

ENERGY AND ENVIRONMENT CABINET

Department for Environmental Protection Division of Waste Management 200 Fair Oaks Lane, 2<sup>nd</sup> Floor Frankfort, Kentucky 40601-1190 www.kentucky.gov Leonard K. Peters Secretary

July 13, 2010

Robert Sherman, Director Legislative Research Commission Room 300, Capitol Frankfort, KY 40601

Mr. Sherman,

Steven L. Beshear

Governor

The Division of Waste Management submits this report on the expenditures and revenues of the Hazardous Waste Management Fund pursuant to KRS 224.46-580(13)(c).

Please find enclosed a hard copy of the report and an electronic version. If you have questions or would like additional information, please contact Allan Bryant at (502) 564-6716 ext. 4625 or Allan.Bryant@ky.gov.

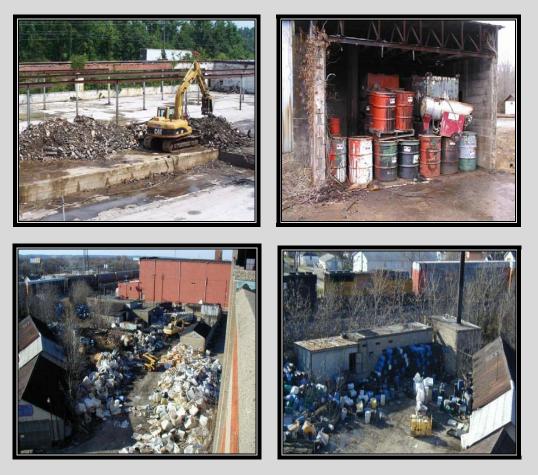
Sincerely,

Anthony R. Hatton, P.G., Director Division of Waste Management

enclosures



# ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION



### HAZARDOUS WASTE MANAGEMENT FUND

BIENNIAL REPORT ON REVENUES AND EXPENDITURES OF THE HAZARDOUS WASTE MANAGEMENT FUND

Fiscal Years 2009 and 2010

**Division of Waste Management** 

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#### **Introduction**

In 1980 the General Assembly created the Hazardous Waste Management Fund (HWMF) to provide the Energy and Environment Cabinet (Cabinet) with the funds necessary to protect the health of the citizens and environment of the Commonwealth from threats associated with releases of hazardous substances, pollutants and contaminants. Since 1980, nearly \$50 million has been spent specifically for cleanup of more than 550 contaminated sites, making the Commonwealth of Kentucky a cleaner and safer place to live. The HWMF also has cumulatively provided more than \$6.4 million in funding for the Kentucky Pollution Prevention Center (KPPC).

During the 2008 legislative session the HWMF was extended through June 30, 2016 and a requirement was added that tasks the Cabinet to submit a biennial report regarding HWMF revenues and related activities and expenditures. This biennial report is required by KRS 224.46-580(13)(c) and includes information from FY 2009 and FY 2010.

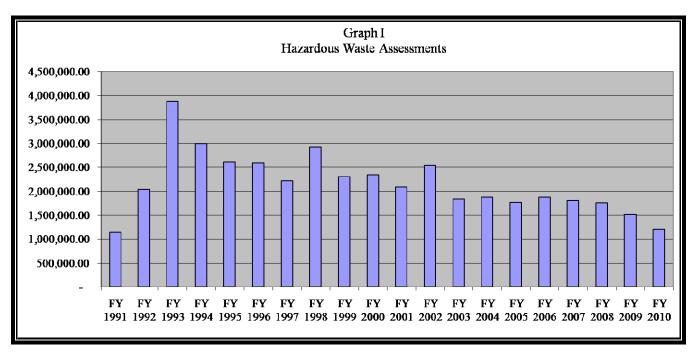
The Cabinet utilizes the monies created by the HWMF assessment for a variety of activities as follows:

- 1. Emergency response to address releases of hazardous substances, pollutants, and contaminants.
- 2. Small purchase removal projects with cost less than twenty thousand dollars.
- 3. Assessment and remediation of contaminated sites for which there is no viable responsible party.
- 4. As required by statute, transfer funds to the KPPC. KPPC provided a summary of their activities which is attached as Appendix A.
- 5. Technical oversight costs to conduct state-lead cleanups and to review cleanup documents submitted for sites for which there is a viable responsible party and technical oversight of environmental emergencies.

The HWMF assessment fee is authorized under KRS 224.46-580(8) and is assessed on generators of hazardous waste at the rate of one and two-tenths cents (\$0.012) per pound if the waste is liquid, or two-tenths of a cent (\$0.002) per pound if the waste is solid.

During the last twenty years there has been a steady decline in the amount of dollars generated annually through the HWMF assessment fee. There are several factors that contribute to the general decline in receipts of assessment fees. This includes companies filing for bankruptcy, multiple rate reductions and waste exclusions for generators, and a decline in the number of generators due to waste minimization efforts.

In 2008, the General Assembly passed legislation allowing generators who burned hazardous waste for energy recovery to be assessed one-half the rate outlined above. In order to keep a minimum balance of \$1.8 million in the HWMF, the General Assembly also authorized the Cabinet to transfer money from the Petroleum Storage Tank Environmental Assurance Fund (PSTEAF) in any fiscal year where assessment fees collected total less than \$1.8 million. Graph I below depicts HWMF assessment fees from 1991 through 2010.



### **Revenues and Expenditures for FY2009 and FY2010**

A summary of the revenues and expenditures for FY 09 and FY 10 is presented in Table I below.

<u>Table I</u>			
	FY09	FY10	
Revenues			
Assessments Collected	\$1,506,853	\$1,205,844	
Cost Recovery*	\$126,315	\$289,527	
Interest	\$8,239	\$9,754	
Transfer from PSTEAF	\$0	\$318,347	
Total Revenues	\$1,641,407	\$1,823,472	
Expenditures			
Superfund Branch Oversight	\$663,909	\$771,523	
Site Cleanups	\$749,079	\$1,052,010	
KPPC**	\$299,705	\$247,079	
Environmental Response Team (ERT)	\$265,388	\$262,000	
Total Expenditures	\$1,978,081	\$2,332,612	
<u>Transfers</u> ***			
Funds moved into Capitol Projects	\$500,000	\$150,000	
Returns from Capitol Project accounts	\$178,204	\$300,000	

NOTE: The expenditures and revenues displayed in Table I will not balance due to overlap from one fiscal year to the next.

\*The Cabinet is authorized to cost recover HWMF dollars when a viable responsible party can be identified.

\*\*KPPC provides assistance to industries, businesses, and other organizations to develop environmental solutions for improved efficiency. KPPC receives twenty percent of total assessments collected each year. See Appendix A.

**\*\*\***A Capitol Project may include a site remediation or a declared environmental emergency, typically costs more than \$20,000 and may cover a multi-year time frame. Project scope reductions or completions below projected costs will result in transfers of dollars back into the HWMF.

#### **Environmental Response Team**

The Cabinet's ERT is housed within the Department for Environmental Protection. The ERT is tasked with responding to a variety of environmental emergencies ranging from petroleum releases, landfill fires, train derailments and many other environmental issues that arise which require immediate attention.

In FY09 the ERT received 13,763 notifications; 449 of which required a response. In addition, eleven declared emergencies were addressed using the HWMF in FY09. In FY10 the ERT received 12,776 notifications; 455 of which required a response. In FY10, ten declared emergencies were addressed using the HWMF. When possible, the ERT pursues cost recovery for emergency projects to help offset administrative and equipment costs.

### **Small Purchase Removals**

The Cabinet's Division of Waste Management Superfund Branch not only manages large, capitol project state-lead site characterization and cleanups, but also numerous small-purchase removals that are equally important. Throughout the Commonwealth, the Superfund Branch is called upon to perform and/or facilitate characterization and cleanup on sites ranging from contaminated wire burning operations and chemical spills to abandoned drum characterization and disposal. These sites are often located in readily accessible areas such as public parks and roadways, and can be contaminated with heavy metals such as lead and arsenic and/or toxic or cancer-causing chemicals like PCBs and other industrial wastes. If not remediated these sites have the potential to be immediately dangerous to local residents, wildlife, and vegetation, and pose long-term risks to both the public and the environment.

In FY09, small purchase remedial actions directed and/or conducted by Superfund Branch personnel led to the removal and proper disposal of 59,114 lbs. of waste. FY10 saw an increase in the amount of waste removed and properly disposed, with a total of 774,719 lbs. through June 2010. This increase is due in part to a January 2010 removal of lead impacted soils at the B & J Battery site, totaling 499,040 lbs.

In the last two fiscal years the Superfund Branch characterized and remediated forty-five contaminated properties using small purchase authority, averaging 3.75 statewide cleanups per month. Total expenditures for these cleanups were \$297,228.

### **Division of Waste Management Superfund Branch**

The Superfund Branch utilizes HWMF dollars to provide technical oversight/cleanup and document review for responsible parties conducting cleanup of contaminated properties. Many of these properties result from previous heavy industrial activities such as wood treatment facilities and former chemical plants and other sources such as dry cleaners.

The Superfund Branch utilizes HWMF monies to directly manage (state-lead) the cleanup of contaminated sites for which there is no viable responsible party. The HWMF is also used to fund oversight and maintenance activities on federal Superfund sites that have been delisted by the United States Environmental Protection Agency. These expenditures are likely to increase over time as more federal sites are delisted.

In FY 09 the Superfund Branch registered 165 new sites and closed 409 sites. In addition, 1279 technical site reviews were completed in FY 09. In FY 10 the Superfund Branch registered 207 new sites and closed 226 sites. Also in FY 10, the Superfund Branch completed 1412 technical site reviews.

A positive outcome related to cleanups conducted under state-lead is that formerly contaminated properties have been remediated to either unrestricted residential use or industrial use with institutional controls in place. As a result, these properties are potentially available for redevelopment/reuse.

A list of capitol projects is presented below in Table II. These projects will require a significant amount of funds from the HWMF.

Table II			
Capitol Project Name	County		
Watson Gate	Casey		
Familee Laundry	Larue		
Various Projects (under \$20,000)	Varies		
Middleboro Tannery	Bell		
Barrel Services	Jefferson		
Kerschner Property	Franklin		
KY Tire & Timber	Graves		
Kim's Dry Cleaners	Jefferson		
Carrollton Solvent	Carroll		
Kentucky Wood Preserving	Clark		
Bluegrass Industrial Services	Rockcastle		
Quality Cleaners	Marshall		
Goodyear Dump	Rockcastle		
Louisville Environmental Services	Jefferson		
Distler Brickyard	Jefferson		
Distler Farm	Hardin		
Home Oil & Gas	Daviess		
Jefferson Forest Drum Site	Bullitt		
Lee's Lane Landfill	Jefferson		
Walgreens/Hogan	Daviess		
Shively	Jefferson		

### **Site Information**

Below are brief summaries of six sites the Superfund Branch remediated under state-lead authority using HWMF monies from FY09 through FY10. Each of these sites are examples where there were no viable responsible party to conduct the necessary cleanup.

#### **Barrel Services**

The Barrel Services site is located in Jefferson County and was used as a solvent recovery, paint manufacturing, and barrel refurbishing and recycling facility. Sample results indicated volatile organic compounds, semi-volatile organic compounds, polychlorinated biphenyls (PCBs) and metals contamination in the soil. The property had thousands of containers, including drums and large plastic totes, filled with solid and liquid wastes. The site presented a mosquito control problem, a fire hazard, and a threat for additional releases. Areas of visual soil contamination were scraped and graded with crushed stone. Total expenditures for the cleanup were \$209,684.



### **Derby Tank Car**

The Derby Tank Car site is located in Meade County and was first used as a distillery and later operated as a rail car refurbishing and repairing facility. The facility closed in 1991 and was contaminated mainly with polynuclear aromatic hydrocarbons. In addition, other contaminants were present in smaller amounts, including PCBs, metals and pesticides. A buried leaking waste cell was discovered and contained sludge impacted with several contaminants. The Superfund Branch oversaw installation of a secure and permanent perimeter fence, removed and disposed of contaminated soil and removed and disposed of the waste cell. The cleanup was completed in August 2008. Total expenditures for the cleanup were \$1.7 million.





### **Deena Products Co.**

The Deena Products Co. site is located in Carlisle County, KY. In the course of removing scrap metal from the property there was an illegal release of asbestos containing material (ACM) resulting in an imminent threat to nearby residents. As a result, an environmental emergency was declared to remediate the property. As of July 2009, approximately 2,400 tons of ACM debris were removed and properly disposed. Total expenditures for the cleanup were \$394,594.



### **B & J Battery, Inc.**

The B & J Battery facility is located in Floyd County, KY. As a result of historical operations related to lead and acid battery refurbishing, hazardous substances, including lead, were released to the environment. Treatability tests demonstrated that the soil, most of which would otherwise be classified as hazardous waste, could be treated on-site, rendering it a non-hazardous solid waste. The project was completed in February 2010 with a total of 250 tons of non-hazardous waste properly disposed at a cost of \$23,264.





### **Cleaver Property**

The Cleaver Property site is located in Larue County and was used for processing transformers, wire burning, and storing scrap materials. As a result of those activities, PCB and other hazardous substances contaminated the site. Remediation by soil removal was completed in October 2008. Total expenditures for the cleanup were \$128,895.





### **Marion Metals**

The Marion Metals site is located in Lebanon, KY and was home to several gate manufacturing businesses. Historical records indicated the use of lead based paint and complaints were recorded which identified the site as a likely source of solvent releases to the wastewater treatment plant system. Superfund Branch staff conducted extensive sampling of paint accumulation associated with the structure used in the manufacturing process and contractors excavated more than 4,000 tons of fill materials. Cleanup of the site was completed in September 2009 and the total expenditures were \$192,055.



#### Summary and Recommendations

The HWMF is the primary source of funding for emergency response and state-lead remediation of contaminated sites ranging from large projects such as industrial facilities and dry cleaners to small projects such as roadside drums, orphan wastes left in parks or pick up and proper disposal of orphan transformers.

The HWMF is the Commonwealth's fail-safe for contaminated sites where there is no party to take action, but where a failure to act could cause harm to human health or the environment. Although receipts have been in general decline since 1993, the HWMF has enabled the Cabinet to continue to carry out its statutory duties. There are no other funding sources to conduct emergency response or state-lead cleanup actions and regulatory oversight.

There are currently an estimated twenty sites which will result in significant expenses to the HWMF. There are over three-hundred additional sites with the potential to be state-lead sites. Additionally, there are numerous sites where viable responsible parties are conducting cleanups and the HWMF supports the necessary regulatory oversight.

It is the recommendation of the Cabinet that authorization of the HWMF continues to provide funding to ensure protection of human health and the environment.

#### Appendix A



### KPPC is a resource for businesses, industries and other organizations...

Established in 1994, KPPC is a state-mandated technical assistance resource center that helps businesses, industries and other organizations develop environmentally sustainable, cost-saving solutions for improved efficiency. Based at the University of Louisville J.B. Speed School of Engineering, KPPC provides technical information and assistance that is free, confidential and non-regulatory.

Through free on-site assessments, training, technical assistance and web-based resources, KPPC offers a variety of services that identify environmentally sustainable solutions for business and industrial facilities. KPPC engineers help clients lower operating costs, eliminate waste at its source, address energy and water efficiency issues and assess other environmental challenges. The Center provides customized services to assist clients in the efficient use of raw materials, water, energy and other resources. By modifying production processes, promoting the use of non-toxic or less-toxic substances and implementing proven conservation techniques, companies can significantly improve their environmental performance.

KPPC has been recognized on a state and national level as a *Center of Excellence*. The Center has conducted more than 600 workshops, seminars and training sessions, and over 30,000 attendees have benefited from these learning opportunities. KPPC's on-site assessments have helped more than 700 Kentucky businesses and organizations improve their environmental performance and lower their operating costs.

### Fiscal Year 2008-2009 Results\*

- KPPC identified a total potential savings of \$4,067,475 for its clients. These savings could be achieved with a total investment of only \$818,190. The opportunities identified included: reduction in water use = 2,104,494,000 gallons per year; reduction in solid waste = 798,600 pounds per year; and reduction in natural gas usage = 11,000,000 therms per year.
- KPPC reached over 2,300 new and returning clients through its technical assistance and outreach efforts.
- KPPC was actively involved in 64 training sessions, workshops, meetings, conferences and events and hosted 12. Total number of attendees at all events was 2,186.

### Partnerships

To leverage funding and expand the reach and impact of its activities, the Center maintains partnerships with a number of local and national organizations, including KY EXCEL, EPA's Region 4 and the ENERGY STAR® programs, the Partnership for a Green City, and the Mountain Association for Community Economic Development.

Kentucky Industrial Materials Exchange (KIME) KPPC maintains KIME, a free, online service that helps participants find other facilities that want to buy, sell, trade or simply reuse their waste materials.

#### **Recycling Services and Consultants Directories**

KPPC maintains the recycling services and consultants directories to facilitate industrial recycling and improve the environmental performance of Kentucky businesses, industries and other organizations.

<sup>\*</sup>Metrics data for fiscal year 2009-2010 were not available at the time of printing.