



ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT

200 FAIR OAKS LANE

FRANKFORT, KENTUCKY 40601

PHONE (502) 564-6716

<http://waste.ky.gov>

Steven L. Beshear
Governor

Leonard K. Peters
Secretary

July 14, 2014

Ms. Marcia Seiler, Acting Director
Legislative Research Commission
Room 300, Capitol
Frankfort, KY 40601

Dear Ms. Seiler,

KRS 224.46-580(13)(c) requires the Energy and Environment Cabinet to report to the General Assembly on the revenues and expenditures of the hazardous waste management fund.

Please find enclosed a copy of the report. If you have any questions or would like additional information, please contact Louanna Aldridge, (502) 564-6716 ext. 4609 or Louanna.Aldridge@ky.gov.

Sincerely,

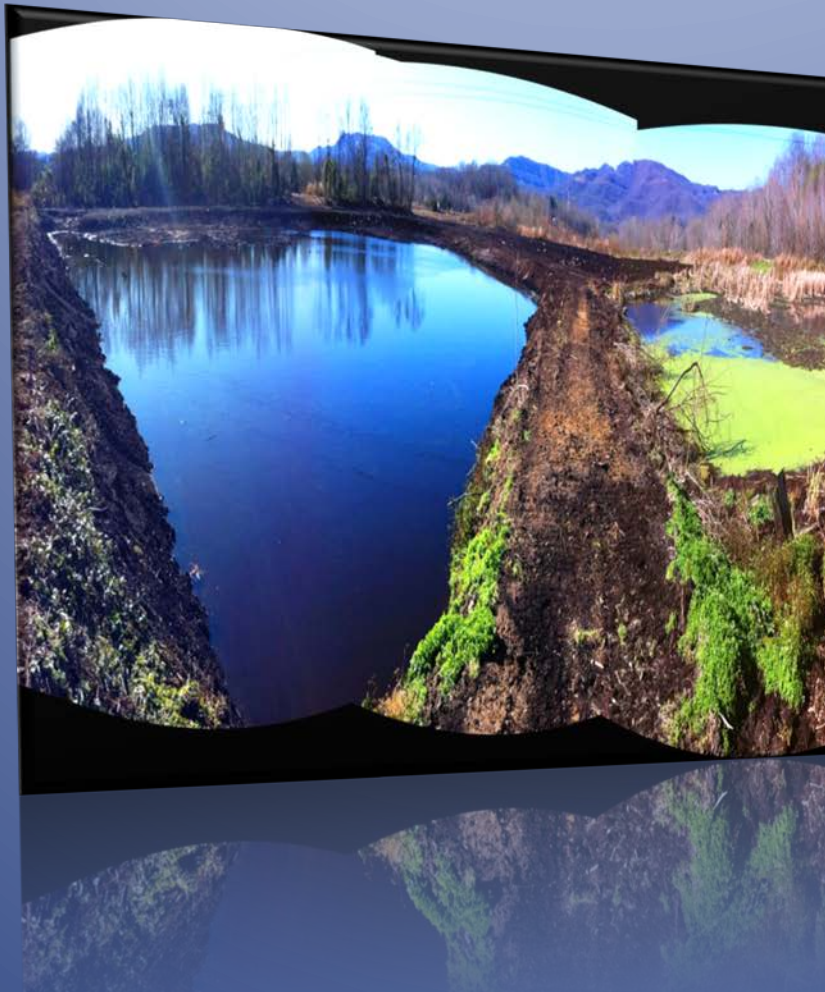
A handwritten signature in black ink, appearing to read "Anthony R. Hatton for".

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

ARH/la

Enclosure

2014



Hazardous Waste Management Fund

A Report to the General Assembly

*Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division of Waste Management
502.564.6716
waste.ky.gov*

TABLE OF CONTENTS

02	<i>EEC Mandate</i>
03	<i>History and Purpose of the Fund</i>
04	<i>Revenues</i>
07	<i>Expenditures</i>
10	<i>Capital Projects</i>
17	<i>Brownfield Redevelopment Program Impact</i>
18	<i>Future of the Fund</i>
20	<i>Credits and Acknowledgements</i>
21	<i>Appendix of Tables</i>
22	<i>A-1: Hazardous Waste Management Fund Revenues</i>
23	<i>A-2: Hazardous Waste Management Fund Expenditures</i>
24	<i>A-3: HWMF Active Capital Project Accounts Cumulative Expenditures</i>
25	<i>A-4: HWMF Active Capital Project Account Expenditures for FY 2013 -2014</i>

ON THE COVER
Middlesboro Tannery Superfund Site,
Bell County.
Photograph by Shawn Cecil

EEC Mandate

This report has been prepared as required by KRS 224.46-580(13)(c). The purpose of the report is to provide information related to the commonwealth's hazardous waste management fund (HWMF). Specifically, the report includes information related to the expenditures and revenues of the hazardous waste management fund for fiscal years 2013 and 2014.

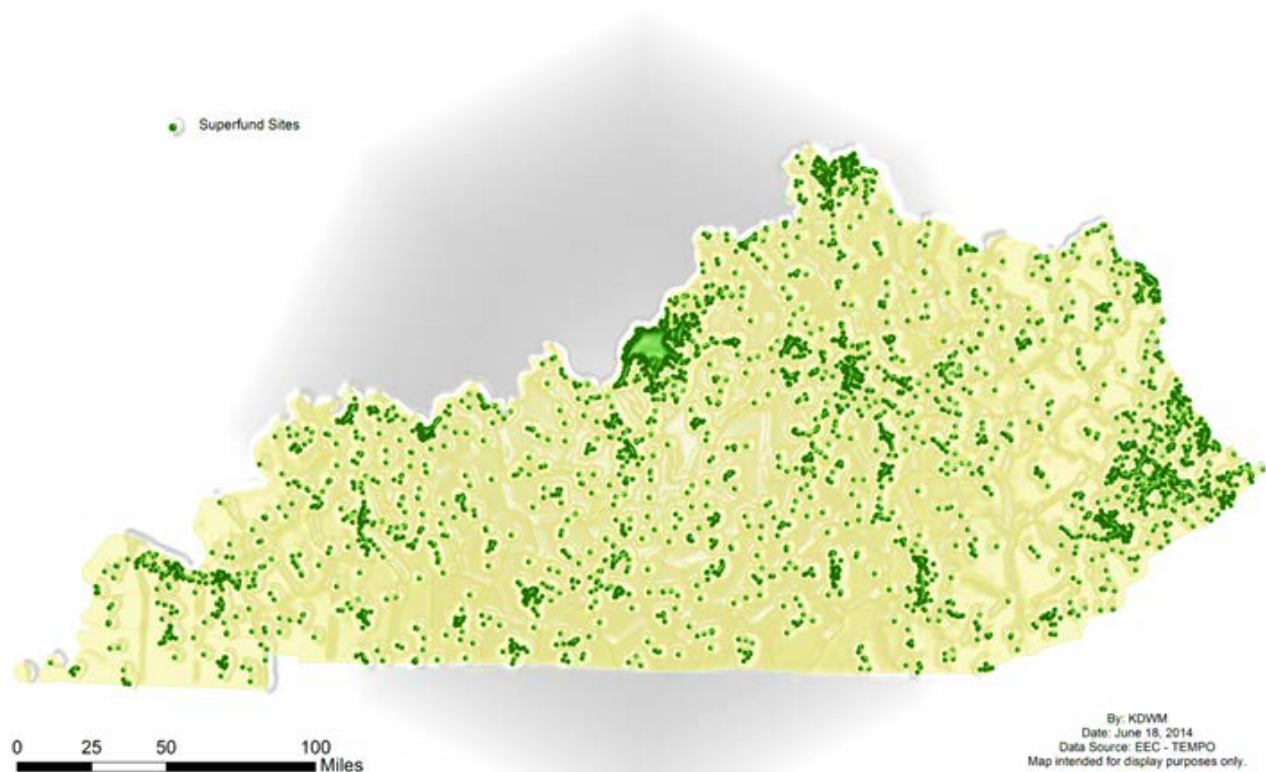
KRS 224.46-580(13)(c) "The cabinet shall file with the Legislative Research Commission a biennial report, beginning two (2) years after July 15, 2008, on the revenues and expenditures of the fund."

HISTORY AND PURPOSE OF THE FUND

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 then, nearly \$70 million has been spent remediating more than 550 contaminated sites, making the Commonwealth of Kentucky a cleaner and safer place to live. In fiscal years 2013 and 2014 the cabinet registered 309 new Superfund sites and oversaw remediation of 390 sites. In addition, the cabinet performed nearly 2,000 technical site reviews and supervised managed closures for just under 200 sites.

The HWMF is the sole source of funding to clean up sites where a release of hazardous substances, pollutants or contaminants has been discovered and no viable responsible party is available. Currently, the commonwealth has an inventory of over 4,000 active and closed superfund sites (Fig. 1).

Figure 1: Active and Closed Superfund Sites in Kentucky



Specifically, HWMF funds are used for the following throughout the commonwealth:

- Response to emergencies with releases of hazardous substances, pollutants, and contaminants;
- Assessments and remediation of contaminated sites where a viable responsible party cannot be identified;
- Technical reviews and oversight of state-lead and responsible party driven remediation projects; and
- Provision of core funding for the Kentucky Pollution Prevention Center's (KPPC) technical assistance and outreach services as part of the University of Louisville's J.B. Speed School of Engineering.

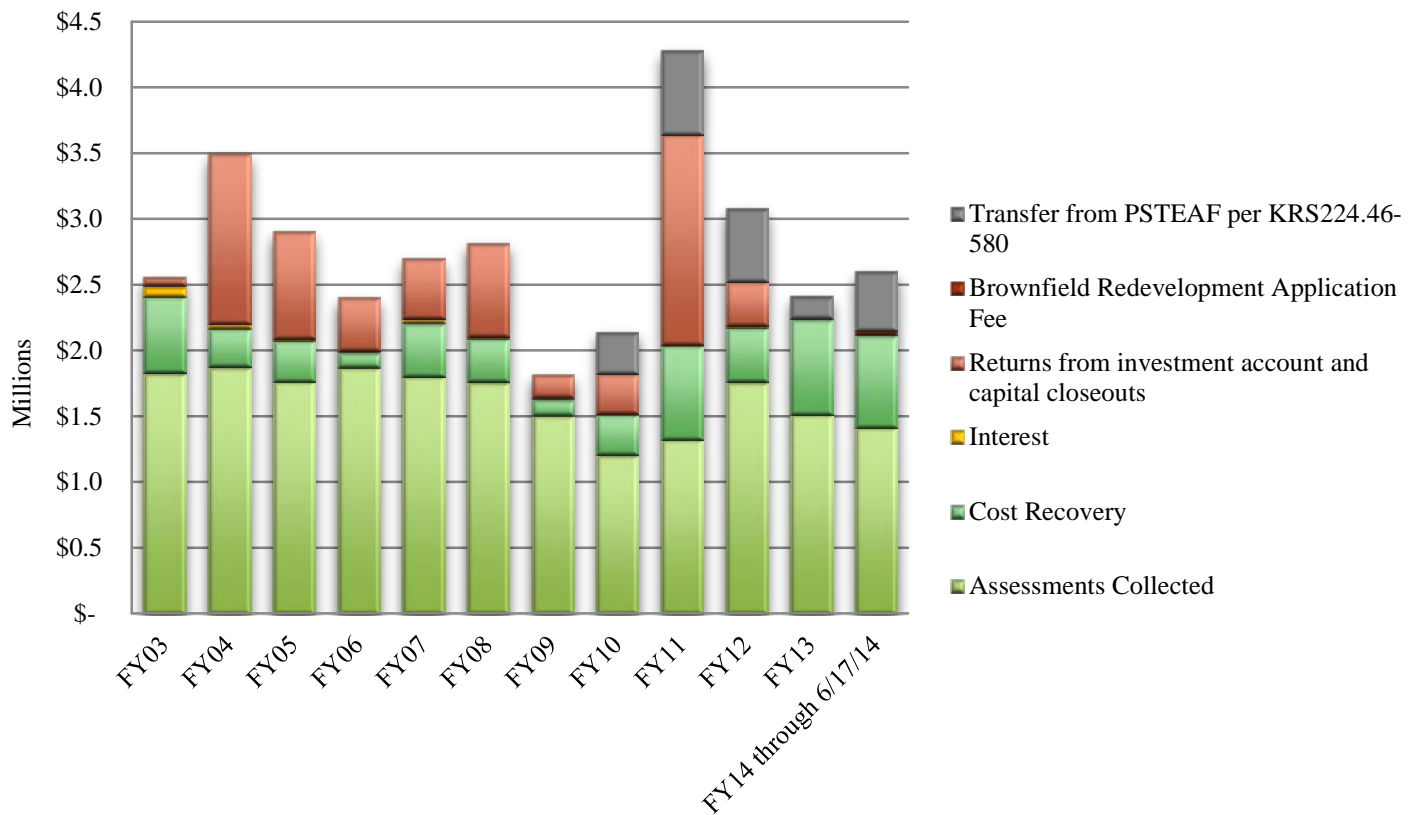
The HWMF has cumulatively provided more than \$7.7 million in funding for the Kentucky Pollution Prevention Center. KPPC was established in 1994 to provide technical assistance to business and industry and promote pollution prevention technologies and procedures. The HWMF contributes a percentage of the assessment fee receipts to KPPC annually in accordance with the statute (Table A-2). For specific activities performed by KPPC, visit kppc.org.

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 2013 and FY 2014.

REVENUES

The HWMF sources of revenue include the hazardous waste generator assessment fees, transfers from the Petroleum Storage Tank Environmental Assistance Fund (PSTEAF), Brownfield Redevelopment Program application fees, interest earned on the HWMF account, cost recoveries (monies recovered from responsible parties), and returns from investment and capital closeout accounts (Table A-1 and Fig. 2).

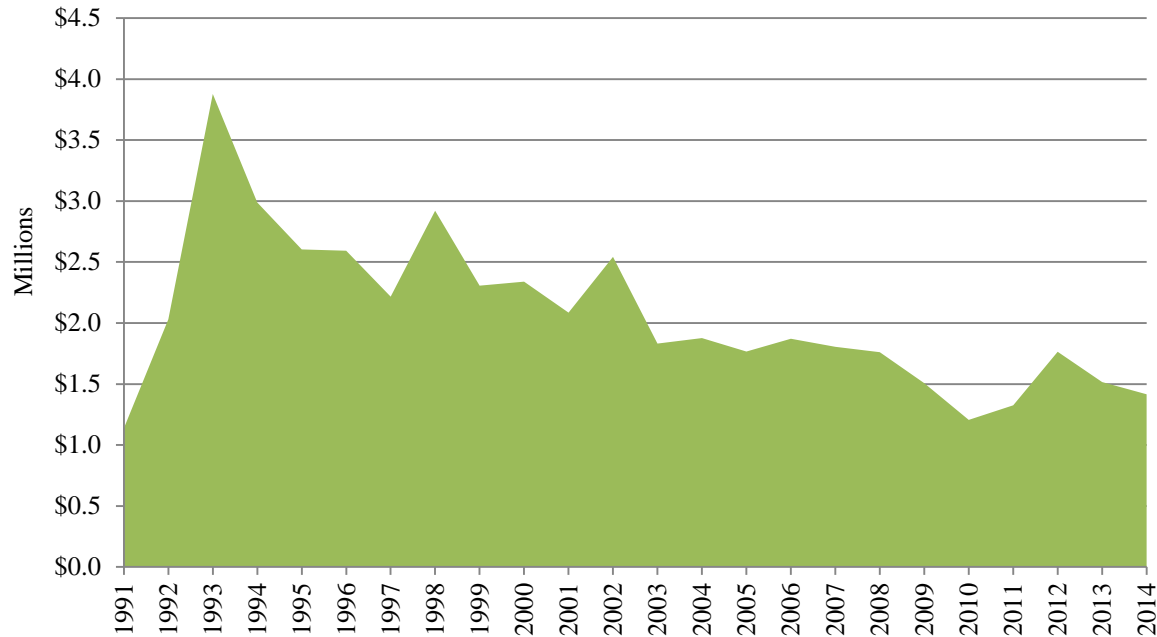
Figure 2: HWMF Revenues for FY 2003-14



The hazardous waste generator assessment fee is authorized pursuant to KRS 224.46-580(8) and is collected from generators of hazardous waste at the rate of one and two-tenths cents (\$0.012) per pound for liquid waste and two-tenths of a cent (\$0.002) per pound for solid waste.

During the last twenty years there has been a steady decline in revenue generated annually through the HWMF assessment fee (Fig. 3).

Figure 3: FY 1991-FY2014 HWMF Assessment Fee Revenues



Factors that contribute to the decline in assessment fees include amendments to KRS 224.46-580 that provide the following exemptions:

- Emission control dust and sludge from the primary production of steel that is recycled by high temperature metals recovery or managed by stabilization of metals (Effective 2004);
- Assessment fee waiver granted for hazardous waste generators owing less than fifty dollars (\$50) (Effective 2006); and
- Waste that is delivered from the generator to an industrial boiler or furnace and burned for energy recovery shall be assessed at half the rate of the assessment (Effective 2008).

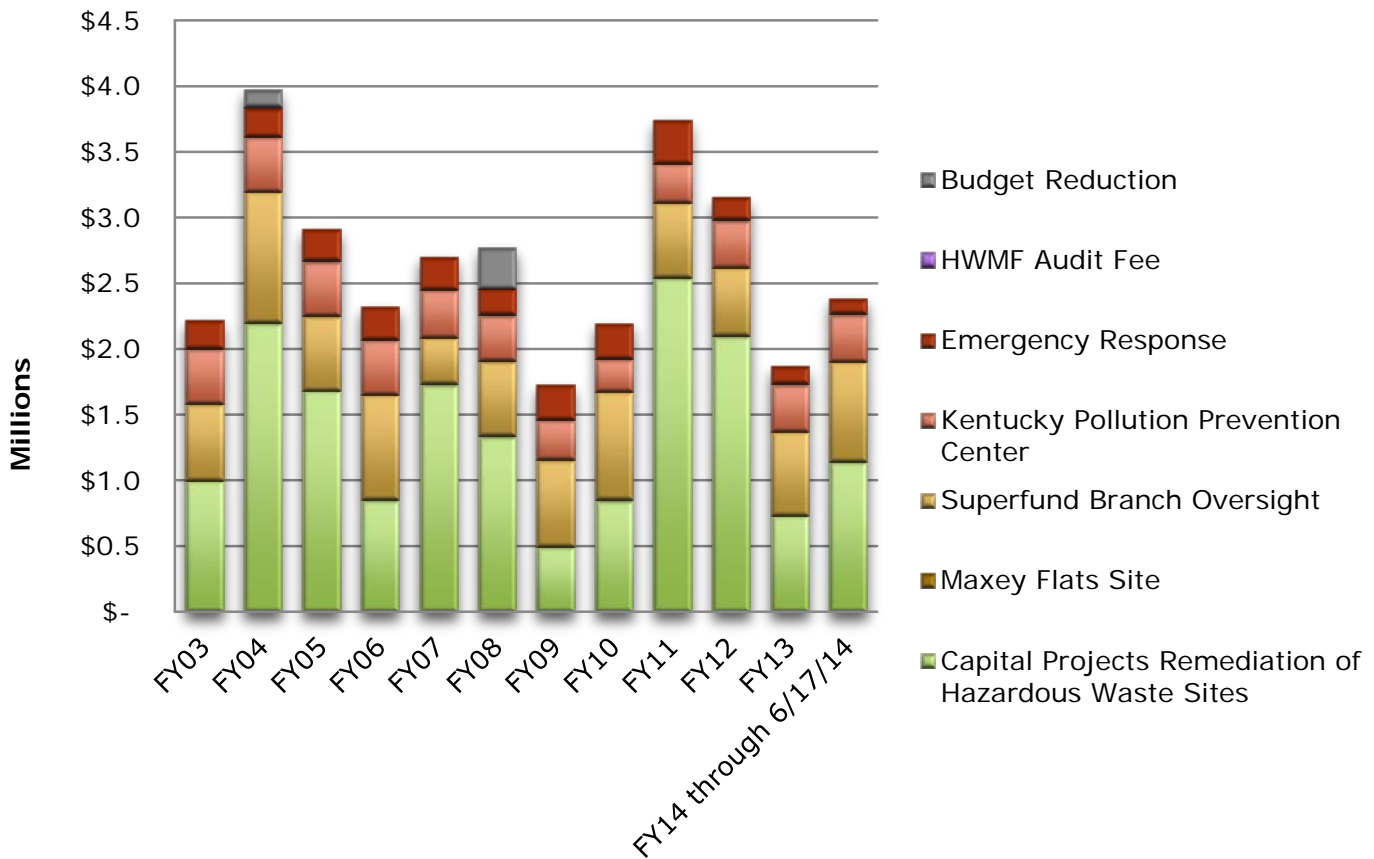
Other declines in revenue can be explained by companies filing for bankruptcy, companies moving their operations out of state, a decline in the number of generators, and an increase in waste minimization and recycling efforts. In recent years, the cabinet’s cost recovery efforts have helped to offset some of the decline in assessment fee revenue.

EXPENDITURES

The cabinet utilizes HWMF monies to provide technical reviews and oversight of state-lead and responsible party driven remediation projects. Many of these projects result from previous heavy industrial activities such as wood treatment, metals plating, chemical production, and dry cleaning.

The cabinet directly manages (state-lead) the cleanup of contaminated sites for which there is no viable responsible party. When a significant amount of remediation will be necessary, a capital project account is created within the HWMF (Table A-3). A capital project may include site investigation, site remediation or may be a declared environmental emergency, and typically costs more than \$20,000. The costs may extend over multiple years. Project scope reductions or completions below projected costs will result in transfers of dollars back into the HWMF. Currently, due to limited funding, capital project expenditures are very minimal (Table A-4). Additionally, HWMF expenditures have declined in direct proportion to the decline in revenue available (Table A-2 and Fig. 4).

Figure 4: HWMF Expenditures FY 2003-14



The cabinet provides a service to the citizens of the commonwealth through its Technical/Professional oversight activities to ensure that emergency response and cleanup projects are properly conducted. Under this heading of Table A-2, cabinet personnel respond in numerous ways including: being on-site and actively involved in emergency responses, contracting for and conducting state lead cleanups in the role of an absentee responsible party, and providing assistance to responsible parties to aid in the cleanup of their sites.

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 sites are known as National Priority List (NPL) sites. The expenditures are likely to increase over time as more federal sites are delisted.

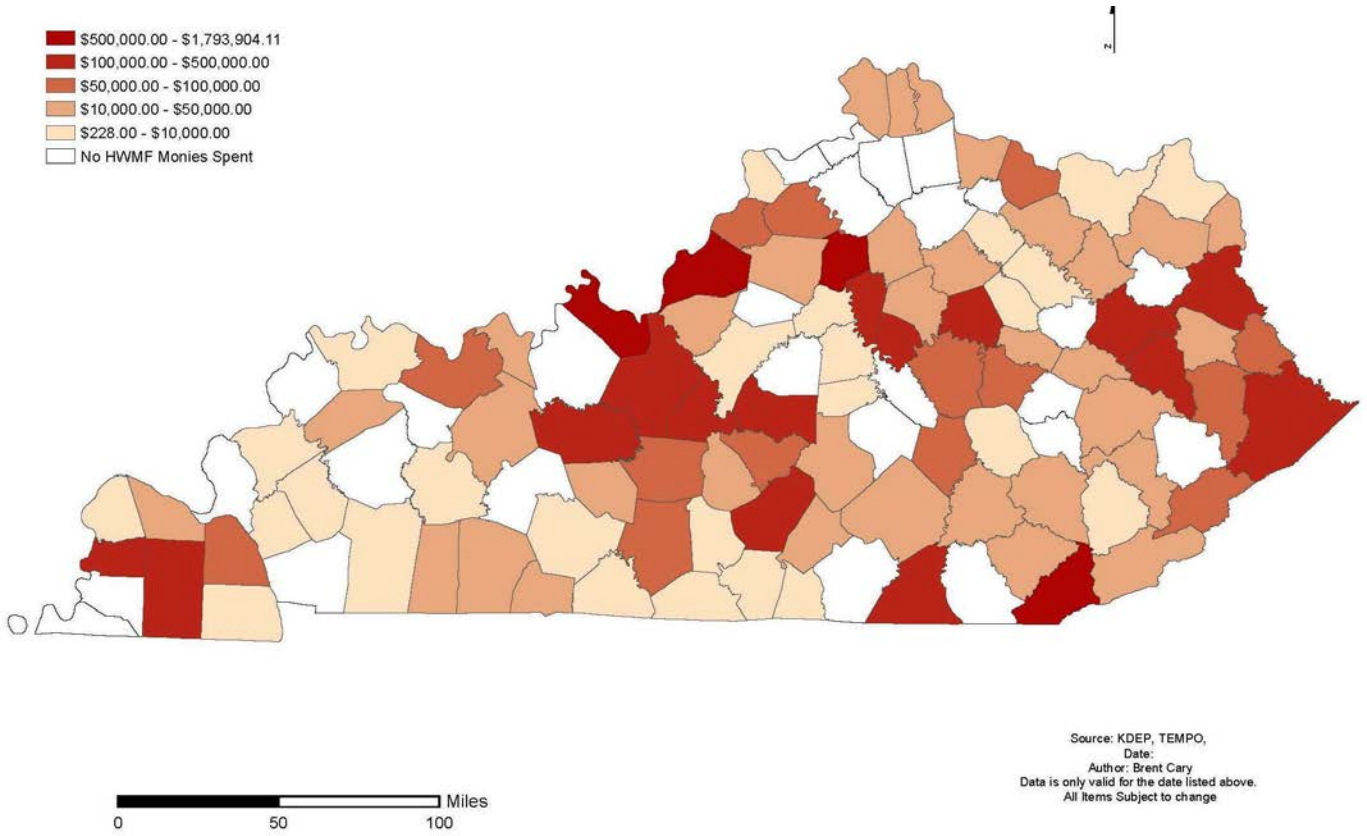
Large capital projects are a key component of state-lead oversight that the cabinet performs, but small remedial actions can be just as important and constitute a substantial volume of the remediation work performed. These corrective actions may include anything from site characterization to remediation. Sites requiring cleanup could range from wire burning operations, collection and disposal of mercury waste and transformer spills to industrial chemical spills, and the removal and disposal of abandoned drums. Some of the contaminants discovered at these sites include toxic heavy metals, such as lead, arsenic, and mercury or toxic or cancer-causing chemicals, such as polychlorinated biphenyls. These sites have real potential to be immediately dangerous to local residents, wildlife, and vegetation and pose a long-term threat to both the public and the environment. To compound the problem, these sites are typically located along highways or waterways and are easily accessible to the citizens of the commonwealth.

In FY 2013-14, small remedial actions directed or conducted by the cabinet's Superfund Branch personnel led to the removal of 5,025 pounds of waste. During the past two fiscal years, the Superfund Branch has characterized and remediated nine contaminated properties using small purchase authority.

The Environmental Response Team (ERT) is tasked with responding to environmental emergencies including petroleum releases, landfill fires, train derailments and many other environmental issues requiring immediate attention. During FY 2013-14, ERT received 11,025 notifications, 1,216 of which required an emergency response. Of those, 42 were declared an emergency and addressed using HWMF monies.

Superfund site remediation and responses to emergencies throughout the commonwealth are costly (Fig. 5).

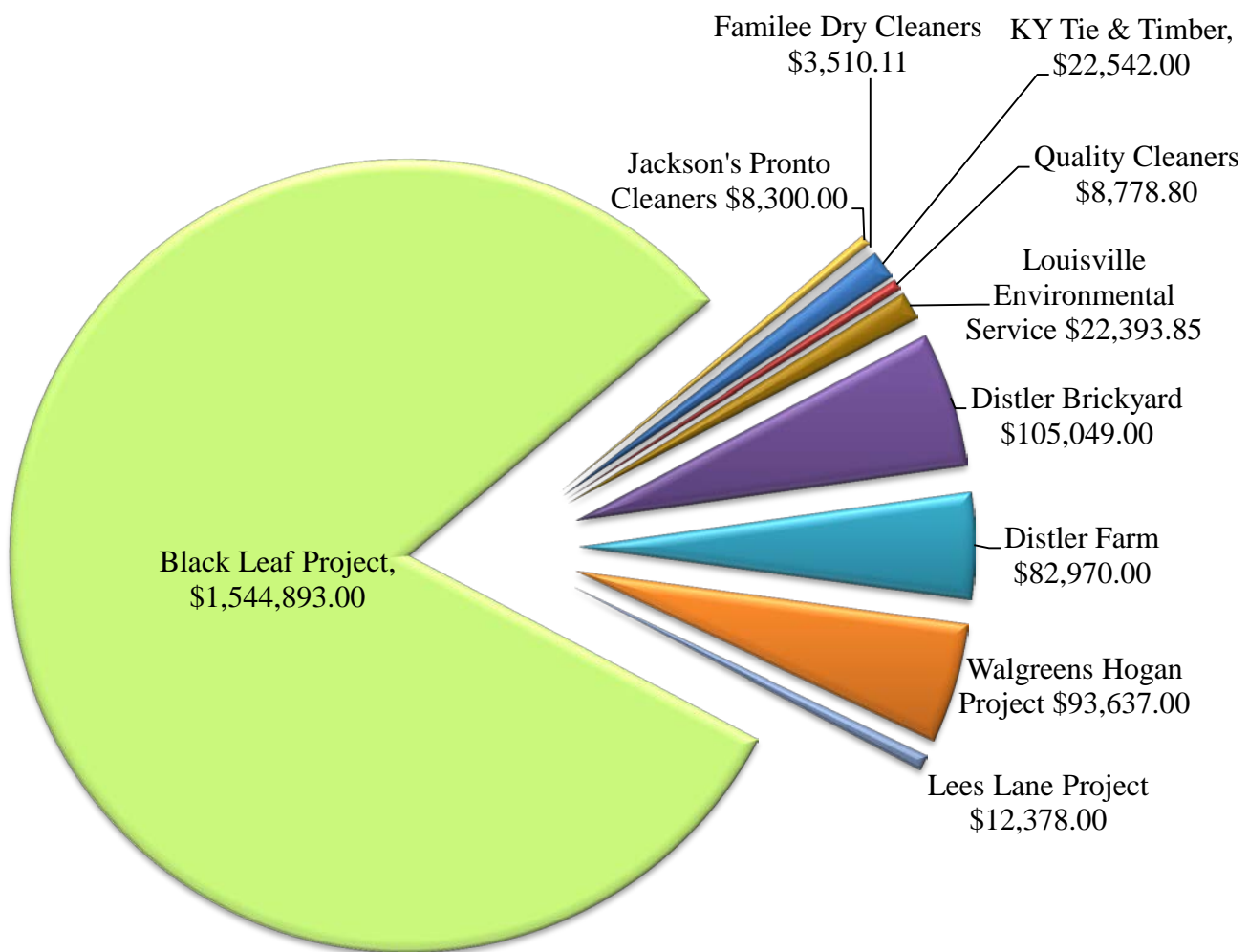
Figure 5: Superfund and Emergency Response Site Expenditures per County, 2007-2014



CAPITAL PROJECTS

The following is a summary of the capital projects with expenditures during FY 2013 and 2014 (Table A-4 and Fig. 6). These projects have ongoing remedial activities necessary to protect human health and the environment.

Figure 6: HWMF Active Capital Project Expenditures FY 2013-14



Black Leaf Project
Louisville, Jefferson County

The Black Leaf Project is a former pesticide manufacturing facility with high level contamination of polycyclic aromatic hydrocarbons (PAHs), arsenic, lead and various pesticides (DDT, dieldrin, and BHC). Sampling was completed in October 2013, and a CERCLA Site Inspection Report was prepared and submitted to the Environmental Protection Agency (EPA).

From August, 2013 to May, 2014, the cabinet and EPA worked jointly on a removal action to remediate nearby residential properties that were impacted by the contamination. Seventy-eight (78) properties were identified for remediation. EPA oversaw the work at ten residences that had contamination exceeding the federal emergency removal standards. The remaining residences were remediated by the cabinet using HWMF monies. This site has received widespread attention from the community and media. Remedial activities for the Black Leaf Project required nearly \$1.6 million, a significant portion of the HWMF during FY 2013-14 (Fig. 6).



Distler Brickyard
Louisville, Jefferson County

Distler Brickyard is an illegal, unpermitted hazardous waste disposal site that is on the National Priority List. It is currently in the operation and maintenance phase of remediation. This means, that all remediation has been completed and long-term groundwater monitoring is in place.

Due to the age and condition of the monitoring wells that were on-site, the cabinet contracted to abandon all wells and install new wells to determine current groundwater conditions and improve reliability of data. Based on the data that will be obtained from the newly installed monitoring wells, additional corrective action may be necessary. The cabinet has ongoing cost recovery efforts for this site.



***Distler Farm
West Point, Hardin County***

Distler Farm is another illegal, unpermitted hazardous waste disposal site on the National Priority List. With similar characteristics to Distler Brickyard, the monitoring wells on-site required decommissioning, and the installation of new wells for both sites was completed in June of 2014. Groundwater monitoring will be conducted for the next two quarters to determine if the site is eligible for closure.

***Familee Dry Cleaners
Hodgenville, Larue County***

Chlorinated solvents were discovered in soil and groundwater at the Familee Dry Cleaners facility. An unexpectedly high level of trichloroethene (TCE) was recently found in groundwater at a monitoring well that was previously non-detect. Additional sample results showed that the TCE contaminant plume is no longer defined and may have reached the Nolin River.



The Hodgenville Waterworks intake is located approximately 400 yards downstream. Several drinking water samples were taken at the plant intake. There were no detections for any constituents of concern. Additional samples will be collected in the future to determine the risk posed to the more than 5,000 citizens connected to the water system.

There are residences and businesses within the known contaminant plume that may be impacted. As a result, vapor risks will need to be assessed through sampling to determine any health threat to nearby residents and workers.

It is essential that funding is available for the Division of Waste Management to define and abate the potential vapor intrusion and drinking water problems associated with this site.

***Jackson's Pronto Cleaners
Owensboro, Daviess County***

The Jackson's Pronto Cleaners site was a dry cleaning facility which started in the 1950's and operated for several decades. The City of Owensboro owns the property and has used a \$200,000 Brownfields grant from EPA to start remedial activities at the site. Despite the demolition of the original structure, removal of a 550 gallon underground storage tank and the use of oxidizing remedial actions, contamination remains.

The contamination plume from this site extends past the property boundaries onto land owned and occupied by Brescia University. Due to the potential for vapor intrusion into high density student housing, the cabinet conducted passive soil-vapor sampling on Brescia's campus. The initial round of testing showed elevated levels of perchloroethylene (PCE) vapor in the soil near the campus bookstore and dormitory. The levels detected were generally low with no additional chlorinated solvents identified. There does not appear to be a risk to students residing on campus

as this time. Additional soil vapor sampling and analysis will need to be conducted to evaluate the risk to students and personnel.

***Kentucky Tie & Timber
Mayfield, Graves County***

Kentucky Tie & Timber is a former wood-treating facility that used creosote to treat railroad ties. Releases of creosote, along with numerous hazardous waste violations were documented around piping and equipment. The company declared bankruptcy and abandoned the facility. Due to the threat posed to children and nearby residents, the cabinet requested EPA's assistance under the removal program. EPA initiated removal of contaminated soil and pumped out thousands of gallons of creosote and water from the secondary containment area.



Additional sampling was completed by the cabinet in 2012 that showed elevated levels of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The cabinet is evaluating remedial options and recommendations for the site. Prospective purchasers are considering application to the Brownfield Redevelopment Program.

***Lees Lane Project
Louisville, Jefferson County***

Lees Lane is a 122 acre delisted NPL site that operated as a sand quarry and then as a landfill for disposal of municipal and industrial waste from 1940 to 1975. Flash fires in nearby homes caused seven families to be evacuated in 1975, which necessitated a methane study. Prior to establishment of the HWMF, the cabinet funded installation of a landfill gas collection system to minimize explosion hazards. An evaluation of the current gas collection system determined that



it was not operating properly and would require further investigation. Surface soil sampling and a soil gas survey conducted in April and June 2013 indicated a need for additional site characterization, which is in progress. Five additional monitoring wells were installed and sampled as a part of the site characterization. Additionally, EPA is conducting a vapor intrusion investigation of nearby residences in June 2014 based on the soil gas survey and site characterization.

Louisville Environmental Services
Louisville, Jefferson County

Louisville Environmental Services is a 27 acre property located along the Ohio River. A series of companies operated the facility for petroleum distribution purposes, including a refinery from 1976 to 1985 which resulted in volatile organic compounds and petroleum based contamination. Numerous areas of visibly impacted soils and oil seeps were observed during a removal action by EPA. Surface soil samples collected by EPA and the cabinet detected the presence of lead and PAHs in excess of allowable residential and industrial standards. Later, the cabinet discovered seeps along the riverbank discharging numerous petroleum compounds. Analysis of the seeps indicated PAHs and benzene in excess of safe drinking water levels.

A site investigation identified significant petroleum contamination in soil and groundwater. The cabinet reviewed the Remedial Evaluation which contained remediation approaches with relative costs, project goals, and closure options based on the nature and volume of the site. Remedial methods will be based on relative risk and available budget.

Quality Cleaners
Benton, Marshall County

As a former dry cleaning facility, Quality Cleaners has resulted in releases of chlorinated solvents to groundwater and soil. Multiple rounds of soil and groundwater sampling have taken place to determine the extent. Subsurface injections of an in-situ remedial product have had a positive impact on groundwater contamination. Superfund Branch staff will continue annual sampling until site remediation is deemed complete and the wells are decommissioned.

Walgreens Hogan Project
Owensboro, Daviess County

The Walgreens Hogan Project site is one of four dry cleaning sites that were addressed with HWMF monies during FY 2013-2014. The current site owner of this facility is considered a Bona Fide Prospective Purchaser pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and therefore has protections from liability of the cleanup. There were historical releases of chlorinated solvents, and as a result, a large

contaminant plume migrated off-site. Remedial actions were successful in removing contaminated ground water from the upper shallow aquifer.

Initial phases of the site investigation were completed during 2013, including monitoring well and aquifer sampling. Additional monitoring wells were installed and the site has undergone sampling of wells associated with the contaminant plume. Data collected from these wells will be used to perform an in-situ pilot study utilizing aerobic bacteria, nutrients, and enzymes for the lower aquifer. Sampling will continue to evaluate the effectiveness of potential future remedial actions.

Other Capital Projects that remain active, but did not incur costs during FY 2013-14, include the Middlesboro Tannery in Bell County, LWD, Inc. in Marshall County, Jefferson Forest Drum Site in Bullitt County, and the following sites in Jefferson County: Kim's Dry Cleaners, Schendley Distillers, and AL Taylor/Wilson Creek.

BROWNFIELD REDEVELOPMENT PROGRAM IMPACT

The positive outcomes to Superfund cleanups are threefold. First, formerly undesired, contaminated properties are potentially available for redevelopment or reuse. Property usage may vary depending on the location and extent of contamination and may require institutional or engineering controls. This has made and continues to make many of these properties attractive and available for redevelopment and reuse through the commonwealth's various brownfields redevelopment programs. Secondly, the reuse of former Superfund sites stems economic growth once the reuse is implemented. Finally, a synergistic effect occurs as former Superfund sites



are redeveloped and put back into the economy for reuse. The redevelopments add another layer of protectiveness under the new land management and use. In short it keeps an “eye” on the property, further decreasing the risk of an improper land use.

Above, a potential Brownfield redevelopment site in Woodford County.

FUTURE OF THE FUND

The HWMF is the sole source of funding for emergency response and state-lead remediation. Contaminated sites can range from large industrial site projects and dry cleaners to small projects such as roadside drums, orphan wastes and transformers.

The HWMF is the Commonwealth's only fail-safe for contaminated sites where there is no responsible or viable party to take action. Failure to act at these sites could result in harm to human health and natural resources of the Commonwealth. There are no other available funding sources to conduct emergency response, state-lead cleanup actions, or regulatory oversight.

There are currently 17 known sites requiring remedial actions that will result in significant expenses to the HWMF. Over 300 additional sites have been identified as potential state-lead projects. Additionally, there are numerous sites where viable responsible parties are conducting cleanups and the HWMF supports the necessary regulatory oversight.

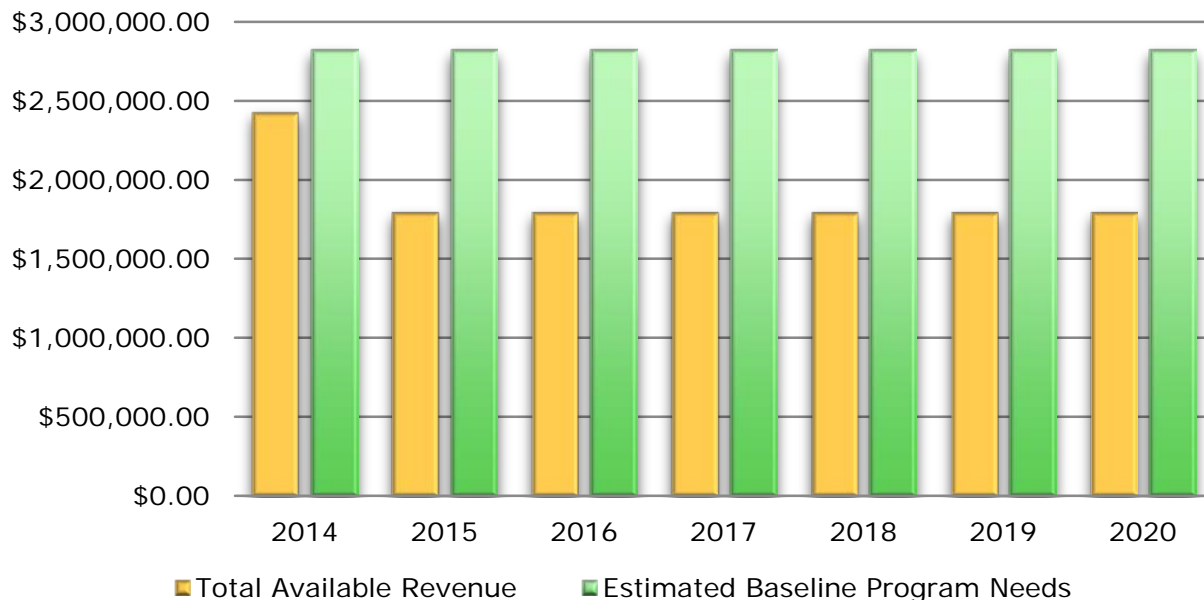
The fastest growing encumbrance on the HWMF is dry cleaning facilities. This is due to the number of facilities located across the commonwealth, remedial difficulties and lack of financially viable responsible parties. While dry cleaners themselves are a public and economic benefit, the use of dry cleaning solvents such as, perchloroethylene (PCE) also known as "perc" can present an environmental challenge. PCE groundwater contamination and vapor intrusion into homes and buildings are the primary routes leading to human health risks and natural resource damage in Kentucky. PCE contaminant plumes are much larger, more mobile, and more persistent than other types of chemicals, can remain in the ground for decades. PCE plume lengths average 1,933 feet with maximum plume lengths reaching 13,700 feet or more. This is ten times larger and longer than the average contamination plume from a gas station. Due to the density of PCE, plumes reach much deeper into the groundwater and are more likely to affect present and future potable drinking water sources.

Approximately 28 dry cleaner sites are being actively addressed by the cabinet. This represents roughly twelve percent of the registered dry cleaning businesses in Kentucky. The vast majority of dry cleaning facilities have never been registered. A nationwide survey of insurers estimated that more than 70 percent of past and present dry cleaners accidentally or intentionally have released PCE into the soil or groundwater.¹ Cleanup costs can range from tens of thousands of dollars to several million dollars, with an average of \$500,000 per cleanup. Many dry cleaning operators do not have adequate assets or insurance to pay these cleanup costs, which easily could exceed the equity in a retail center. Currently, 13 states have established a specific dry cleaning fund, with 5 of which are in the same EPA region as Kentucky.

As a result of decreases to the HWMF through exemptions (Fig. 1), and decreases to general and federal funds available to the cabinet since 2008, the HWMF is projected in FY2015-16 to not provide sufficient funds to adequately (a) respond to environmental emergencies, or (b) provide

cleanup of contaminated properties. Figure 7 is a comparison of the amount of funding available to the estimated annual program need. The amount of funding available is based on the anticipated assessment fees and PSTEAF transfers to the HWMF. The estimated annual program need is based on average expenditures for emergency responses and state lead site cleanups over the last two years. The available funding on an annual basis will not be sufficient to meet the baseline needs for the program moving forward.

Figure 7: Funding Shortfall Projections



Currently, the cabinet has suspended cleanup activities on state-lead sites so that it can maintain a balance in the HWMF to respond to an emergency that may arise. Unless there are modifications in the form of an increase of funding to the HWMF, it will become increasingly difficult for the cabinet to respond to emergencies and to clean up sites where there is no viable responsible party. Clean up of sites where there is no responsible party will be particularly damaged by the funding shortfall. Some of these sites, which the cabinet cannot currently respond to, may present appreciable risk to human health and over time mount up to a significant backlog of environmental liability.

These shortfalls will have a direct negative impact on the cabinet’s mandate to protect human health and the environment. The cabinet is currently formulating options to address the coming shortfall in funding.

¹Gary Keyes, “Cleaning Up After Dry Cleaners,” *CIRE Magazine*, CCIM Institute, <http://www.ccim.com/cire-magazine/articles/cleaning-after-dry-cleaners> (accessed 23 Jun. 2014).

CREDITS AND ACKNOWLEDGEMENTS

Commonwealth of Kentucky

Governor Steve Beshear

Energy and Environment Cabinet

Secretary Leonard K. Peters

Kentucky Department for Environmental Protection

Commissioner R. Bruce Scott, P.E.

Deputy Commissioner Aaron Keatley

This biennial report was produced by:

Kentucky Division of Waste Management

200 Fair Oaks Lane

Frankfort, KY 40601

Phone: 502.564.6716

Fax: 502.564.3492

waste.ky.gov

Director Anthony R. Hatton, P.G.

Assistant Director Timothy Hubbard, P.G.

We acknowledge the contributions of the management and staff of the Division of Waste Management.

Larry Hughes, P.G.

Donna Conway

John Maddy

Jason Whisman

Cody Munday

Wes Turner

Nathan Hancock, P.G.

Sheri Adkins, P.G.

Jim Kirby

Brent Cary

Mike Blanton

Shawn Cecil, P.G.

Editor :

Louanna C. Aldridge

The mission of the Kentucky Division of Waste Management is to protect human health and the environment by minimizing adverse impacts on all citizens of the Commonwealth through the development and implementation of fair, equitable and effective waste management programs.

June 2014

APPENDIX OF TABLES

TABLE A-1: Hazardous Waste Management Fund Revenues

	Assessments Collected	Cost Recovery	Interest	Returns from investment account and capital closeouts	Brownfield Redevelopment Application Fee	Transfer from PSTEAF per KRS 224.46-580	Total
FY93-FY02	26,497,996.00	3,623,784.00	1,114,921.00	5,663,178.00			36,899,879.00
FY03	1,831,535.00	579,544.00	81,162.00	65,735.14			2,557,976.14
FY04	1,876,572.00	293,420.00	37,370.00	1,295,046.00			3,502,408.00
FY05	1,766,239.12	311,827.28	17,565.74	812,841.38			2,908,473.52
FY06	1,871,802.74	119,138.54	11,916.21	404,327.01			2,407,184.50
FY07	1,804,954.42	407,829.27	28,873.17	457,975.78			2,699,632.64
FY08	1,760,870.25	331,372.35	16,201.64	711,505.58			2,819,949.82
FY09	1,506,853.23	126,314.75	8,238.64	178,204.44			1,819,611.06
FY10	1,205,801.18	309,757.11	10,645.88	300,000.00		318,346.77	2,144,550.94
FY11	1,325,342.34	715,588.96	6,512.49	1,597,180.97		637,062.05	4,281,686.81
FY12	1,764,288.24	410,100.86	16,362.73	335,760.36		554,562.44	3,081,074.63
FY13	1,515,949.68	725,993.60	1,098.03	-		170,697.75	2,413,739.06
FY14 through 6/17/14	1,415,727.14	702,781.98	658.32	-	33,500.00	450,932.31	2,603,599.75
Total	46,143,931.34	8,657,452.70	1,351,525.85	11,821,754.66	33,500.00	2,131,601.32	70,139,765.87

TABLE A-2: Hazardous Waste Management Fund Expenditures

	Capital Projects Remediation of Hazardous Waste Sites	Maxey Flats Site	Technical/Professional Oversight	Kentucky Pollution Prevention Center	HWMF Audit Fee	Budget Reduction	Total
FY93- FY02	19,800,000.00	6,258,654.00	7,131,214.00	3,514,900.00	-		36,704,768.00
FY03	1,000,000.00	-	797,991.00	420,000.00	-		2,217,991.00
FY04	2,200,000.00	-	1,215,955.00	420,000.00	11,033.00	128,600.00	3,975,588.00
FY05	1,684,853.34	-	809,567.75	420,000.00			2,914,421.09
FY06	853,900.00	-	1,055,581.73	420,000.00			2,329,481.73
FY07	1,734,387.89	-	606,379.41	362,080.00	-	-	2,702,847.30
FY08	1,338,707.98		772,847.34	351,793.85		313,600.00	2,776,949.17
FY09	500,000.00		929,296.70	299,705.39			1,729,002.09
FY10	850,000.00		1,100,956.70	247,078.50			2,198,035.20
FY11	2,544,731.00		897,226.30	300,000.00			3,741,957.30
FY12	2,100,000.00		693,369.49	360,000.00			3,153,369.49
FY13	737,000.00		773,016.63	360,000.00			1,870,016.63
FY14 through 6/17/14	1,142,160.94	-	886,037.02	360,000.00	-	-	2,388,197.96
Total	36,485,741.15	6,258,654.00	17,669,439.07	7,835,557.74	11,033.00	442,200.00	68,702,624.96

Table A-3: HWMF Active Capital Project Accounts Cumulative Expenditures

	Engineering	Construction	Total
Small Cleanups/Emergency Response	\$ 909,089.87	\$ 4,061,936.65	\$ 4,971,026.52
Middlesboro Tannery	\$ 435,135.90	\$ 1,355,267.00	\$ 1,790,402.90
LWD	\$ 3.00	\$ 14,400.82	\$ 14,403.82
KY Tie & Timber	\$ 177,266.25	\$ 37,685.25	\$ 214,951.50
Kim's Dry Cleaners			\$ -
Quality Cleaners	\$ 33,642.91	\$ 29,276.00	\$ 62,918.91
Louisville Environmental Service	\$ 172,079.20		\$ 172,079.20
Distler Brickyard	\$ 10,954.72	\$ 140,855.21	\$ 151,809.93
Distler Farm	\$ 992.60	\$ 120,078.39	\$ 121,070.99
Jefferson Forest Drum Site	\$ 88,251.12		\$ 88,251.12
Walgreens Hogan Project	\$ 93,637.00		\$ 93,637.00
Lees Lane Project	\$ 14,942.06	\$ 85.50	\$ 15,027.56
Black Leaf Project	\$ -	\$ 1,514,842.01	\$ 1,514,842.01
Schendley Distillers	\$ -		\$ -
Jackson's Pronto Cleaners	\$ 8,300.00	\$ -	\$ 8,300.00
Familee Dry Cleaners	\$ 2,677.71	\$ 832.20	\$ 3,509.91
02 Logistics ERT Response Site		\$ 244,759.18	\$ 244,759.18
Total	\$ 1,946,972.34	\$ 7,520,018.21	\$ 9,466,990.55

Table A-4: HWMF Active Capital Project Account Expenditures for FY 2013 -2014

	FY13	FY14	Total
KY Tie & Timber	\$22,542.00		\$22,542.00
Quality Cleaners	\$900.00	\$7,878.80	\$8,778.80
Louisville Environmental Service	\$14,070.73	\$8,323.12	\$22,393.85
Distler Brickyard	\$9,611.00	\$95,438.00	\$105,049.00
Distler Farm	\$2,938.00	\$80,032.00	\$82,970.00
Walgreens Hogan Project	\$25,963.00	\$67,674.00	\$93,637.00
Lees Lane Project		\$12,378.00	\$12,378.00
Black Leaf Project	\$469.00	\$1,544,424.00	\$1,544,893.00
Jackson's Pronto Cleaners	\$1,275.00	\$7,025.00	\$8,300.00
Familee Dry Cleaners	\$2,303.00	\$1,207.11	\$3,510.11
Total	\$80,071.73	\$1,824,380.03	\$1,904,451.76