Kentucky Division of Environmental Program Support

Annual Report

Fiscal Year 2012

(July 2011 to June 2012)



September 2012

Energy and Environment Cabinet Department for Environmental Protection

502-564-2150 and 502-564-6120 (Lab) <u>dep.ky.gov/deps</u>



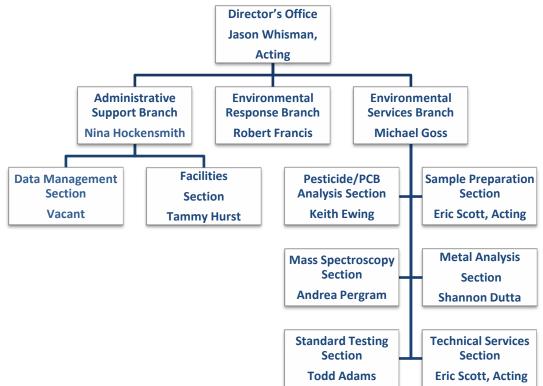
DIVISION OF ENVIRONMENTAL PROGRAM SUPPORT

Introduction

The Department for Environmental Protection (DEP) was reorganized effective June 16, 2009 (Executive Order 2009-538). 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 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

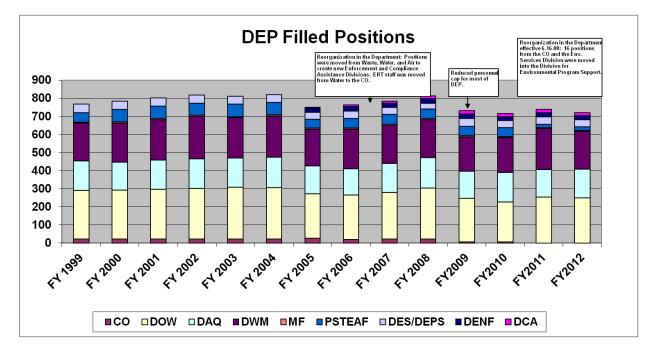
The Administrative Support Branch (which includes the Data Management and Facilities Sections) is responsible for personnel management, budget activity and financial reporting, inventory coordination, printing, communication services (telephone systems), facilities management, mail processing, coordination 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

Filled Positions

The current number of filled positions within DEP as of the beginning of July 2012 was 721. The FY2012 budgeted personnel cap was 766 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.



Employee Awards

Due to budget constraints, ACE and ERA Awards continue to be suspended within EEC. On January 20, 2012 the Department held an Employee Awards Program to recognize outstanding employees and employee units (branch, section or program) for Calendar Year 2011.

Energy and Environment Cabinet Scholarships

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 62 students. In May 2012, DEP awarded 1 student a scholarship. This student was sponsored by the Division of Water. Two students, also sponsored by the Division of Water, are completing their degrees in December 2012.

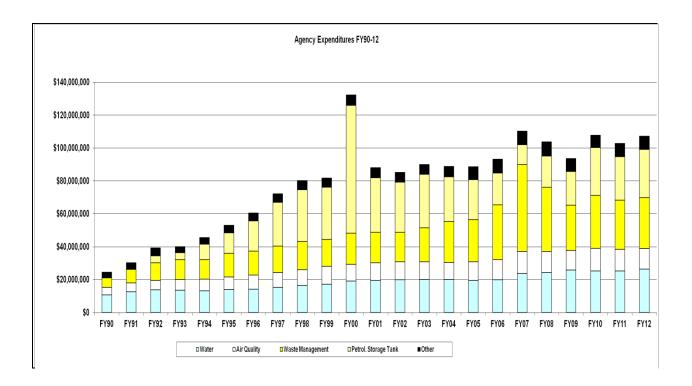
Recruitment/Career Fairs

No Division chose to participate in the fall 2011 or spring 2012 career fairs due to budgetary restraints. Divisions have indicated an interest in participating in the upcoming fall 2012 career fair but no Division has committed due to cost associated with the registrations.

Financial Management

FY12 Budget

All divisions within the Department for Environmental Protection compiled and submitted FY2012 operating budgets to the Cabinet's General Administration and Program Support (GAPS) budget office.



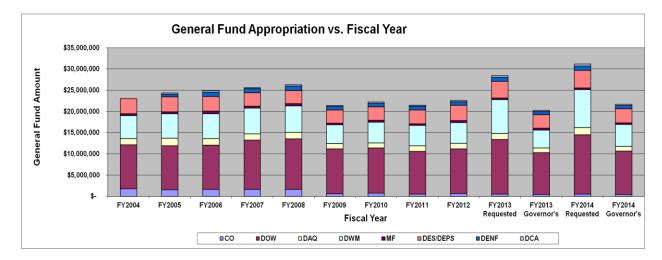
Below are the actual expenditures for DEP in FY12 by division or program area.

| Expenditures by Unit | FY12 |
|----------------------------------|---------------|
| Commissioner's Office | \$479,839 |
| Water | \$26,361,397 |
| Air Quality | \$12,489,636 |
| Waste Management | \$31,020,191 |
| Env Services/Env Program Support | \$4,303,931 |
| Maxey Flats | \$397,297 |
| PSTEAF | \$29,236,568 |
| Enforcement | \$1,374,489 |
| Compliance Assistance | \$1,379,412 |
| | |
| Total Expenditures | \$107,042,760 |

FY12 Budget and Managing Budget Reductions

General Funds:

Since January 2008, state agencies have implemented eight rounds of general fund budget cuts resulting in budget reductions ranging from 20% to 25%. In FY09, the DEP general fund budget was reduced by approximately \$4.9M, an approximately 20% general fund reduction from FY08 to FY09. In FY12, DEP's general fund budget was \$22,550,600 and included unallotted general fund total payroll deferral of \$958,200 on Jun 30, 2012.



In an effort to offset a portion of the general fund reductions, DEP has been working for the past few 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 most of these efforts including increasing KPDES and solid waste permit fees.

Information Management

<u>TEMPO</u>

Eighty percent of the TEMPO help desk requests are resolved within 24 hours. The TEMPO linked "ePermitting" forms engine supports multiple document types including coal and additional departmental program needs and are available to the regulated community.

CROMERR

DEP's formal Cross-Media Electronic Reporting Regulation (CROMERR) application was rewritten to address USEPA concerns and sent to USEPA in Spring 2012. At present, the NetDMR portion of the application has been approved and filed on the Federal Register. The CROMERR compliant portal portion of the application is in review.

USEPA STAG Grants

USEPA 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 through FY12.

• PCS to ICIS-NPDES Migration – The grant funds (\$171,600 federal, \$110,500 state) were 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 were developed based on the new ICIS data and migration

tools were developed to extract data from TEMPO to ICIS to reduce manual data entry. This project is complete.

• Better Use Project/Tablet Personal Computers Compliance Monitoring - The grant funds (\$108,000 federal, \$61,500 state) were 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. This project is complete.

NEIEN Grants

The USEPA National Environmental Information Exchange Network (NEIEN) is an Internetbased 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) were 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.

2009 NEIEN grant for CROMERR compliance – These funds (\$198,034) are being used to upgrade KYDEP's ePortal in order to comply with the USEPA's Cross-Media Electronic Reporting Regulation (CROMERR). This project has been extended until Fall 2013.

2009 NEIEN grant for NetDMR implementation – These funds (\$75,000) are being used to implement the USEPA's NetDMR application system at KYDEP in order to allow for automated reporting of Discharge Monitoring Reports. This project has been extended until end-of-year 2012.

Additional Projects

The following projects were completed during FY12.

- 1. Regional office network upgrades
- 2. ePortal Administration Upgrades
- 3. Departmental server and data consolidation
- 4. Node 2 implementation
- 5. Coal permitting forms via ePortal

Buildings and Facilities Management

200 Fair Oaks Building Telephone Change

In August 2011, DEP began integrating the two telephone systems in the 200 and 300 Fair Oaks buildings so staff can call each other direct and bypass the switchboards. This resulted in a cost-savings measure in that we were able to cancel several trunk lines for each switchboard at a cost of \$30 per line. The project is ongoing.

Bowling Green Regional Office Move

Construction on the new Bowling Green Regional Office is complete. September 17, 2012, is the scheduled date for the move to the new location.



Environmental Services Branch – Activities and Accomplishments

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 Division of Environmental Services) underwent reorganization in FY07 that resulted in the risk assessment responsibilities being redistributed to the Divisions of Air Quality and Waste Management. Soon after this change the Division was downsized managerially into a branch and placed into the current Division of Environmental Program Support. This resulted in the lab 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. The ESB lab has had two on-site NELAC laboratory audits since and has passed all of the requirements this prestigious accreditation requires.

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 branch 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 number 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 the past 4 years has been critical to maintaining productivity without additional staff. Since 2009 the laboratory has been able to acquire funding through other divisions for the purchase of much needed instrumentation. Examples include: Dionex IC (May 2009), TOC Analyzer (June 2009), Leeman Hg AA (June 2010), Man-tech Titrator (Nov 2010), ICP-AES (June 2010), Horizon SPE (June 2011), GC-FID (July 2011)

The Environmental Services Branch (ESB) continues to provide testing services for all the divisions in accordance with the allocated budget monies. In CY2010, the number of samples analyzed was 6076 and the average turn-around time was 24.3 days. In CY2011 the number of samples analyzed (5846) decreased while the average turn-around time increased to 35.4 days. During this time period the decreased efficiency can be attributed to a number of variables. One of the instruments went down for over a 3 month period. Parts to repair this instrument (used to run N/P Pesticides) placed a very large number of samples into limbo and just continued to add to the average turnaround time. In 2011 ESB spent a great amount of time working with Region 4 staff on Air audit reports and general holdups related to the Air Toxic program. Inability to report this data for months was a huge contributing factor for the increase in TAT for samples in CY2011.

From July 1, 2011 to June 30, 2012 (FY12), the laboratory had accepted 5900 samples. This number is around 1.3% more than the total number of samples received the same period last year (FY11). This increase could be attributed to the MOA signed between DEPS/ESB and the DNR

related CHIA project. ESB is also taking in extra work from the mining related PAI audits in eastern Kentucky.

ESB continues to participate in the number of proficiency tests that are needed to maintain accreditation under USEPA and NELAP programs. In calendar year 2011, ESB submitted 1463 analytes and received a passing grade of 96.0%. This is an improvement from 2010's - 93.7%.

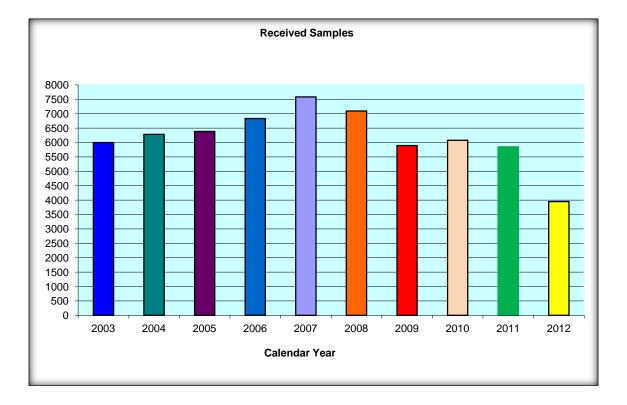
Overall, the FY11 budget for the Environmental Services Branch supported the current activities in the branch. State General Fund budget reductions in FY09 and FY10 resulted in personnel budget reductions and limited funds for instrument purchases and upgrades. Software upgrades on a couple of our major instruments have been possible but only through the help of other divisions within the department. Instrument service agreements were paid in FY10 and FY11 by other divisions within the department. The FY11 baseline budget included 25 full-time positions, six full-time positions less than in FY09. 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.



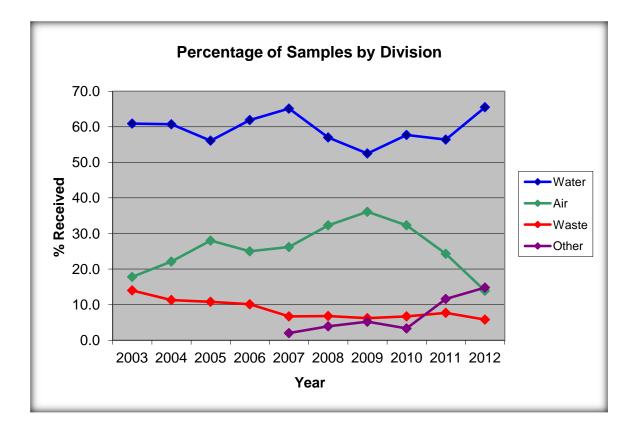
Joseph Carpenter (Mass Spectrometry Section) repairs a column on his N-P GCMS instrument and Amanda Evans (Metal Analysis Section) loads samples scheduled for Mercury analysis.



Victoria Link (Standard Testing Section) loads samples for TOC analysis and Keith Ewing (Pest/PCB Analysis Section) begins prep work of samples on the Dionex Solid Phase Extraction (SPE) system.



Environmental Services Branch – Samples Received from 1/01/03 to 9/7/12



Environmental Response Branch – Activities and Accomplishments

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 contaminates. 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, 30 part-time responders (365 days per year 24 hours a day) and 3 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, US EPA, 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

EEC/DEP ENVIRONMENTAL RESPONSE TEAM KY EMERGENCY OPERATIONS PLAN RESPONSIBILITIES ERT SUPPORT ROLES FOR KY EOC

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.

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 effected by releases
- Coordinate with US Environmental Protection Agency, 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

The present notification/communication structure 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/cleanup releases. The past procedure for these situations has 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 notifies the Commissioner and asks for approval to authorize and acquire necessary contractors to deal with the emergency
- Commissioner gives verbal approval to ERT to proceed under spending guidelines
- Commissioner notifies EEC Secretary and gains upward approvals for emergency declaration
- ERT processes documentation for contractor and emergency declaration

Presently there are three cost recovery procedures.

- For non-enforcement actions expenditures are calculated and a letter is sent to the responsible party requesting payment. Failure to pay results in formal enforcement action.
- Cost recovery associated with formal enforcement action is included in an overall settlement calculation.
- If the preceding two procedures fail to recover ERT costs, reimbursement from the Federal OPA fund is sought.

Environmental Response Center and Enhanced Communications

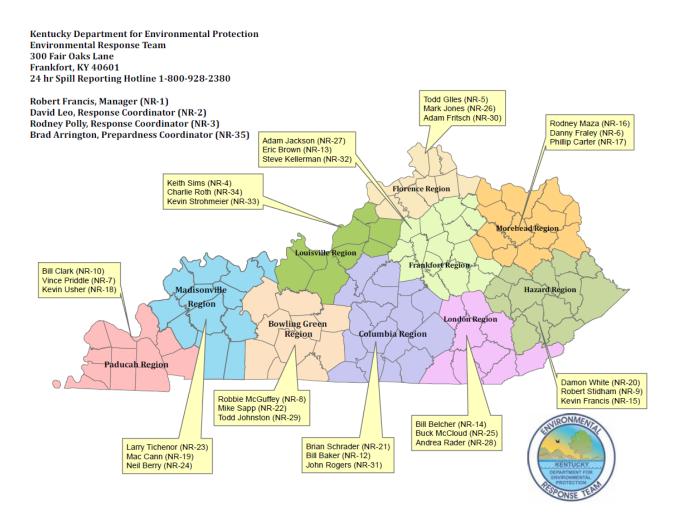
The Environmental Response Branch operates an Environmental Response Center (ERC) that is located at 300 Fair Oaks Lane in Frankfort. The DOC will be used to coordinate Department emergency activities that result from a release at the Bluegrass Army Depot or any other large scale emergency activity.



Staff working in the ERC during the March 2, 2012 Tornado Outbreak

ERT Coverage Areas and Responders

The Environmental Response Team is composed of employees from the Department for Environmental Protection selected from interested applicants based on areas of expertise, and work area to assure statewide coverage and specialized training and experience. ERT members assume the additional responsibilities of ERT responder in addition to their regular work duties. ERT responders are assigned to eight geographic coverage areas with 3 responders in each region being on call in a three-week rotation (one per week) plus an alternate to fill in as needed.



ERT CENTRAL OFFICE STAFF

ROBERT FRANCIS, MANAGER DAVID LEO, COORDINATOR RODNEY POLLY, COORDINATOR BRAD ARRINGTON, PREPARDNESS COORDINATOR

ERT RESPONDERS BY AREA

<u>Madisonville:</u> NEIL BERRY (DWM-MADISONVILLE) LARRY TICHENOR (DWM-MADISONVILLE) MAC CANN (DAQ-OWENSBORO)

| Bowling Green | ROBBIE MCGUFFEY (DWM-BOWLING GREEN) TODD JOHNSTON (DWM-BOWLING GREEN) MIKE SAPP (DWM-BOWLING GREEN) |
|-------------------|---|
| <u>Columbia</u> | JOHN ROGERS (DWM-COLUMBIA) BILL BAKER (DOW-BOWLING GREEN) BRIAN SCHRADER (DWM-COLUMBIA) |
| <u>Frankfort:</u> | ERIC BROWN (DWM-FRANKFORT) ADAM JACKSON (DOW-FRANKFORT) STEVE KELLERMAN - (DWM-FRANKFORT) |
| <u>Hazard:</u> | DAMON WHITE (DOW-HAZARD) KEVIN FRANCIS (DWM – HAZARD) ROBERT STIDHAM (DWM – HAZARD) KELLY FUGATE (DOW-HAZARD) - ALTERNATE |
| <u>Florence:</u> | TODD GILES (DOW-FLORENCE) MARK JONES (DOW-FLORENCE) ADAM FRITCH (DWM-FLORENCE) |
| Louisville: | KEITH SIMS (DWM-LOUISIVLLE) CHARLIE ROTH (DOW-LOUISVILLE) KEVIN STROHMEIER (DWM-LOUISVILLE) |
| Morehead: | RODNEY MAZE (DWM-MOREHEAD) PHILIP CARTER (DWM-MOREHEAD) ASHLEY MARKWELL (DAQ-ASHLAND) JAMES BLEVINS (DOW-MOREHEAD) – ALTERNATE |
| London: | JAMES MCCLOUD (DOW-LONDON) BILL BELCHER (DWM-LONDON) ANDREA RADER (DWM-HAZARD) |
| Paducah: | KEVIN USHER (DAQ-PADUCAH) BILL CLARK (DAQ-PADUCAH) VINCE PRIDDLE (DOW-PADUCAH) MARGIE WILLIAMS (DWM-PADUCAH) - ALTERNATE |

Blue Grass Army Depot:

AMY MCCRACKEN (DWM - FRANKFORT)



ERT Staff participating in oil spill response training provided by the US EPA

ENVIRONMENTAL INCIDENT NOTIFICATIONS

| Year | Incidents | Incidents / day | Emergency Responses |
|-----------------|-----------|-----------------|----------------------------|
| | | | |
| 2012 (Jan-June) | 5830 | 31.9 | 319 |
| 2011 (July-Dec) | 7073 | 38.7 | 294 |
| 2011 (Jan-June) | 9427 | 51.6 | 337 |
| 2010 (July-Dec) | 6519 | 35.7 | 220 |
| 2010 (Jan-June) | 7152 | 39.1 | 272 |
| 2009 (July-Dec) | 6698 | 36.7 | 240 |
| 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 through 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 within 5 working days of notification

Several major incidents with severe or potentially catastrophic impacts to human health or the environment occurred in the last eleven fiscal years. A summary of events follows.





ERT Staff and Contractors work on extinguishing the tire fire at Kings Tire Recycling in McCreary County.



ERT Staff and Contractors conducting assessments and cleaning up spills of hazardous material

| DATE | INCIDENT | COUNTY | IMPACTS |
|----------------------|---|---|--|
| | | | |
| 3-2-12 | March Tornado Outbreak | Morgan, Magoffin, Menifee, Johnson, Martin, Laurel | Drinking Water, Waste Water, Air, Solid Waste, Hazardous Waste |
| 8-15-12 | Kings Tire Recycling – Tire Fire exceeding 100,000 tires | McCreary | Air, Waste |
| 7-11-11 | Norfolk Southern Railway | Lincoln | Surface Water |
| 4-25-11 | Statewide Flooding | | Drinking Water, Wastewater, Solid Waste |
| 2-12-11 | Childers Oil Co Inc Bulk Plant – Discharge into stream that impacted city water plant | Letcher | Drinking Water, Surface Water |
| 2-4-11 | Hitachi Automotive Systems - | Madison | Surface Water |
| 7-17-10 | Flooding in Eastern KY | | Drinking Water, Wastewater, Hazardous Materials |
| 6-1-10 | CSX Train Derailment | Webster | Surface Water |
| 5-1-10 | Flooding in 66 counties that resulted in drinking water and wastewater issues for approximately 300,000 residents. ERT coordinated DEP's response with drinking water, wastewater, and debris disposal issues. | | Drinking Water, Wastewater |
| 2-1-10 | Nuplex Resins Release | Jefferson | Air, Wastewater |
| 12-09-09- 1-22-10 | Hazard-Buckhorn Water Shortage Emergency | Perry | Drinking Water |
| 12-19-09 | Snow Storm-State of Emergency, power outages in Eastern KY | | Drinking Water, Wastewater |
| 8-12-09 | Richard Lacefield Whey Spill | Grayson | Surface Water |
| 7-2-09 | Emerson Power Transmission release | Mason | Surface Water |
| 11-30-08 | Aisin Automotive – Above ground storage tank lost 1,000 gallons of dye lubrication was released into Laurel River | Laurel | Water, Soil |
| 11-1-08 | Childers Oil – Released unknown amount of petroleum waste from an unpermitted site that contaminated the Whitesburg Water Plant. | Letcher | Drinking Water, Water, Soil |
| 5-25-08 | Whayne Supply – Above ground storage tank lost 1,200 gallons of hydraulic oil to Town Branch. | Fayette | Water, Soil |
| 4-23-08 | Little Oil Company – Tanker Truck wreck that resulted in a release of 4,500 gallons of gasoline | Jefferson | Soil |

| 4-8-08 | Highwall Mining – Release of 2,000 gallons of diesel fuel into the Levisa Fork. | Pike | Soil, Water |
|----------|--|------------|---|
| 3-18-08 | Metalworking Lubricants Company - tanker truck accident that released 7,000 of oil onto I-65. | Hart | Soil |
| 2-27-08 | Pine Branch Coal – Release of 3,000 gallons of diesel fuel from an above ground storage tank due to driver error. | Perry | Soil |
| 2-11-08 | Marathon Oil – Pipeline leak that resulted in the release of 8,400 gallons of crude oil | Clark | Water, Soil |
| 10-29-07 | Agri Chem - Attempted theft resulted in the release of anhydrous ammonia from a 12,000 gallon tank. The release resulted in local evacuations. | Christian | Air, Soil |
| 1-16-07 | CSX - Train derailment that resulted in fire and release of cyclohexane, butadiene, residual Chlorine, maleic anhydride, and methyl Ethyl Ketone | Bullitt | Air, Soil, Water |
| 1-15-07 | CSX - Collision of train with another train caused release of butyl acetate and diesel fuel | Estill | Air, Soil, Water |
| 10-19-06 | Canadian Railroad - Rail car released Hydrochloric Acid to the air causing an evacuation in the community. | Fulton Co. | Air, Soil |
| 8-27-06 | Comair Plane Crash- Commercial plane crash that released an unknown amount of Jet Fuel | Fayette | Soil |
| 1-26-06 | Magnolia Marine - Barge sank in the Ohio River releasing 14,000 gallons of diesel, 4,000 gallons of heating oil, 500,000 gallons of liquid asphalt. | Jefferson | Surface Water |
| 1-03-06 | Cooksey Brothers Landfill - Landfill fire that was releasing toxic smoke into the air causing evacuations in the community. | Boyd | Air |
| 12-06-05 | Canal Barge Co Tugboat sank in the Tennessee River threatened to release 40,000 gallons of diesel fuel. | Marshall | Surface Water |
| 11-23-05 | BP Pipelines - 14,000 gallons of Xylene released from a pipeline hit by a farmer | Todd | Surface Water, Soil, Air |
| 1-26-05 | Mid-Valley Oil- Pipeline release of 268,000 gallons of crude oil into the Kentucky River | Owen | Soil, Surface Water, Drinking Water intakes in Louisville. |
| 6-18-04 | AK Steel- Unknown amount of fuel | Boyd | Soil, WWTP impacted |

| | leaked from underground piping, which entered into the WWTP sewer lines. | | |
|----------|--|-----------|--|
| 5-10-04 | Catlettsburg Refining LLC- 12,000 gallons of crude oil ejected into the air and re-settled onto the ground & the Big Sandy River from a failed flare | Boyd | Soil, Surface Water |
| 3-19-04 | Trans-Kentucky Transportation- 6000 gallons of diesel released | Mason | Soil, Surface Water |
| 1-29-04 | Norfolk Southern Railway- 3250 gallons of diesel release | Scott | Groundwater, Drinking Water Intakes, Soil |
| 8-14-03 | Xylene Tanker Wreck | Pike | Big Sandy River degradation - downstream water intakes effected |
| 8-4-03 | Jim Beam bourbon warehouse fire- 800,000 gallons of bourbon released | Nelson | Stream degradation - Fishkill in Salt River |
| 5-20-03 | Pesticide tanker truck wreck- Diazinon | Jefferson | Groundwater, surface water, soils contamination |
| 2-2-03 | CTA Acoustics Factory fire | Laurel | Air contamination - surface water runoff to stream |
| 8-26-02 | CSX RR derailment- ammonium nitrate release | Laurel | Stream degradation - water intake impacted |
| 1-29-02 | Westlake Monomers-air release of chlorine and vinyl chloride | Marshall | Air release resulting in local evacuations and plume movement |
| 11-8-01 | Waxler Barge incident- gasoline barge release | Jefferson | Gasoline barge on Ohio River rupture in lock on Ohio River |
| 10-11-00 | Martin Co. Coal Co. coal slurry release | Martin | Slurry release from slurry impoundment - 90 miles of stream effected - 350,000 public water customers effected |
| 5-10-00 | Fire at Wild Turkey/ Boulevard Distilleries | Anderson | Bourbon warehouse fire - release to KY River – Major fish kill on 60 miles of river - 83,600 public water customers effected |
| 4-25-00 | Norfolk Southern RR railcar fire | Boyle | RR car fire – hazardous chemicals (toxic and explosive) - 50% of Danville evacuated- air release |
| 1-27-00 | Marathon/Ashland crude oil pipeline rupture | Clark | Release of 600,000 gallons of crude oil – threatened water supply of 515,300 customers downstream |
| 11-8-99 | Marathon/ Ashland –Catlettsburg Refinery tank explosion | Boyd | Process tank explosion - release of intermediate product to stream and Big |

| | | | Sandy River |
|---------|------------------------------------|-----------|------------------------------|
| 10-2-99 | KY Utilities diesel fuel spill | Mercer | 300,000 gallons of diesel |
| | | | threatened 116,00 water |
| | | | customers downstream |
| 8-8-99 | Illinois RR derailment | McCracken | Derailment of 6 RR cars |
| | | | containing vinyl chloride - |
| | | | threatened catastrophic air |
| | | | release |
| 8-8-99 | Barge collision-gasoline barge and | Henderson | Collision of Waxler gasoline |
| | cumene barge | | barge and MAP cumene |
| | | | barge-100,000 gallons of |
| | | | product released to Ohio |
| | | | River |