

**Kentucky Division of  
Environmental Program Support**

**Annual Report**

**Fiscal Year 2009**



**September 2009**

**Energy and Environment Cabinet  
Department for Environmental Protection**

**502-564-2150 and 502-564-6120 (Lab)**

**[www.dep.ky.gov/deps](http://www.dep.ky.gov/deps)**



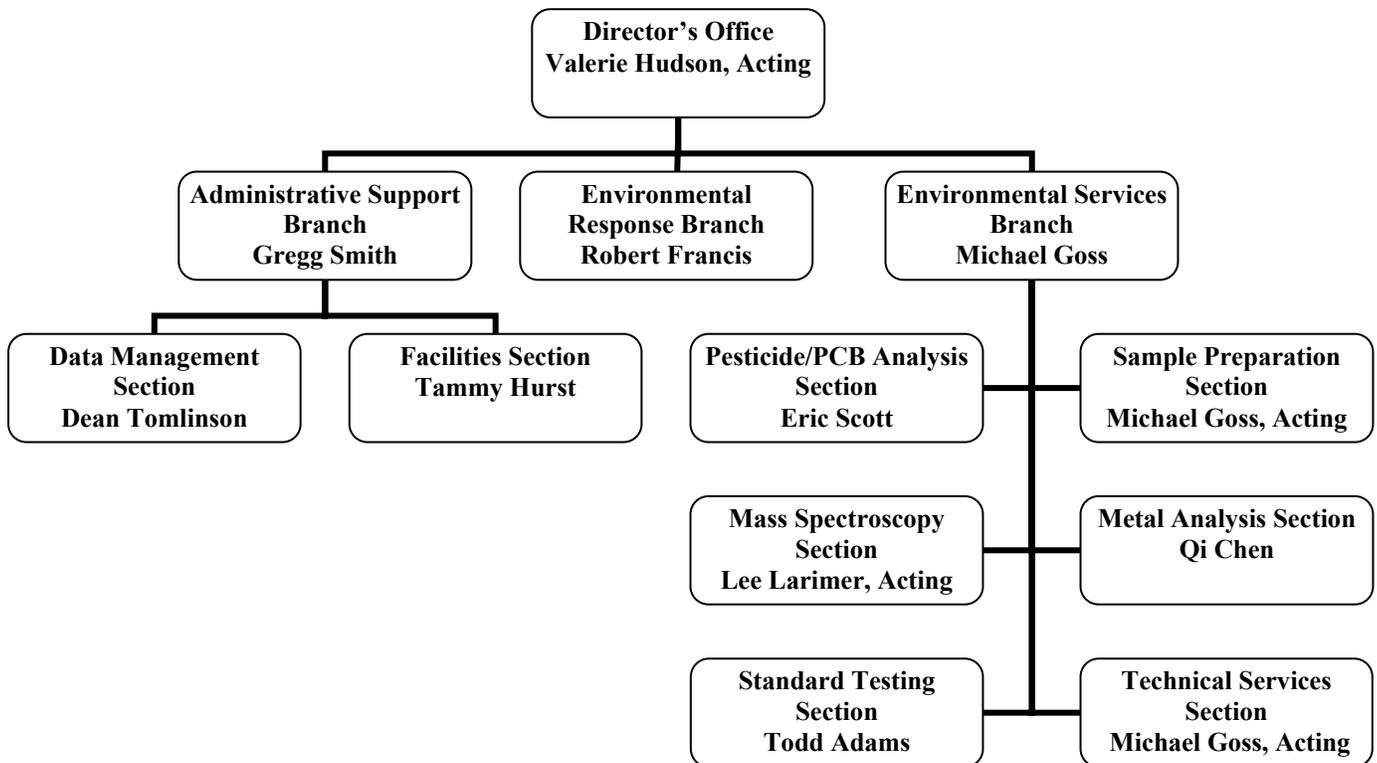
# DIVISION OF ENVIRONMENTAL PROGRAM SUPPORT

## Introduction

The Department for Environmental Protection (DEP) was reorganized effective June 16, 2008 (Executive Order 2008-531). DEP consolidated internal support functions for the department into the new Division of Environmental Program Support (DEPS). These functions included administrative functions, environmental laboratory services and environmental response team (ERT) functions. As a result of the reorganization, the former Division of Environmental Services was changed from a division to a branch and the former Environmental Response Section in the Commissioner's Office was changed to a branch in the new division.

## Division Structure

The Division of Environmental Program Support is composed of three Branches – Administrative Support Branch, Environmental Response Branch and Environmental Services Branch. The Environmental Services Branch is located at 100 Sower Boulevard in Frankfort in the Central Laboratory Complex. The other two branches are located at 300 Fair Oaks Lane in Frankfort.



## Administrative Support Branch – Activities and Accomplishments

The Administrative Support Branch (includes the Data Management and Facilities Sections) is responsible for personnel management, budget activity and financial reporting, inventory coordination, printing, communication services (telephone systems), facilities management, mail processing, coordination of grant activities and memoranda of agreement, federal and state statutory and regulatory reporting functions, and information technology (IT) functions for the

department. IT activities include the development and implementation of computer systems, software packages, and database structures; system support services for multiple systems; and coordination and oversight of the TEMPO (Tools for Environmental Management and Protection Organizations) enterprise for the department.

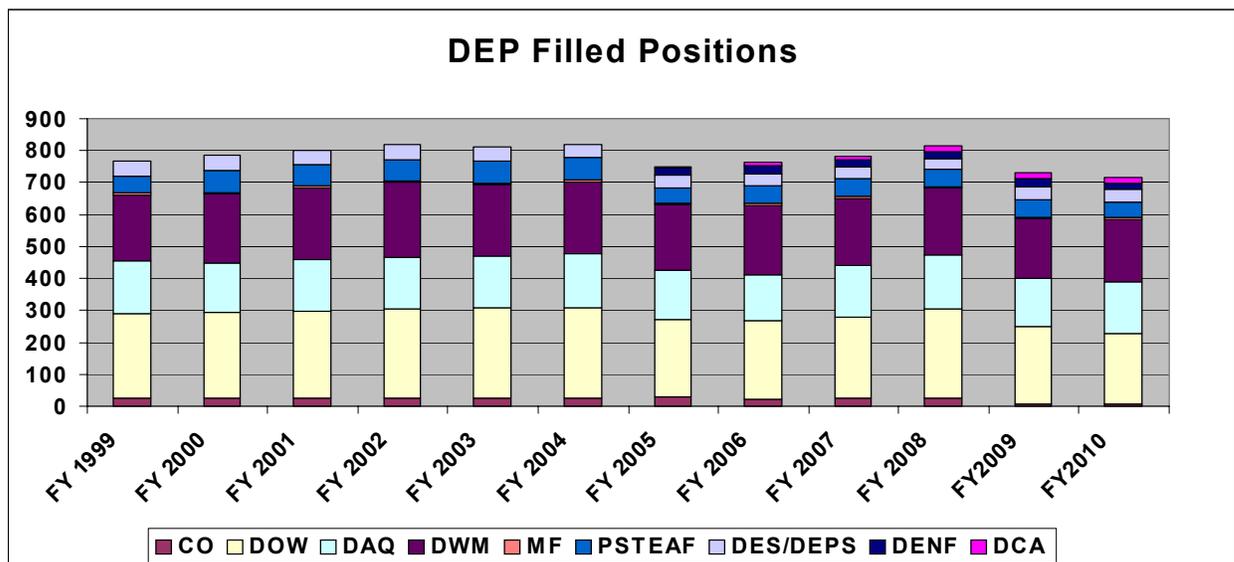
## Human Resource Management

### Retirements

DEP experienced the retirement of approximately 10% of its staff during calendar year 2008. A total of 78 employees retired with 57 retirements occurring between July 1, 2008 and January 1, 2009. Many of these retirements created vacancies in key management and supervisory positions. The Department has filled the majority of these leadership positions and is now in the process of attempting to fill key technical staff positions that have been vacated as a result of these promotional opportunities. However, at the end of FY08, approximately 80 staff level vacancies remained, creating gaps in the ability of the agency to deliver required services.

### Filled Positions

The current number of filled positions within DEP as of the beginning of July 2009 was 716. The FY2009 budgeted personnel cap is 795 positions, although the budget reductions do not accommodate this number of filled positions. Historically, DEP's highest number of filled positions was in FY2003-2004 with approximately 821 positions filled and a budgeted personnel cap of 851.



### Environmental and Natural Resources Scholarship Program

The scholarship program began in 1991 and scholarships are available to college juniors, seniors and graduate students in selected academic disciplines, such as engineering, geology and chemistry. The program is coordinated by the Kentucky Water Resources Research Institute and the scholarship student must agree to work full-time for DEP immediately after graduation. To date, DEP has awarded scholarships to 57 students. In FY09, there were two students in the program and they were both sponsored by the Division of Water.

### Recruitment/Career Fairs

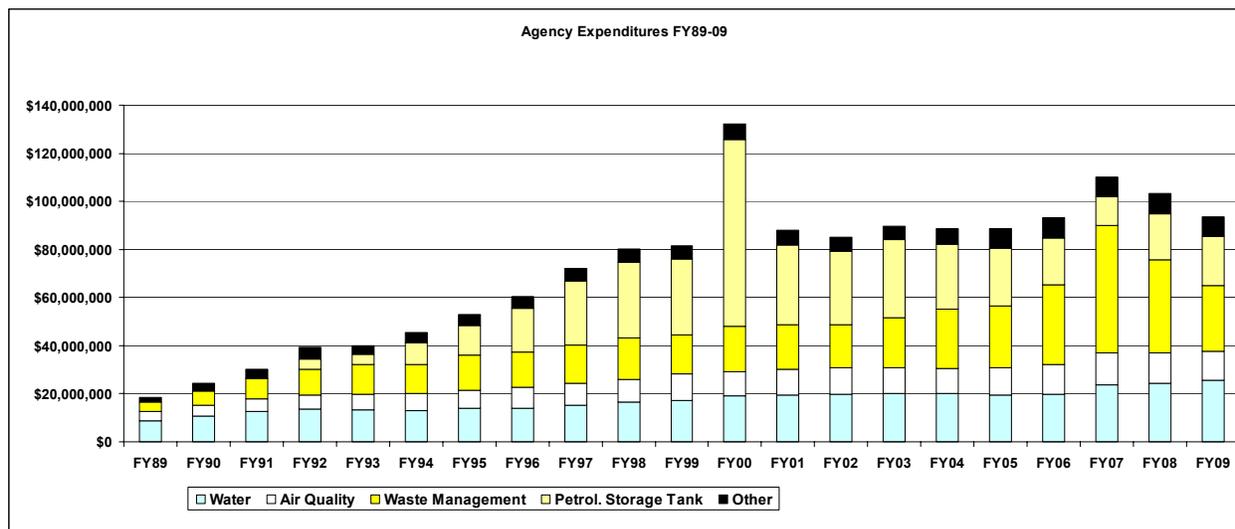
In the fall of 2008, DEP was represented at 7 Kentucky universities promoting the DEP scholarship program and recruiting students for vacancies. There was a 52% increase in student

attendance when compared with the spring 2008 fairs. In the spring of 2009, DEP was represented at career fairs held at 7 Kentucky universities.

## Financial Management

### FY09 Budget

In the first half of FY 2009, the divisions completed their FY09 operating budgets and submitted them to the Cabinet's General Administration and Program Support (GAPS) budget office by the July 21, 2008 deadline. In addition, the divisions worked on vacancy credit calculations in order to see if vacancy credits could supply the department with enough general funds to cover the anticipated budget cuts. The divisions completed a 1% and 4% budget cut impact statements that were sent to the GAPS budget office by the November 20, 2008 deadline. The divisions completed the FY10 operating budgets and submitted them to the GAPS budget office by the June 15, 2009 deadline. The divisions prepared the Capital Plan for FY2010-2016 by the March 16, 2009 deadline. The Capital Plan included the following projects: State-Owned Dam Repair, Hazardous Waste Management Fund, State-Funded Leaking Underground Storage Tanks Additional, Paper Shredder, and Maxey Flats Cap. The divisions prepared expansion items for the FY2010-2012 biennial budget request and the requests were ranked by the Commissioner's Office. The fixed asset audit was completed with a deadline of April 30, 2009 to GAPS. The Auditor's Office chose the Commissioner's Office/DEPS inventory (located at 300 Fair Oaks) to observe the inventory procedures. FY09 closing activities began at the end of June 2009. After the ice storm that occurred during January 2009, staff worked with FEMA to be reimbursed for some of the ERT responder time. In May 2009, FEMA agreed to reimburse DEP \$19,096.54.

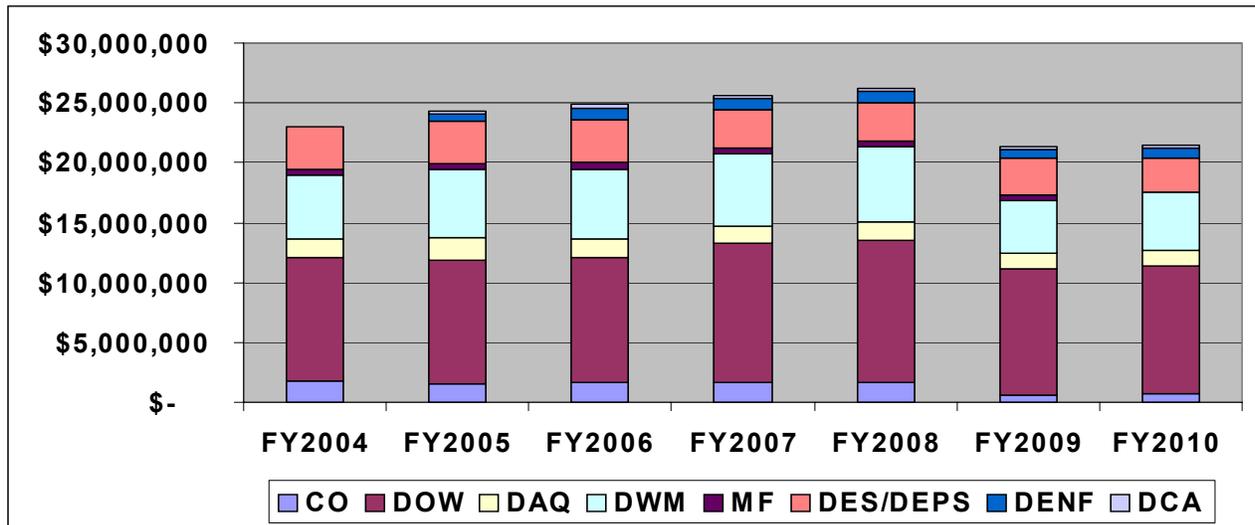


Below are the actual expenditures for DEP in FY09 by division or program area.

Expenditures By Unit	FY09
Commissioner's Office	\$770,164
Water	\$25,774,752
Air Quality	\$11,932,166
Waste Management	\$27,408,051
Env. Services/Env. Program Support	\$3,914,032
Maxey Flats	\$415,600
PSTEAF	\$20,463,558
Enforcement	\$1,388,731
Compliance Assistance	\$1,361,028
<b>TOTAL EXPENDITURES</b>	<b>\$93,428,083</b>

## FY09 Budget and Managing Budget Reductions – General Funds

The overall FY09 DEP general fund budget was reduced by approximately \$4.9M, an approximately 20% general fund reduction from FY08 to FY09.



In an effort to offset a portion of the general fund reductions, DEP has been working for the past 1.5 years in an effort to increase authorization fees for a number of agency programs that historically either had no fee at all or had not been revised in many years (in some cases greater than 20 years). The agency has been successful in some of these efforts. However, at this time, the two primary (from a financial perspective) fee regulation amendments are still in process with respect to solid waste and KPDES.

## **Information Management**

### TEMPO

Backup staff was trained to produce and format weekly TEMPO reports. The module for TEMPO web-based enhancements is currently in production and version upgrades are currently being drawn up. These will be accomplished as time allows due to budget constraints. (NOTE: The FY09-10 expansion budget request for web-based electronic services, including on-line permitting applications, was not approved.) A TEMPO linked “ePermitting” module is in production. The latest addition for KPDES permits is in the process of being written and will be completed when the DOW KPDES staff provides a final version of the associated permit.

### COMPASS Replacement System

A test instance of the COMPASS replacement system (ALA-WADR) was established in-house and is currently in testing by DOW staff. Representatives from Alabama will be on-site for the annual Southeast Water Pollution Biologist Association (SWPBA) conference October 19<sup>th</sup> through the 22<sup>nd</sup> and DEP will provide an on-site demo of the ALA-WADR system. Mississippi is also making enhancement to ALA-WADR to make it ‘plug-in friendly’. COMPASS is still on-line in order to continue to feed the KWMIP system. Once a replacement for COMPASS is in production, a module will be written that will allow DEP to shut COMPASS down and continue that data feed from the replacement system.

### SWr1

SWr1 has been upgraded to version 2 and is in production. It is expected that version 3 will be available in 2009 and DEP will be upgrading again by the end of the year.

## CROMERR

The Cross-Media Electronic Reporting Rule (CROMERR) compliance survey was completed by September 2008. The CROMERR submission date was been extended until January 2010. The DEP manpower needs assessment for CROMERR compliance was completed as of September 2008. A draft CROMERR application was submitted to the US Environmental Protection Agency (USEPA) for review. The review revealed five minor issues with the proposal. Overall USEPA was pleased with the completeness of the DEP application and the proposed technology. DEP is currently addressing the issues noted and will be submitting a final proposal after final review and approval by the DEP IT Oversight Committee.

## USEPA STAG Grants

USEPA has recently awarded money to DEP for the following two 2008 State and Tribal Assistance Grants (STAG). Work on these two grant projects will take place in FY10.

- PCS to ICIS-NPDES Migration – The grant funds (\$171,600 federal, \$110,500 state) will be used for software enhancements and contractual labor to migrate existing data in PCS to ICIS, verify the accuracy of the migration, and enter required data not currently in PCS. Management reports will be developed based on the new ICIS data and migration tools will be developed to extract data from TEMPO to ICIS to reduce manual data entry.
- Better Use Project/Tablet Personal Computers Compliance Monitoring - The grant funds (\$108,000 federal, \$61,500 state) will be used to demonstrate better use of technology in compliance monitoring activities with the use of portable, personal-computing technologies for the performance of pre-inspection, on-site inspection, and post-inspection activities.

## NEIEN Grants

The USEPA National Environmental Information Exchange Network (NEIEN) is an Internet-based approach for exchanging environmental data between USEPA and states. The NEIEN enables participants to control and manage their own data while making it available to partners via requests over a secure Internet connection. DEP has been applying for NEIEN grants in order to maintain and improve the TEMPO enterprise system. TEMPO was originally funded by EMPOWER funds. After EMPOWER funds were depleted, the department began applying for the NEIEN grants in order to support the program. Grant funds are limited and the entire department is now sharing the costs of maintaining TEMPO. A listing of past and current NEIEN grants is provided below.

- 2002 NEIEN One Stop Grant - DEP completed this project in 2006 using the grant funds (\$500,000 federal). One of the many outcomes of this project included “eSearch” which allows the regulated community to search agency data via the web. DEP also implemented “eNotification”, a module of ePortal, for the collection of routine incident notification data from regulated facilities.
- 2002 NEIEN Challenge Grant – DEP used the grant funds (\$150,000 federal) to develop the corrective action interface under the TEMPO/RCRA Info Interface and completed additional work to customize the Mississippi interface for Kentucky.
- 2004 NEIEN Readiness Grant - DEP implemented NODE 1.1 using these grant funds (\$71,577 federal). This included installing the Node on the hardware purchased under the grant, conducting testing, and implementation.
- 2005 Kentucky Exchange Network Implementation Grant (AFS & NEI) - The funds (\$230,000 federal, \$50,000 state) were used to address the XML mapping changes brought about by the department’s state-specific implementation of TEMPO, provide the

department the ability to develop data flows to support exchange of AFS data with USEPA and trading partners via CDX, and allow the department to complete NEI changes. A minor modification was made to the original grant proposal to allow for the submittal of AFS data to USEPA using the Universal Interface (UI). DEP is routinely submitting data to USEPA via the UI in production environment now.

- 2006 Kentucky Exchange Network Grant for the Web Based Emissions Survey - The funds (\$200,000 federal, \$50,000 state) were used to allow the department to develop a system to improve timeliness, efficiency, and reduce costs associated with the Division for Air Quality annual emissions survey process. The grant provided the department the ability to develop data flows to enhance Kentucky's participation of NEI data with USEPA and trading partners via CDX. This work was for the benefit of the Division for Air Quality.
- 2006 Kentucky Exchange Network Grant for the FRS Data Flow – The funds (\$78,000 federal) were used to make necessary changes to the previously developed Mississippi Department of Environmental Quality FRS node and to implement a DEP FRS node. This work was for the benefit of the entire department.
- 2009 NEIEN Grant for Node 2.0 - These funds (\$77,114) will be used to upgrade the DEP software Node from version 1.0 to version 2.0. The node is used to supply data to USEPA and other data trading partners.

## **Buildings and Facilities Management**

### DEP Office Move

For the first time in over 25 years, the DEP consolidated the Division's of Water, Waste Management and Air Quality into one office location. This extensive effort physically relocated approximately 550 staff with DEP from 6 buildings located in the Frankfort, Kentucky metro area to one building located at 200 Fair Oaks Lane in Frankfort, Kentucky. This massive consolidation of DEP staff, laboratory equipment and official files should ultimately generate savings in utility payments, facility upkeep payments and security services payments. In addition, the consolidation created one central DEP file room, enhanced training and meeting room facilities, and will increase communication between divisions along with enhancing work efficiencies. Finally, the public will be better served by having a one-stop location to address their environmental concerns and permitting needs.



DEP Oversight Moving Team  
Members (right to left):  
Valerie Hudson, Lona Brewer,  
Alan Bryant, Rufus Turner,  
Tammy Hurst, Eddie Roberts,  
Ron Price and Neal Bruckner

## **Environmental Services Branch – Activities and Accomplishments**

### **Lab Overview**

The Environmental Services Branch provides laboratory-testing services essential for the identification and characterization of environmental pollutants in the Commonwealth. These services are required by KRS 224.10-100(7) “Secure necessary scientific, technical, administrative, and operations services including laboratory services by contract or otherwise”; and (16) “monitor the environment to afford more effective and efficient control practices to identify changes and conditions in ecological systems and to warn of emergency conditions”. Additionally, 40 CFR 123.26 - Requirements for Compliance Evaluation Programs states that “State programs shall have inspection and surveillance procedures to determine, independent of information supplied by regulated persons, compliance or non-compliance with applicable program requirements.”

The Environmental Services Branch (previously a Division) underwent reorganization in FY07 that resulted in the risk assessment responsibilities being redistributed to the Divisions of Air Quality and Waste Management. This resulted in focusing on the single mission of providing laboratory services to the Department for Environmental Protection as the department’s consolidated environmental chemistry laboratory. The branch has accomplished much since FY07 and expects to continue its reputation for high achievement. The Environmental Services Branch attained national accreditation under the National Environmental Laboratory Accreditation Program (NELAP) in 2007. It became the second state laboratory in the United States Environmental Protection Agency Region IV, an eight-state region, to achieve this accreditation. This accreditation is testament to the quality of the analysis performed by the laboratory.

Concurrent with this achievement, the Environmental Services Branch (ESB) has maintained a high level of analytical services to the Department. The testing activities of the division support all of the programs managed by the Divisions of Water, Air Quality and Waste Management. The ESB increased its productivity between 2003 and 2007 and the numbers of samples tested and the numbers of tests performed increased during that time by an average of 12.7%. The addition of more productive equipment and the dedication of analytical and support staff allowed this increase in productivity. Replacing equipment with newer, more efficient instruments over this timeframe was critical to maintaining productivity improvements without additional staff.

The ESB continued to provide testing for all divisions in accordance with the allocated FY09 monies. From January 1 to June 30, 2009, the laboratory had accepted 2,876 samples. This number is around 75% of the total number of samples received during the same period last year. This drop in the number samples can be attributed to the lack of monies funding the different programs within the department. Divisions are making cuts in the number of samples they are collecting. Additionally, from January 1 to June 30, 2009, the number of tests performed was 16,539 and the number of chemical parameters reported was 142,821.

ESB continues to participate in the number of proficiency tests that are needed to maintain accreditation under USEPA and NELAP programs. ESB has passed 93.5% of the tests that have been submitted and, in April of 2009, ESB took part in a NELAP on-site audit conducted by the NH ELAP (New Hampshire Environmental Laboratory Accreditation Program).

Overall, the FY09 budget for the Environmental Services Branch supported the current activities in the branch. The FY09 baseline budget included 31 full-time positions, 1 interim position and 1 cooperative education (co-op) position. The majority of the laboratory positions charge their time to project codes associated with general, restricted and federal funds. All other positions are funded 100% with general fund dollars. However, with the General Fund budget reduction in FY09, there was no money available for instrument purchase and upgrades. Instrument service agreements are being paid in FY10 by other division's within the department.

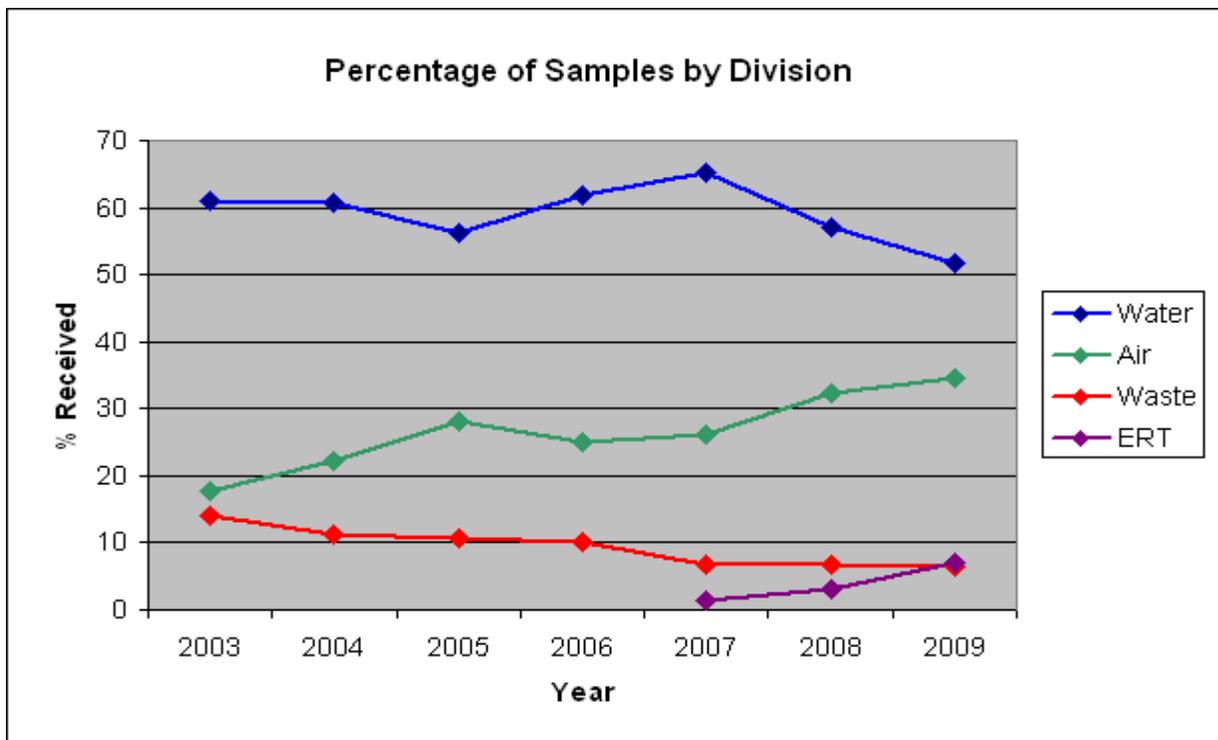
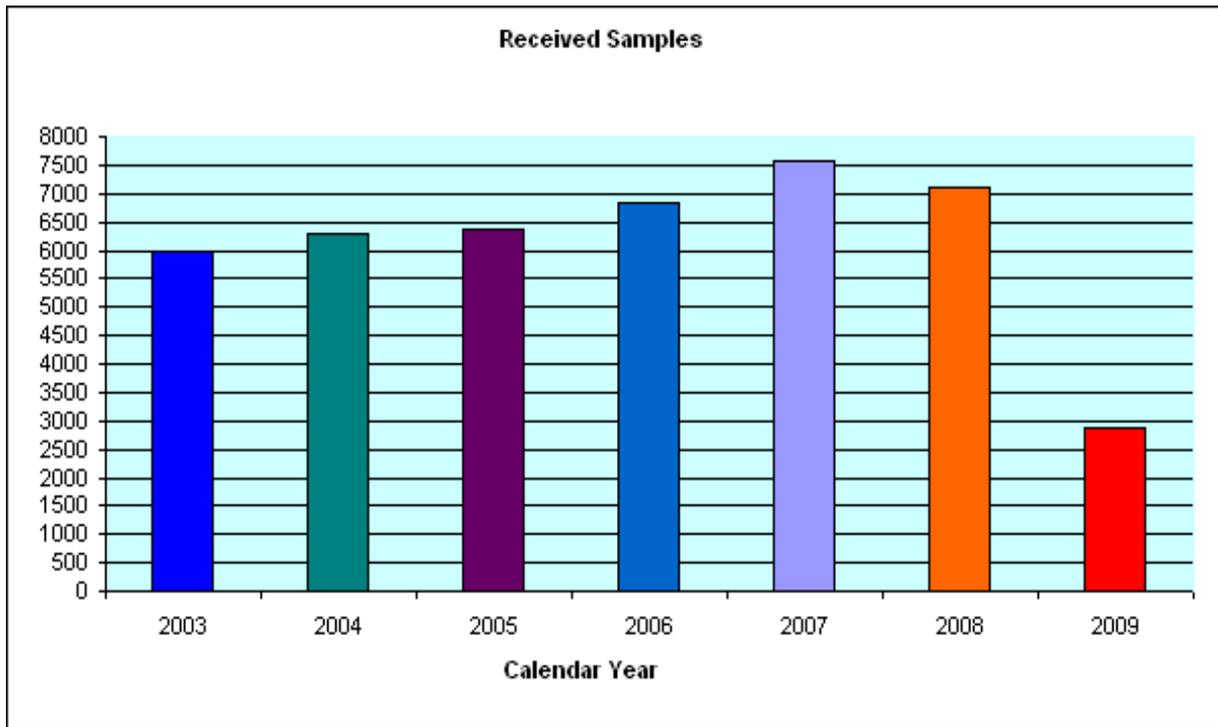


Todd Adams loads the discrete analyzer with samples and Greg Abner weighs out samples in the preparation section of the lab.



Kassandra Rumsey prepares mercury samples for analysis and Baoding Chen prepares a SUMMA canister for an air analysis.

**Environmental Services Branch – Samples Received from 1/01/03 to 6/30/09**



## **Environmental Response Branch – Activities and Accomplishments**

### **Overview**

The Energy and Environment Cabinet (EEC) is mandated to protect human health and to provide for efficient, coordinated and effective action to minimize damage to air, land and waters of the Commonwealth from toxic or hazardous releases of pollutants and contaminants. To achieve this goal, the Department for Environmental Protection formed the Environmental Response Team (ERT) in 1980.

The language in KRS 224.01-400 mandates the Cabinet to have a 24-hour environmental response line and designates the Cabinet as the lead agency for emergency spill responses. In addition KRS 224.46-580 mandates the Cabinet to respond effectively and timely to emergencies created by releases per 224.01-400.

ERT is a departmental function composed of staff with various environmental discipline backgrounds from DOW, DAQ, DWM and DEPS with the majority of the staff from the regional offices. The Environmental Response Branch is composed of four full time staff, 24 part-time responders (365 days per year 24 hours a day) and 8 alternates. ERT is operationally based in the Division of Environmental Program Support in Frankfort. ERT was moved from the Division of Water to the Commissioner's Office in the July 2004 reorganization (Executive Order 2004-731) and then was moved to the Division of Environmental Program Support in the June 2008 reorganization (Executive Order 2008-531).

ERT responsibilities include:

- Maintain a 24-hour emergency report/notification phone line for spills and releases
- Coordinate and transfer non-emergency and post emergency incidents to appropriate DEP staff
- Serve as On-Scene Coordinator to releases of toxic and hazardous substances, pollutants and contaminants that threaten the environment
- Coordinate with local and state agencies, USEPA, other federal agencies and adjacent state's agencies related to environmental releases
- Provide staffing and coordination of EEC efforts for KY Emergency Operations Center (EOC) during activation of EOC due to natural disasters such as flooding and tornadoes.
- Assist in training and planning activities of other local and state agencies

During an emergency event in Kentucky, the KY Emergency Operations Plan (coordinated by the KY Division of Emergency Management) is activated which places requirements on the EEC/DEP and the Environmental Response Team to work within a framework with other state, local and federal agencies to coordinate efforts to mitigate the emergency.



Oil spill response training was held at Barren River State Resort Park.

Beyond the routine response activities by ERT, the KY EOP places specific duties on the EEC to provide the following:

- Provide on-scene coordinator
- Provide staffing to State Emergency Operations Center
- Provide technical assistance and initial evaluation of pollution hazards
- Assist in early assessment of extent of hazard by dispatching staff to spill/release site when required
- Approve and direct on-site operations plan for cleanup, treatment or containment and mitigation of environmental damage
- Assure proper disposal of resulting waste materials
- Establish environmental sampling, testing and analysis programs to measure environmental effects
- Determine environmentally safe concentrations for water quality and ensure safe public drinking water supplies affected by releases
- Coordinate with USEPA, Federal Region IV Regional Response Team, US Army Corps of Engineers, US Coast Guard and other federal agencies

KRS 224.01-400 mandates coordination by requiring “consultation with other federal, state, and local agencies, and private organizations.” It must occur at all stages and in all elements of emergency response activities. This coordination is managed by use of the Incident Command System (ICS) as set forth in the KY Emergency Operations Plan and the OSHA safety standards.

The Incident Command System is a standardized system of incident management based upon a chain of command and common terminology for all responding agencies. ICS incorporates the concept of a unified command system, which are employed at large incidents where multiple agencies have jurisdictional concerns.

ERT has daily coordination/communication activity with the KYDEM’s Emergency Operations Center duty officers who receive the initial calls on the ERT 24-hour phone after normal work hours. The duty officers receive and log the calls and forward the information to the ERT coordinator on call at that time. The duty officers also perform the same services for several other state agencies including the State Fire Marshal, Dept. of Agriculture and Dept. for Health Services (Radiation Branch). They are also in communication with several other agencies such as KSP, DOT, Fish and Wildlife, KVE, KY National Guard, and the regional and local DEM emergency managers.

### **Coordination, Communication and Cost Recovery**

The present notification and communication structure for the EEC/DEP is as follows:

- ERT receives and evaluates incidents
- ERT makes decision on response and severity of incident
- ERT notifies appropriate Branch Managers and Director of appropriate Division if situation warrants
- ERT notifies Commissioner and EEC Secretary if necessary

Some emergency situations due to unknown or unresponsive responsible parties may require the Cabinet to act to control and cleanup releases. The procedures for these situations have been:

- ERT determines that an emergency situation exists requiring immediate response to prevent/limit environmental damage due to the situation
- ERT determines that a responsible party is either unknown or unresponsive



## **ERT Responders**

### **ERT CENTRAL OFFICE STAFF:**

Robert Francis, Manager  
David Leo, Coordinator  
Rodney Polly, Coordinator  
Keri Greenidge, Administrative Specialist

### **ERT RESPONDERS BY AREA**

**AREA I:** Kevin Usher (DAQ-PADUCAH)  
Bill Clark (DAQ-PADUCAH)  
Vince Priddle (DOW-PADUCAH)  
Margie Williams (DWM-PADUCAH) - Alternate

**AREA II:** Neil Berry (DWM-MADISONVILLE)  
Larry Tichenor (DWM-MADISONVILLE)  
Mac Cann (DAQ-OWENSBORO)  
VACANT - Alternate

**AREA III:** Robbie McGuffey (DWM-BOWLING GREEN)  
Bill Baker (DOW-BOWLING GREEN)  
Mike Sapp (DWM-BOWLING GREEN)  
John Rogers (DWM-COLUMBIA) – Alternate

**AREA IV:** Keith Simms (DWM-LOUISVILLE)  
Todd Giles (DOW-FLORENCE)  
Rob Staley (DWM-LOUISVILLE)  
Mark Jones (DOW-FLORENCE) - Alternate

**AREA V:** Rodney Maze (DWM-MOREHEAD)  
Philip Carter (DWM-MOREHEAD)  
Danny Fraley (DOW-MOREHEAD)  
James Blevins (DOW-MOREHEAD) – Alternate  
Ashley Markwell (DAQ-ASHLAND) - Alternate

**AREA VI:** James McCloud (DOW-LONDON)  
Bill Belcher (DWM-LONDON)  
Andrea Rader (DWM-HAZARD)  
Kim Farris - Alternate

**AREA VII:** Damon White (DOW-HAZARD)  
Kevin Francis (DWM – HAZARD)  
Robert Stidham (DWM – HAZARD)  
Kelly Fugate (DOW-HAZARD) - Alternate  
Steve Hall (DAQ-HAZARD) – Alternate

**AREA VIII:** VACANT  
Barbara Risk (DOW-FRANKFORT)  
Brian Schrader (DWM-COLUMBIA)  
VACANT – Alternate

### **BLUEGRASS ARMY DEPOT**

Bill Buchanan (DWM – FRANKFORT)

## Environmental Incident Notifications

Year	Incidents	Incidents / day	Emergency Responses
2009 (Jan – June)	6058	33.2	253
2008	11753	32.2	475
2007	9719	26.62	460
2006	8254	22.61	663
2005	5720	15.67	327
2004	3650	10	242
2003	3130	8.57	132
2002	3265	8.94	96
2001	3029	8.30	152
2000	3066	8.41	201
1999	3654	10.01	221
1998	4327	11.44	219
1997	4102	11.24	199
1996	3976	10.86	255
1995	3749	10.24	218
1994	3499	9.59	227
1993	3071	8.74	118
1992	2478	6.77	144

All incidents and notifications received thru the ERT section are evaluated and responded to according to the established DEP business rules as follows:

- **Emergency** - on site response within 2 hours of notification
- **High Priority** - DEP staff will make site visit for follow-up within 2 working days of notification
- **Routine**- DEP staff will make site visit or contact notifier with 5 working days of notification

Several major incidents that occurred in the last state fiscal year are listed in the table below.

DATE	MAJOR INCIDENTS DURING SFY2009	COUNTY	IMPACTS
11/01/08	Childers Oil – Released unknown amount of petroleum waste from an unpermitted site into a stream that contaminated the Whitesburg Water Plant and kept the system under a consumer advisory for 6 days.	Letcher	Drinking Water, Water, Soil
11/30/08	Aisin Automotive- Above ground storage tank lost 1,000 gallons of dye lubrication that was released into Laurel River. Aeration and recovery of stream in stream lasted for 9 days.	Laurel	Water, Soil
1/26/09	Ice Storm – Ice Storm that resulted in power outage all across Western KY that caused drinking water outage and wastewater outage to approximately 500,000 residents. ERT coordinated DEP's response effort with drinking water, wastewater, and debris disposal issues. ERT staffed the State EOC and remained in emergency operations for the Ice Storm for 34 days.	Statewide	Drinking Water, Wastewater
2/15/09	Childers Oil- Released unknown amount of petroleum into the stream from a used above ground storage tank location that contaminated the Whitesburg Water Plant and kept the system under a consumer advisory for 9 days.	Letcher	Drinking Water, Water, Soil



**January  
2009  
ICE  
STORM**

