report their recycling tonnages annually. This should go a long way in helping South Carolina reach its recycling goal of 35 percent. This past year, 195 businesses were assisted through phone and e-mail and 18 site visits were conducted. In addition, a workshop was held May 1, with 45 people attending from 23 different organizations. Smart Business has displayed or presented at the following events: Compliance Assistance conference, Recycling Market Development Advisory Council (RMDAC) Recycling Forum, Columbia's Climate Protection Action Campaign Bootcamp and Conference as well as the S.C. Environmentally Excellence Program Celebration. Smart Business is a partnership between the Office, DHEC's Center for Waste Minimization and DHEC's Small Business Environmental Assistance Program as well as the S.C. Department of Commerce's RMDAC Program.

As part of its efforts through the S.C. Smart Business Recycling Program, the Office continued to maintain the **S.C. Materials Exchange** (SCME), a free online service (www.scdhec.gov/scme) that seeks to reduce waste by facilitating the exchange of reusable materials by businesses, non-profit organizations and government. In short, the SCME serves as a "matchmaking service" that provides users access to information on materials available or wanted. Use of the SCME has continued to be brisk. During FY08, 44 new listings were posted (18 for materials available and 26 for materials wanted). While the Office attempts to follow up with users of the SCME on the status of their postings, very few users provide any information beyond the initial posting. Anecdotal information, however, indicates that a number of successful matches have been made.

The Office continues to work closely with the **S.C. Solid Waste Professionals Association.** The group, which formed in January 2007, represents public sector solid waste directors, public works directors and other solid waste professionals. The group's mission is to provide a forum to discuss and develop best solid waste management practices in order to protect the environment, conserve resources and build a sustainable future. With the support of the Office, the group held regular meetings to discuss a variety of issues including updates on regulations, planning and recycling. In addition, the S.C. Solid Waste Professionals Association held a two-and-a-half-day conference in September 2007 with about 50 local government representatives in attendance.

Following the lead of the solid waste professionals, several local government recycling professionals formed the **S.C. Recycling Professionals Association** in December 2007. The association – which consists primarily of local government recycling coordinators - meets regularly to provide its members an opportunity to network, share successes and address common issues to promote recycling in South Carolina. Office staff attend the association's meetings and provide support as needed.

America Recycles Campaign (AR) is a national awareness effort held every November 15 to remind Americans of the environmental and economic benefits of recycling as well as to buy products made from recycled materials. Americans are asked to sign a challenge card pledging to recycle and buy recycled content products. The Office, which has been involved with AR since the national celebration began in 1997, has developed one of the nation's top programs. South Carolina collected nearly 23,000 challenge cards in FY08. The cards are used in the state drawing for a \$1,000 U.S. Savings Bond. This year's winner was Carlos Mantilla of Oakview Elementary School in Simpsonville.

During FY08, the Office partnered with The Sustainability Institute (based in Charleston) to produce the **S.C. Green Building Directory** (Directory). The online Directory (<u>www.scgreenbuildingdirectory.org</u>) provides information on construction and demolition debris recycling, recycled-content building products as well as green building techniques. The Directory – which is funded primarily by the Office with additional support from the S.C. Energy Office and the S.C. Department of Commerce – allows users to easily access information on green building products and services offered by more than 200 companies. From January to June 2008, the Directory was visited by 3,850 unique users.

**RecycleMania,** organized by university recycling coordinators with the support of the U.S. Environmental Protection Agency's (EPA) WasteWise program and the National Recycling Coalition, is a national recycling competition in which colleges and universities engage in an environmentally friendly rivalry to determine which schools recycle the most and generate the least waste. For the third consecutive year, the Office promoted this program in South Carolina.

As a result of the Office's efforts, twelve S.C. colleges and universities participated in the 10-week competition. Bob Jones University, Charleston Southern University, The Citadel, Clemson University, Coker College, College of Charleston, Furman University, Lander University, the Medical University of South Carolina, USC-Aiken, Winthrop University and Wofford College were among more than 400 schools from 46 states that participated in the seventh annual RecycleMania competition. South Carolina had one of the strongest showings in the RecycleMania competition, with participating schools recycling more than 1.3 million pounds of material as part of the competition.

The **S.C. Resource Conservation Challenge** (S.C. RCC) was developed in 2003 to encourage all state agencies, colleges and universities, schools and school districts as well as local governments to conserve natural resources, protect the environment and perhaps save money in the process. The challenge was modeled after the U.S. EPA's Resource Conservation Challenge.

In October 2007, the fifth annual S.C. RCC Workshop was held. Nearly 100 individuals attended the workshop that provided information on a wide range of topics. The workshop began with an overview of climate change and how our activities impact the environment. Other presentations covered computer leasing, the Electronic Product Environmental Assessment Tool (which helps consumers select more environmentally friendly computers), energy conservation plans and utility bill analyses. A key presentation on sustainability tied all of the other topics together. Each attendee received a variety of materials to assist with his/her organization's resource conservation efforts.

In May 2006, South Carolina passed legislation setting up a **mercury switch removal program**. The program is intended to remove and recycle mercury switches – found in convenience lights in trunk and hood compartments as well as anti-lock brakes – from vehicles before they are crushed and shredded for recycling. The state's program is being offered in partnership with End-of-Life Vehicle Solutions (ELVS), a non-profit corporation formed by automobile manufacturers to manage the collected switches as well as provide educational materials.

During FY08, Office staff continued to promote the mercury switch removal program and encourage automobile dismantlers (junkyards) and scrap metal recycling facilities to participate in the program. Staff presented on the program at DHEC's Environmental Permitting Staff Retreat and Nucor Steel's Supplier Appreciation and Information Day. To date, 64 facilities (a 45% increase from last year) have registered to participate in the program. During FY08, 4,311 switches were recovered – resulting in 9.483 pounds of mercury being recycled and kept out of the environment.

DHEC's Office of Environmental Quality Control began developing a **mercury reduction strategy** in FY08. The purpose of this strategy is to identify collaborative ways that the public, industry, interested groups and government can reduce the risk from mercury exposure. In support of that effort, Office staff participate in the Bureau of Land and Waste Management's Mercury Workgroup. Office efforts to reduce mercury in the environment include promoting fluorescent bulb, thermostat, electronics and mercury switch recycling. The Office also was involved in a pilot program to remove mercury from schools in FY07.

Lastly, this past fiscal year approximately sixty (60) financial assurance mechanisms were reviewed by staff.

#### **Publications**

The following projects were completed for the Office during FY08:

- "The S.C. Solid Waste Management Annual Report" was designed, compiled and printed. This
  publication featured updated text, graphics and county-specific charts detailing South Carolina's
  waste generation as well as its waste reduction and recycling efforts;
- "The S.C. Recycling Professionals Certification Training Manual" was designed and printed in FY08;
- Two registration brochures -- one for Municipal Solid Waste Landfill (MSWL) managers and another
  for MSWL supervisors -- were updated and printed. Two additional registration brochures -- one for
  transfer station operators and another for construction and demolition debris landfill operators -also were updated, printed and distributed;
- Awards, certificates, programs and signs were produced for the Office's 13<sup>th</sup> annual Recycle Guys Awards Program;
- The "State Agencies and Colleges/Universities Waste Reduction, Recycling and Buy Recycled Annual Report" was prepared and submitted to the Governor's Office in FY08;
- Registration agendas, programs and nametags were produced for the S.C. Solid Waste Professionals Association Workshop;
- Many projects for city and county recycling programs were completed during FY08. They include: new or updated brochures for Abbeville, Kershaw, Oconee and Williamsburg counties; newspaper ads for Abbeville, Cherokee, Clarendon, Greenville, Lexington, Marion, Williamsburg and York counties as well as the City of Rock Hill; billboard artwork for Barnwell, Chester, Chesterfield, Dorchester, Greenville, Greenwood, Oconee, Pickens and Sumter counties. In addition, customized artwork was created for: a recycling trailer for Berkeley County; signs for the cities of Easley and Seneca as well as Florence and York counties; recycling bin stickers for the City of Forest Acres; postcards for Greenwood and Pickens counties; a "Going Green" sticker to encourage businesses to recycle for the City of Columbia; and posters for Anderson County and the cities of North Augusta and Rock Hill;
- The Office's Web site was redesigned to match the agency's other Internet sites. New pages were added and information was updated to make the site more user friendly. The Office's Smart Business Recycling Program Web site also was redesigned, updated and expanded;
- Take Action Today Workshop materials including certificates, nametags, agendas, signs, fliers and forms – were produced in FY08;
- A new coloring book entitled "I Want You to Color this Recycling Poster Coloring Book" was created using the artwork from many of the Office's recycling mini-posters; and
- A guide to encourage schools to start, maintain and expand recycling program was designed, printed and distributed in FY08.

The following materials were completed for the Office's partners and other DHEC programs:

- Nametags and signs were made for DHEC's Bureau of Land and Waste Management (BLWM) Program Day. Artwork for a stadium cup also was designed for the event;
- Three issues of "Land Lines" BLWM's quarterly employee newsletter -- were designed and posted on the agency's Intranet;
- T-shirt and pencil artwork was designed for the EQC Outreach Group to promote Earth Day 2008. It's Earth Day display also was updated and printed;
- A display for DHEC's Division of Compliance and Enforcement was developed and produced;
- Several projects were completed for school, college and university recycling programs. They include: mini-poster artwork for Coastal Carolina University, Conder and Polo Road Elementary Schools and Irmo Middle School; recycling bin stickers and truck signs for the Medical University of South Carolina; tote bag artwork for Columbia College; and campus recycling signs for the University of South Carolina's "Green Quad" program;
- Four issues of the Underground Storage Tank Program's "UST Newsletter" were produced and printed;
- A brochure was updated and award certificates were produced for the S.C. Green Step Program; and
- A variety of materials (including certificates, membership lists, contact lists, application brochures, etc.) were updated and printed for the S.C. Environmental Excellence Program. Its 10-year report also was designed and printed.

#### SOLID WASTE PLANNING AND REPORTING

#### **Local Planning**

The Act requires the State and each county or regional government to develop and implement a Solid Waste Management Plan. The purpose of the plans is to ensure that there is adequate but not excess capacity to manage the solid waste generated in the state. DHEC planning activities ensure that solid waste permitting decisions are consistent with the state and local plans.

Most solid waste facilities must be determined consistent with the state and local plan prior to being permitted. This includes MSW landfills, Part II and Part IV landfills, ISW landfills, Solid Waste Processing facilities, Waste Tire Processing facilities, Incinerators, Transfer Stations, Research, Development and Demonstration facilities and facilities for the off-site treatment of contaminated soil. The Solid Waste Planning section reviews proposed facilities for consistency with both the state and local plans as needed during the permitting process.

In addition, revised local plans that are submitted to DHEC are reviewed for completeness and consistency with state and federal law and regulation. The following counties submitted new or revised solid waste management plans during FY08:

COUNTY	SUBMISSION
Abbeville County	September 2007
Marlboro County	May 2008
Richland County	December 2007

#### **State Planning**

Changes to the State Solid Waste Management Plan (state plan) are developed by DHEC and must be approved by the DHEC board. No changes were made to the state plan during FY2008. The last state plan was adopted in 1999, and a revision was made in 2005. DHEC anticipates revising the state plan in 2009.

#### **Solid Waste Reporting**

The Act requires DHEC to publish a comprehensive annual report on solid waste management in the state. "The S.C. Solid Waste Management Annual Report" must be submitted to the Governor and General Assembly by March 15 each year. The report, which is completed by the Office, is required at a minimum to include: an overview of the amount and/or composition of waste that is recycled, disposed of and incinerated; the progress of the state and each county toward meeting the state's recycling and disposal goals; revisions to the state's solid waste management plan; and recommendations to the Governor and General Assembly for improving solid waste management.

The most recent report – which reflects solid waste management activities for FY07 (July 1, 2006 to June 30, 2007) – provides information on all types of solid waste, but focuses on MSW because that is what recycling and disposal goals are based on in South Carolina.

Counties and permitted solid waste facilities (except for private, on-site industrial landfills) provide the information used to compile this report. Counties are required to provide recycling information and solid waste facilities are required to report disposal information for the previous FY to DHEC annually. The state uses a Web-based solid waste data management system – called Re-TRAC – to collect and analyze recycling and disposal data from counties. Trainings were held through out the state to provide information on changes and improvements made to the solid waste data management system.

More than 5 million tons of MSW was generated in South Carolina in FY07 – a slight increase from the previous FY. Of that amount: 1,551,365 tons (31.0 percent) were recycled – which is just under the 35 percent recycling goal.

In addition, 224,919 tons (4 percent) were disposed of at a waste-to-energy facility (incinerator) in Charleston County and 3,235,738 tons (65 percent) were disposed of in MSW landfills. The amount of MSW disposed of per capita stayed about the same from FY06 to FY07 at a rate of 4.4 pounds per person per day (p/p/d). This rate has changed little in the past six years and remains above the state's disposal goal of 3.5 p/p/d.

The report also details the recycling efforts of state agencies and colleges/universities. In FY07, they recycled 17,023 tons of material, reflecting a decrease of 4 percent from FY06. This decrease is the result of a one-time event with a university that recycled a large amount of construction and demolition debris during a project that took place in FY06 but was not repeated in FY07. Specifically, 61 state agencies reported recycling 10,619 tons of material. Of that amount, the No. 1 item recycled was office paper followed by mixed metal. Twenty-four colleges and universities reported recycling 6,404 tons of material. Of that amount, the number one item recycled was office paper followed by corrugated cardboard.

#### REGULATION DEVELOPMENT

The South Carolina General Assembly approved an amendment of Chapter 61-107 Solid Waste Management regulations during the 2008 legislative session. **Regulation 61-107.19 SWM: Solid Waste Landfills and Structural Fill** became effective upon publication in the State Register on May 23, 2008. A minor erratum was published in the State Register on July 25. 2008. This amendment simultaneously repeals and replaces Sections 61-107.11 Construction, Demolition, and Land-clearing Debris Landfills, 61-107.13 Municipal Solid Waste Incinerator Ash Landfills, 61-107.16 Industrial Solid Waste Landfills, and 61-107.258 Municipal Solid Waste Landfills.

On October 26, 2007, DHEC filed a Notice of Drafting in the State Register to amend **R.61-107.17 SWM: Demonstration-of-Need**. This regulation section will broaden the scope of the regulation as well as update it to correlate with the new Section 61-107.19.

DHEC proposes an amendment of R.61-107.4 SWM: Yard Trash and Land-Clearing Debris; and Compost. This proposed amendment will broaden the scope of the regulation to provide more flexibility to include composting options for other solid waste streams. Chipping/shredding operations will be addressed in this proposed amendment. It also will address problems encountered with the operation of existing facilities.

#### SOLID WASTE PERMITTING

The responsibilities of the Solid Waste Permitting Section (Section), located within the Division of Mining and Solid Waste Management, include reviewing applications for permits, registrations and other forms of approval for the construction and operation of solid waste management facilities in the state and rendering a permitting decision for each. Table 1 is a summary of all permitting decisions. Table 2 lists the facility and associated permitting decision. Table 3 is a summary of other approvals completed by the Section.

### SUMMARY OF PERMITTING DECISIONS (Table 1)

FACILITY TYPE	NEW PERMITS	PERMIT MODIFICATIONS
Short-Term C&D Landfill	0	0
Land-Clearing Debris Landfill	1	4
On-Site Industrial C&D Landfill	0	0
Long-Term C&D Landfill	1	11
Composting/Wood Grinding	4	1
Incinerator Ash Landfill	0	0
Contaminated Soil Treatment	0	0
Air Curtain Incinerator	0	0
Municipal Solid Waste Incinerator	0	0
Industrial Solid Waste Landfill	2	8
Land Application of Solid Waste	0	1
Municipal Solid Waste Landfill	0	2
Research Development & Demonstration	0	0
Solid Waste Processing	0	3
Solid Waste Transfer Station	0	0
Used Oil Facility	0	1
Waste Tire Facility	2	2
Total	10	36

### FACILITY SPECIFIC PERMITTING DECISIONS (Table 2)

FACILITY NAME AND TYPE	PERMITTING DECISION
Land-Clearing Debris LF	Permitting Decision
Ronald J. Norris	New permit
Lawson B. Watson	Modification (transfer of ownership)
Randy Crawford	Modification (facility name change)
James R. Hughes	Modification (short-term to a land-clearing yard trash)
BHC Trucking, Inc.	Modification (transfer of ownership)
C&D Part IV (Long-term) LFs	Permitting Decision
City of Lake City	New permit
WCA Shiloh Landfill LLC	Modification (vertical expansion)
Laurens County Landfill LLC	Modification (tonnage increase)
Tri County Solid Waste Authority	Modification (vertical expansion & tonnage increase)
City of Clinton	Modification (tonnage increase)
Charleston County Solid Waste & Recycling	Modification (expansion & tonnage increase)
Carter Excavating Company Inc	Modification (closure cost estimate revised)
Williams Sand & Gravel Company	Modification (tonnage increase)
Enterprise Material Handling Facility	Modification (tonnage increase)
Sandlands C&D LLC	Modification (expansion)
Georgetown County	Modification (tonnage increase)
Greenwood County Public Works Dept.	Modification (tonnage increase)
Composting / Wood Grinding Registration	Permitting Decision

Marion County	New permit
Shane Herron	New permit
Fowler Corporation	New permit
Herman E. Muckenfuss	New permit
Callahan Grading LLC	Modification (transfer of ownership)
Industrial Waste LF	Permitting Decision
Washington Savannah River Company	New permit
SCE&G Wateree Station	New permit
CMC Metal Recycling	Modification (new liner design)
Domtar Paper Company LLC	Modification (transfer of ownership)
Intertape Polymer Group	Modification (closure/post-closure plan)
Duke Energy Carolinas LLC Oconee Nuclear	Modification (closure/post-closure plan)
Kohler Company Spartanburg	Modification (expansion)
Southeast Resource Recovery LLC	Modification (modification of waste stream; revised
•	closure cost estimates)
Sonoco Products Company	Modification (closure/post-closure plan)
Pee Dee Environmental Services	Modification (lateral expansion; tonnage increase)
Land Application	Permitting Decision
Domtar Paper Company LLC	Modification (transfer of ownership)
Municipal SW LF	Permitting Decision
Abbeville County Landfill	Modification (tonnage increase)
Lee County Landfill	Modification (fill sequence)
Solid Waste Processing	Permitting Decision
Geocycle LLC Dorchester	Modification (transfer of ownership)
Warren M Lee	Modification (add industrial waste processing)
VLS - Piedmont LLC	Modification (facility name change)
,	
Used Oil Facilities	Permitting Decision
VLS - Piedmont LLC	Modification (facility name change)
	, , , , , ,
Waste Tire Facilities	Permitting Decision
Rubber Recovery Technologies	New permit
Kiln Direct Inc	New permit
Lafarge	Modification (updated drawings)
Rubber Recovery Inc	Modification (updated operations plan & financial
	assurance)

#### **OTHER APPROVALS (Table 3)**

TYPE OF APPROVAL	DECISIONS / APPROVALS
Cell Certification Approvals	9
New Waste Stream Approvals	3
Termination of Permits	5
Structural Fill Approvals	0
Miscellaneous Approvals	12
Total Approvals	29

#### SOLID WASTE HYDROGEOLOGY

Many solid waste facilities require groundwater approvals as a part of the permitting process. The Solid Waste Groundwater Section located within the Division of Hydrogeology provides these approvals. The table below summarizes the approvals made during FY08.

#### **GROUNDWATER APPROVALS**

TYPE OF APPROVAL	DECISIONS/APPROVALS
Preliminary Hydrogeologic Characterization Report	1
Site Hydrogeologic Characterization Work Plan	1
Site Hydrogeologic Characterization Report	1
Annual Groundwater Monitoring Report	93
Monitoring Well Approval Request	28
Methane Well Approvals	9
Total Approvals	133

#### SOLID WASTE COMPLIANCE

The Solid and Hazardous Waste Compliance Section is comprised of a Solid Waste Compliance unit and a Hazardous Waste Compliance Unit in the Bureau of Land and Waste Management. The Solid Waste Compliance Unit receives and acts upon solid waste compliance referrals, referred by one of DHEC's Regional offices. The Solid Waste Compliance Unit also receives, reviews and acts upon referrals resulting from routine inspections conducted at permitted and registered solid waste management facilities. In instances where regulatory violations occur, a referral may be made to the Solid Waste Enforcement Section.

The Compliance Unit is responsible for tracking the status of one hundred fifty two (152) registered waste tire haulers. Waste tire haulers are required to renew registrations prior to March 1 of each year. The State has fourteen (14) permitted waste tire facilities. Seven (7) of these facilities are processing facilities that produce tire chips for use in septic tank drainage fields or for boiler fuel (tire derived fuel), and crumb rubber for use in a variety of non-manufactured products. Seven (7) facilities are collection sites with capacities to manage greater than 2500 scrap tires. These facilities ship tires to authorized waste tire processing facilities for recycling. One (1) facility is a waste tire disposal site. Staff accompanied regional office staff on over one hundred (100) routine site visits/inspections. Compliance unit members continue to work with the regional

offices on compliance problems at permitted facilities. Compliance unit members continue to work closely with the staff of the Enforcement Section to ensure proper operation and maintenance of all solid waste management facilities. Approximately thirty four (34) projects were referred for enforcement this fiscal year. Open dumping of construction, demolition, land-clearing debris and other solid waste continued to be a problem throughout the state. During the year approximately seven (7) disclosure statements were reviewed and approved. There are currently seven hundred sixty one (761) registered used oil collection sites in the State. Staff is tracking compliance of seventy-one (71) used oil transporters and working closely with Hazardous Waste Compliance and Emergency Response to make sure all collection sites and transfer sties are properly registered and operated. Staff continues to work with these facilities to ensure compliance with the regulations. Lead-acid battery collection, recycling and recovered material processing facilities are required to renew registrations prior to March 1. There are currently two hundred eighty four (284) active sites registered with DHEC.

Compliance staff participated in numerous training sessions throughout the year. Staff also participated as instructors for DHEC's Operator Certification Training program for supervisors and managers of Municipal Solid Waste Landfills

#### SOLID WASTE ENFORCEMENT

The Solid Waste Enforcement Section (Enforcement Section) processes enforcement referrals for the solid waste program. The Enforcement Section receives and acts upon compliance referrals, initiated by one of DHEC's regional offices, or DHEC's Solid and Hazardous Waste Compliance Section (Compliance Section). Referrals are assigned to an Enforcement Section project manager. The project manager reviews the file, develops and issues a Notice of Alleged Violation and Enforcement Conference (NOAVEC) to the alleged violator (Respondent). The NOAVEC outlines the alleged violations and includes a date for an enforcement conference. Following the enforcement conference, the project manager reviews the information provided and after consultation with the Section Manager, determines if the violations warrant a formal enforcement action. If the decision is made to proceed with formal enforcement action, a proposed consent order is drafted and sent to the Respondent for review and comment. The Enforcement Section uses approved civil penalty assessment procedures and approved DHEC policies in deciding upon appropriate civil penalties. All penalty assessments are subjected to a peer review process and management approval to ensure consistency and fairness.

If a Consent Order is issued, the language of the Order and the assessed civil penalty are negotiable. Once consensus is reached, the Respondent and DHEC sign the Order. The Order is considered executed when the Deputy Commissioner signs it. In most instances, a Consent Order requires corrective actions(s) and the payment of a civil penalty. Civil penalties are transmitted into the state general fund or as directed by statute. If a Consent Order cannot be agreed upon, DHEC may issue an Administrative Order without the Respondent's consent, which is subject to an appeals process. The Enforcement Section coordinates closely with DHEC's Office of General Counsel on all cases and testifies in court, as required, regarding contested cases on appeal.

The solid waste program referrals usually involve cases of illegal disposal (open dumping) of solid wastes such as construction and demolition debris, land-clearing debris, shingles, used oil and waste tires. Other cases involve actions against permitted solid waste management facilities such as landfills, solid waste transfer stations, waste tire processing facilities, and wood chipping and composting facilities for operational, regulatory and permit violations.

#### Actions taken during the fiscal year include:

ADMINISTRATIVE ORDERS EXECUTED	4
Consent Orders executed	28
Consent Agreements executed	4
NOAVEC's issued	34
Warning Letters issued	7

During the fiscal year the Enforcement Section assessed civil penalties totaling \$201,370 regarding solid waste violations.

The Enforcement Section also is assisting in the development of a formal training program for new enforcement personnel, in conjunction with the other enforcement programs within Environmental Quality Control.

The Enforcement Section implemented two pilot initiatives for the Bureau of Land and Waste Management involving an alternative enforcement approach. One approach includes the settlement of minor violations through giving the respondent an option to sign a Consent Order and waive the right to an enforcement conference, in order to save time, travel and other resources. The other approach involves having minor open dumping violations addressed through an enforcement process handled by the Regional Office in which the violations occurred, with input and assistance from the Enforcement Section.

Additionally, the Section has assisted with the development of a "Solid Waste Investigation Notice," which is a form that a solid waste inspector can complete and leave on the site immediately after an inspection to facilitate compliance under an accelerated timeframe.

#### SOLID WASTE INVESTIGATIONS

The Solid Waste Investigation Unit (Unit) within the Office of Criminal Investigations is responsible for investigating criminal violations of the S.C. Solid Waste Policy and Management Act and other state laws as necessary. The Bureau's Solid Waste Review Group may make referrals to the Unit. If a referral is accepted, one of the Unit's criminal investigators who are commissioned law enforcement officers is assigned to work the case, leading to possible criminal prosecution.