

# **Kentucky Department for Environmental Protection**



## **Strategic Operational Plan for State Fiscal Year 2019**

Kentucky Energy and Environment Cabinet

**July 2018**

# Department for Environmental Protection

## *Mission*

**Protect and enhance Kentucky's environment to improve the quality of life for all Kentuckians.**

## *Vision*

**The Department for Environmental Protection envisions a healthy and productive commonwealth with balanced stewardship of the land, air and water where future generations enjoy an environment as good as or better than the present.**

## *Principles*

- **The department will make sound decisions that earn the public's trust.** The decisions made by the department will be prudent, defensible and consistent with the department's mission and in the best interest of the citizens of the commonwealth.
- **The department will focus on environmental results rather than programs or procedures.** The success of environmental programs will be measured in terms of achieving desirable environmental benefits, not in the number of staff or the size of budgets. We will evaluate programs and procedures in relation to their contribution to the mission.
- **The department will use good scientific information to aid in its decision making.** The foundation on which environmental protection programs are constructed is an understanding of the causes and effects resulting from actions that impact the environment. Scientific information is critical to the assessment and evaluation of existing environmental conditions and the determination of the effectiveness of our programs. We will employ generally accepted and applicable scientific methods and processes to accomplish our mission.
- **The department will consider the range of environmental benefits and consequences of proposed actions before making final decisions.** Good public policy encourages government agencies to promote actions that maximize benefits to society while minimizing adverse effects. While individual statutes, regulations, programs and organizational units may have a narrow focus, we will always consider the benefits and consequences of our actions to the environment as a whole.
- **The department will evaluate its performance using meaningful criteria.** We will require accountability from our managers, supervisors and staff in the continuing evaluation of program performance. We will gauge effectiveness based on actual program results.

**Department for Environmental Protection**

**CONTENTS**

**Goal 1 Clean Air .....5**

- Objective 1 – Ensure Programs Adhere to Federal and State Statutory and Regulatory Requirements .....6**
- Objective 2 – Ensure Permits are Protective of Kentucky’s Air Quality .....9**
- Objective 3 - Monitor Kentucky’s Air Quality .....10**
- Objective 4 – Assure Compliance and Enforce Air Quality Standards.....12**
- Objective 5 – Participate in Programs that Improve Kentucky’s Air Quality .....13**

**Goal 2 Clean and Safe Water ..... 15**

- Objective 1 – Protect, Manage And Restore Water Resources .....16**
- Objective 2 – Measure Safe Drinking Water Act compliance and provide technical assistance to Kentucky Public Water Systems.....18**
- Objective 3 – Conduct effective water resources planning .....19**
- Objective 4 – Meet federal and state program requirements... .....21**
- Objective 5 – Promote better management and communication of data .....25**

**Goal 3 Waste Management and Land Restoration.....28**

- Objective 1 – Ensure programs adhere to federal and state statutory and regulatory requirements.....30**
- Objective 2 – Ensure permits are protective of human health and Kentucky’s land resources.....32**
- Objective 3 – Ensure remedial investigation, restoration, and management in place decisions are site specific, risk based, and environmental performance standards prone.....33**
- Objective 4 – Support and encourage economic redevelopment of property with real or perceived contamination.....35**
- Objective 5 - Minimize waste generation and disposal.....35**
- Objective 6 - Encourage beneficial reuse and recycling.....35**
- Objective 7 - Continue to Support and Coordinate Ongoing Programmatic Activities. ....36**

**Goal 4 Environmental Compliance .....38**

- Objective 1 – Facilitate the Return of Regulated Entities to compliance with environmental statutes and regulations .....41**

## **Department for Environmental Protection**

Objective 2 – Provide assistance to Department programs by issuing and tracking compliance with letters of warning and notices of violation.....	44
<b>Goal 5 Compliance Assistance and Environmental Stewardship .....</b>	<b>45</b>
Objective 1 – Certify Qualified Environmental Professionals .....	47
Objective 2 – Help entities comply with Kentucky’s environmental requirements.....	47
Objective 3 – Facilitate Environmental Stewardship .....	48
<b>Goal 6 Environmental Program Support .....</b>	<b>51</b>
Objective 1 – Provide accurate and defensible chemical analytical services to the program divisions of the Department for Environmental Protection.....	52
<b>Appendices</b>	
Department Organizational Chart .....	55
Department Addresses .....	56

## Department for Environmental Protection

### Goal 1



### Clean Air

*Protect human health and the environment by achieving and maintaining acceptable air quality.*

Implementing and maintaining programs to achieve federal and state ambient air quality standards in the Commonwealth of Kentucky is important to the health and wellness of all citizens across the state. The amount of air pollution released into the air by industry and transportation sources is quantified and controlled by administering a comprehensive program involving air quality monitoring, planning, construction and operation permitting and inspections.

During FY19, the Kentucky Division for Air Quality will operate 94 instruments, including 11 meteorological stations, located at 27 ambient air-monitoring sites in 24 Kentucky counties. The Louisville Metropolitan Air Pollution Control District will operate an additional 33 instruments, including 6 meteorological stations, in Jefferson County. When combined with the air-monitoring site operated at Mammoth Cave National Park, Kentucky's total ambient air monitoring network will consist of 133 instruments, including 18 meteorological stations, located at 34 sites across 26 counties of the Commonwealth.



Air monitoring stations are selected using U.S. EPA guidance and are generally established near populous areas or pollutant sources. Station locations are reviewed annually to ensure adequate air quality monitoring coverage. Data from the network is used to demonstrate compliance with ambient air quality standards and identify pollution trends. This information is also used to provide pollutant levels for daily air quality index reporting and detect elevated pollutant levels for activation of emergency control procedures.

Creating effective partnerships with air pollution sources and the public enables the department to carry out its goal of protecting human health and the environment by achieving and maintaining acceptable air quality for all Kentuckians.

## Department for Environmental Protection

### Objective 1 – Ensure programs adhere to federal and state statutory and regulatory requirements.

**Tactic 1.1:** Attain and maintain the National Ambient Air Quality Standards.

**Measure:** The number of counties currently attaining the 2015 ozone standard.

**Baseline:** The number of counties originally designated nonattainment for the 2015 ozone standard based upon the ambient monitoring data.

**Measure:** The number of counties currently attaining the 2012 PM<sub>2.5</sub> standard.

**Baseline:** The number of counties originally designated nonattainment for the 2012 PM<sub>2.5</sub> standard based upon the ambient monitoring data.

**Measure:** The number of counties currently attaining the 2010 NO<sub>2</sub> standard.

**Baseline:** The number of counties originally designated nonattainment for the 2010 NO<sub>2</sub> standard based upon the ambient monitoring data.

**Measure:** The number of counties currently attaining the 2010 SO<sub>2</sub> standard.

**Baseline:** The number of counties originally designated nonattainment for the 2010 SO<sub>2</sub> standard based upon the ambient monitoring data.

**Measure:** The number of counties currently in attainment of the 2008 lead standard.

**Baseline:** The number of counties originally designated as nonattainment for the 2008 lead standard based on ambient monitoring data.

**Measure:** Improved visibility at Class I areas, including Mammoth Cave National Park, by EPA specified levels at interim deadlines and work toward long-range 2064 background visibility goals.

**Baseline:** 2000-2004 visibility levels.

**Action 1.1.1:** Submit 2015 ozone standard Infrastructure SIP by October 1, 2018.

**Action 1.1.2:** Implement and enforce federal and state control strategies for 2012 PM<sub>2.5</sub> standard

**Action 1.1.3:** Implement and enforce federal and state control strategies for 1-hour 2010 NO<sub>2</sub> standard (100ppb).

**Action 1.1.4:** Implement and enforce federal and state control strategies for areas of Kentucky that do not meet the 1-hour 2010 SO<sub>2</sub> standard (75ppb).

**Action 1.1.5:** Conduct education and outreach to those communities expected to be impacted by nonattainment designations.

**Action 1.1.6:** Implement and enforce the federal programs and requirements contained in the December 2007 Regional Haze SIP.

**Status:**

## Department for Environmental Protection

**Tactic 1.2:** Develop and maintain a comprehensive State Implementation Plan

**Measure:** The number of Infrastructure SIPs currently disapproved or have a Federal Implementation Plan in place for Clean Air Act Section 110(a)(2)(D)(i).

**Baseline:** The number of Infrastructure State Implementation Plans, which have been fully approved.

**Measure:** Review data provided by contractors. Work with outside entities who are tasked to model areas to quantify the impact of pollutants through interstate transport.

**Baseline:** 2008 EPA CSAPR Update modeling.

**Measure:** Improved visibility at Class I areas, including Mammoth Cave National Park, by EPA specified levels. Assure long-range visibility goals are met in 2064 by submitting a Regional Haze Plan for the second implementation period.

**Baseline:** 2008-2018

**Action 1.2.1:** Submit SIP revisions to convert FIPs and partial disapprovals for 1997 ozone, 2008 ozone, 1997 PM<sub>2.5</sub>, and 2006 PM<sub>2.5</sub>.

**Action 1.2.2:** Monitor EPA's actions of the submitted infrastructure SIP for the Pb, O<sub>3</sub>, PM<sub>2.5</sub>, NO<sub>2</sub> and SO<sub>2</sub> standards.

**Action 1.2.3:** Participate in regional modeling initiatives for ozone and visibility control strategies.

**Action 1.2.5:** Administer SIP-approved programs implemented as part of historic control strategies.

**Action 1.2.6:** Develop required control strategy SIP as specified by the CAA and EPA guidance.

### Status:

**Tactic 1.3:** Review and revise state air quality regulations.

**Measure:** The number of regulatory packages developed, promulgated and finalized in FY19.

**Baseline:** The number of FY18 packages developed, promulgated and finalized.

**Action 1.3.1** Certification under 2017 House Bill 50 of 401 KAR Chapters 50, 51, 52, 53, 55, 57, 58, 59, 61, 63, 65, and 68.

**Action 1.3.2:** Revise state regulations 401 KAR 52:050, 401 KAR 52:070, 401 KAR 51:010, 401 KAR 52:100, 401 KAR 58:005, 401 KAR 59:101, 401 KAR 60:005, 401 KAR 61:005, 401 KAR 61:056, 401 KAR 63:002, and 401 KAR 63:031.

**Action 1.3.3:** Repeal 401 KAR 51:160, 51:170, 51:180, 51:190, 51:195, 51:210, 51:220, and 51:230

**Action 1.3.4:** Develop and promulgate state regulations to adopt federal Cross State Air Pollution Regulation (CSAPR) requirements.

## Department for Environmental Protection

### Status:

**Tactic 1.4:** Assess source emissions annually through the Emission Inventory System.

**Measure:** The number of sources assessed, estimated calendar year emissions, and the amount of emission fees collected during CY 2017.

**Baseline:** The number of sources assessed, estimated calendar year emissions, and the amount of emission fees collected during CY 2016.

**Action 1.4.1:** Determine the sources eligible for the emission survey by the first quarter of the calendar year.

**Action 1.4.2:** Assess source emissions by third quarter of the calendar year.

**Action 1.4.3:** Assess emission fees by the fourth quarter of the calendar year.

**Action 1.4.4:** Develop projection of emission fee based on source emission assessments and divisional needs.

**Action 1.4.5:** Submit 2017 emissions data to EPA's National Emissions Inventory database (NEI) by December 31, 2018.

### Status:

**Tactic 1.5:** Ensure air quality programs are fiscally and administratively viable.

**Measure:** The division staffing levels as compared to cap, budgeted amounts, number of grant programs administered and completed, number of training programs delivered for division staff during FY19.

**Baseline:** Corresponding measures for FY18.

**Action 1.5.1:** Prepare the division budget for the fiscal year.

**Action 1.5.2:** Communicate and coordinate with Cabinet budget staff on the divisional budget requirements.

**Action 1.5.3:** Track expenditures and receipts to ensure programs are within designated budgetary amounts.

**Action 1.5.4:** Implement Cabinet operational, personnel and human resource policies and programs.

**Action 1.5.5:** Monitor staffing levels and ensure timely processing of personnel actions.

**Action 1.5.6:** Educate and provide outreach to division staff on Cabinet and DEP policies.

**Action 1.5.7:** Track grants programs and ensure grant programs are meeting expectations.

**Action 1.5.8:** Develop alternative fee strategy for permitted sources.

### Status:

## Department for Environmental Protection

**Tactic 1.6:** Ensure programs are legally sound.

**Measure:** Number and outcome of air quality litigation cases in FY19.

**Baseline:** Litigation cases in FY 2018.

**Action 1.6.1:** Provide technical expert witness testimony at Office of Administrative Hearings and courts of jurisdiction.

**Action 1.6.2:** Track relevant state and federal air quality policy issues and litigation.

**Action 1.6.3:** Track on-going DAQ litigation.

**Status:**

### Objective 2 – Ensure permits are protective of Kentucky’s air quality.

**Tactic 2.1:** Issue appropriate, lawful permits in a timely manner.

**Measures:** The total number of permit applications received; the total number of permits issued; the total number of permits pending; the total number of permits pending that exceed regulatory timeframes; the total number of other permit actions (i.e. registrations; off-permit changes; etc.) processed; the number of new permit staff; number of trainings programs provided for permit review staff.

**Baseline:** Average of the five previous state fiscal years.

**Action 2.1.1:** Issue permitting actions that are inclusive of all applicable federal and state requirements.

**Action 2.1.2:** Issue permitting actions within the designated regulatory timeframes.

**Action 2.1.3:** Accurately track and report on permitting actions.

**Action 2.1.4:** Evaluate and implement streamlining opportunities to address procedural and institutional inefficiencies.

**Action 2.1.5:** Recruit qualified permitting staff.

**Action 2.1.6:** Provide training to increase knowledge and enhance retention of qualified staff.

**Status:**

**Tactic 2.2:** Conduct air quality modeling to assess source impacts on air quality.

**Measures:** The total number of air quality and modeling assessments in FY19.

**Baseline:** Air quality and modeling assessments in FY18.

**Action 2.2.1:** Assess air toxic impacts as they pertain to permit requirements.

**Action 2.2.2:** Assess emissions as they relate to NAAQS.

**Status:**

## Department for Environmental Protection

### Objective 3 – Monitor Kentucky’s Air Quality.

**Tactic 3.1:** Operate a statewide ambient air-monitoring network.

**Measures:** The number of air monitors in the network based on population estimates; number of locations selected to represent population exposure; number of locations selected to represent background concentration levels; number of locations selected to represent regional transport of ambient air pollution; number of monitors and locations to represent source impacts; number of hours of continuous ambient air monitoring data collected; number of particulate matter; lead; and air toxics samples collected; concentrations of pollutants for which national ambient air quality standards have been established; and concentrations of pollutants for which health-based risk standards have been determined.

**Baseline:** 2013-2017 Kentucky Electronic Data Acquisition Systems and AirVision data, and 2013-2017 Kentucky Air Quality System (AQS) data.

**Action 3.1.1:** Develop and submit to EPA for approval the ambient air monitoring network plan by July 1, 2018.

**Action 3.1.2:** Operate monitor sites as approved in the ambient air monitoring network plan.

**Action 3.1.3:** Obtain ambient air pollutant concentrations for ozone, sulfur dioxide and oxides of nitrogen on a continuous basis using automated analyzers in accordance with applicable regulatory requirements.

**Action 3.1.4:** Obtain ambient air pollutant concentrations for particulate matter 2.5 microns in diameter or smaller (PM<sub>2.5</sub>) on a continuous basis using automated samplers in accordance with applicable regulatory requirements.

**Action 3.1.5:** Collect 24-hour samples for particulate matter (including PM<sub>2.5</sub>, PM<sub>10</sub>, and speciated PM<sub>2.5</sub>), lead and air toxics per the national EPA Monitoring Schedule.

**Action 3.1.6:** Minimize data loss by ensuring that failed equipment is repaired or replaced within 5 business days after notification of instrument malfunction.

#### **Status:**

**Tactic 3.2:** Ensure data accuracy and integrity of the ambient air-monitoring network.

**Measures:** The number of complete and current Quality Assurance Project Plans (QAPPs); number of complete and current standard operating procedures (SOPs); percentage of valid; quality-assured continuous ambient air monitoring data collected; percentage of valid; quality-assured particulate matter; lead; and air toxics samples collected; number of quality control checks performed on ambient air monitors; and number of ambient air monitoring performance evaluations conducted.

## Department for Environmental Protection

**Baseline:** EPA's 2015-2017 Kentucky Technical Systems Audit Results.

- Action 3.2.1:** Review 100% of the division's air monitoring QAPPs on an annual basis.
- Action 3.2.2:** Review 100% of the division's technical air monitoring SOPs on an annual basis.
- Action 3.2.3:** Develop SOPs for new methods within 6 months of start-up.
- Action 3.2.4:** Maintain 75% data recovery for each calendar quarter for all instruments within the ambient air-monitoring network.
- Action 3.2.5:** Conduct quality control precision checks on each automated analyzer that collects ozone at least once every two weeks, with results within  $\pm 7\%$  difference.
- Action 3.2.6:** Conduct quality control precision checks on each automated analyzer that collects SO<sub>2</sub> data at least once every two weeks, with results within  $\pm 10$ .
- Action 3.2.7:** Conduct quality control precision checks on each automated analyzer that collects NO<sub>x</sub> data at least once every two weeks, with results within  $\pm 15\%$  difference.
- Action 3.2.8:** Conduct quality control precision checks on each instrument that collects particulate matter samples at least once per month, with results within  $\pm 4\%$  difference.
- Action 3.2.9:** Review and submit the annual ambient air quality data certification for each NAAQS pollutant measured by May 1, 2019.

### Status:

**Tactic 3.3:** Administer the source-sampling program.

**Measures:** The number of source sampling events observed; number of test protocol reviews completed; and number of test report technical reviews completed in FY19.

**Baseline:** Corresponding measures for FY 2018.

- Action 3.3.1:** Review source-sampling protocols for adherence to standard test methods.
- Action 3.3.2:** Observe source sampling events to assure compliance with test protocols and permit requirements.
- Action 3.3.3:** Review source sampling test reports for adherence to standard test methods.
- Action 3.3.4:** Track source-sampling activities.
- Action 3.3.5:** Provide technical assistance to staff on source sampling methods and activities.

### Status:

## Department for Environmental Protection

### Objective 4 – Assure compliance and enforce air quality standards.

**Tactic 4.1:** Inspect sources of air pollution.

**Measures:** The number of major (Title V) and conditional major/Federally Enforceable State Origin Permit (FESOP) permits; the number of Title V source inspections conducted; number of conditional major/Federally Enforceable State Origin Permit (FESOP) inspections conducted; the number of annual compliance certifications for Title V major and conditional major (FESOP) sources received; the number of annual compliance certifications for Title V major and conditional major (FESOP) sources reviewed; and the compliance rate of stationary source inspections.

**Baseline:** CY 2014-2018 trends data.

**Action 4.1.1:** Complete full compliance evaluations (FCE) at all (100%) Title V major stationary sources on a biennial basis.

**Action 4.1.2:** Complete full compliance evaluations at all (100%) conditional major (FESOP) sources on a biennial basis.

**Action 4.1.3:** Complete review of 100% of annual compliance certifications for Title V major and conditional major (FESOP) sources annually.

**Status:**

**Tactic 4.2:** Conduct enforcement actions regarding violations of air quality regulations.

**Measures:** Number of High Priority Violations (HPV), number of Letters of Warning (LOWs) and Notices of Violation (NOVs) issued on an annual basis.

**Baseline:** CY 2014-2018 trends data.

**Action 4.2.1:** Initiate appropriate enforcement action on 100% of high priority violations (HPV) within 60 days of discovery.

**Action 4.2.2:** Issue LOWs and NOVs in a timely manner.

**Status:**

**Tactic 4.3:** Respond to air quality complaints.

**Measures:** The number of non-asbestos complaints received; number of non-asbestos complaint investigations conducted; the number of complaints resolved by other means; number of open burning complaints received (401 KAR 63:005); number of fugitive emission complaints received (401 KAR 63:010); number of odor complaints received (401 KAR 53:010) and the number of violations for these three complaint types.

**Baseline:** CY 2014-2018 trends data.

## Department for Environmental Protection

**Action 4.3.1:** Complete complaint assessments, investigations and/or resolutions for 100% of complaints received on an annual basis.

**Status:**

**Tactic 4.4:** Administer the asbestos program.

**Measures:** The number of Asbestos Certification and Accreditations processed in TEMPO; number of non-complaint asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) inspections conducted; number of Asbestos Hazard Emergency Response Act (AHERA) inspections conducted; number of asbestos-related complaints received; number of asbestos-related complaint investigations conducted; number of asbestos NESHAP notifications received; and number of asbestos NESHAP notification investigations.

**Baseline:** CY 2014-2018 trends data.

**Action 4.4.1:** Review and issue certification and accreditations within the 30-day regulatory timeframe (RTF).

**Action 4.4.2:** Complete inspection of 75% of NESHAP-regulated asbestos activities within the current fiscal year for which the division has received a required notification.

**Action 4.4.3:** Complete inspection of 20% of selected AHERA local education agencies (i.e. school districts) for the current fiscal year.

**Action 4.4.4:** Complete asbestos complaint assessments and /or investigations for 100% of complaints received during fiscal year.

**Action 4.4.5:** Update the QAPP for asbestos sampling.

**Action 4.4.6:** Update the standard operating procedure on AHERA inspections.

**Action 4.4.7:** Update the standard operating procedures for asbestos sampling.

**Action 4.4.8:** Develop required Kentucky Asbestos Orientation Course in an online format.

**Status:**

### Objective 5 – Participate in programs that improve Kentucky’s air quality program.

**Tactic 5.1:** Participate in programs that reduce mobile and off road emissions.

**Measures:** The number of programs administered, partners, and any emission reduction results for FY19.

**Baseline:** Corresponding measures for FY18.

**Action 5.1.1:** Report annual data to the Kentucky Clean Fuels Coalition (KCFC) website for the DEP Green Fleets Program.

**Action 5.1.2:** Partner with the KCFC on initiatives such as promotion of electric vehicles, natural gas and other clean transportation fuels.

## Department for Environmental Protection

### Status:

**Tactic 5.2:** Educate the public on Kentucky air quality issues.

**Measures:** The number of schools visited, students educated, outreach events conducted, and programs initiated and conducted in FY19.

**Baseline:** Corresponding measures for FY18.

**Action 5.2.1:** Develop and conduct air quality educational programming for Kentucky's primary and secondary educational institutions.

**Action 5.2.2:** Partner with organizations on environmental education opportunities.

**Action 5.2.3:** Develop educational materials including articles for print, non-print, and social media that educate the public on air quality issues.

**Action 5.2.4:** Maintain and update the division's website.

**Action 5.2.5:** Coordinate and conduct public events and exhibitions that educate the public on air quality issues.

**Action 5.2.6:** Monitor and coordinate environmental education information as it pertains to the division programs and air quality education.

### Status:

**Tactic 5.3:** Foster networking through regional and national partnership.

**Measures:** The number of DAQ staff participating in leadership roles or as committee members in FY19.

**Baseline:** Number of staff in leadership roles or serving as committee members in FY18.

**Action 5.3.1:** Participate with AAPCA, AWMA, ECOS and SESARM on programs and initiatives that affect the division.

### Status:

## Department for Environmental Protection

### Goal 2



### Clean and Safe Water

*To manage, protect, and enhance the quality and quantity of the Commonwealth's water resources for present and future generations through voluntary, regulatory and educational programs.*



Kentucky has an abundance of water resources that provide important sources for public water systems, recreation and tourism, and economic opportunities. Managing and protecting the state's waters, including lakes, streams and rivers, as well as the water beneath the ground's surface, is imperative to ensure safe water for human health, the subsistence of important ecosystems, and the prospect of economic development. The department is responsible for regulating and monitoring the quality of drinking water, surface water and groundwater resources and wastewater treatment systems across the state of Kentucky.

Effective regulatory oversight of water quality via federal and state regulations along with appropriate water quality criteria controls the amount of pollutants that can be discharged to water sources. Continuous improvement of water quality in Kentucky is achieved through permitting, compliance and inspection, monitoring, and other water quality improvement programs. Inspections of permitted facilities, in conjunction with collection and analysis of data from rivers, streams, lakes and wetlands throughout the state, enable the department to closely monitor the safety of the public's drinking water and the state's water resources.

The department not only protects the public's safety by regulating water quality, but also assists the federal government in the effort to protect Kentuckians from dam failures and flooding through permits issued by the department for construction, reconstruction and repair of dams issued by the department, and the regular inspections of dams. The National Flood Insurance Program is administered by the department, which also issues permits for construction in regulatory floodplains to prevent losses from flooding in Kentucky.

Through the support of regulatory, monitoring, and water quality improvement programs, Kentucky's water resources are enhanced and protected for present and future generations.

## Department for Environmental Protection

### Objective 1 - Protect, manage and restore water resources.

**Tactic 1.1:** Develop and implement a strategy for completion of Total Maximum Daily Loads (TMDLs) and alternative plans.

**Measures:** Number of impaired waters scheduled for TMDL development in accordance with the Long Term Vision for Assessment Restoration and Protection under the Clean Water Act section 303(d) program in SFY19.  
Progress on Sulphur Creek Watershed Plan/TMDL Alternative development in SFY19.

Number of watershed plans being implemented to address TMDL waterbodies.

Number of watershed plans accepted as TMDL alternatives.

**Baselines:** Number of impaired waters identified in the 2016 303(d) list in Kentucky and prioritized as low, medium, or high for TMDL development.  
Number of accepted watershed plans at beginning of SFY15.

**Action 1.1.1:** Develop TMDLs or alternatives in accordance with the Clean Water Act Section 303(d) Program and Performance Partnership Agreement (PPA).

**Action 1.1.2:** Pilot Gunpowder Creek Watershed Plan development as a TMDL Alternative by June 30, 2019.

**Action 1.1.3:** Develop watershed plans to assist in TMDL implementation by June 30, 2019.

#### **Status:**

**Tactic 1.2:** Implement a Nutrient Reduction Strategy.

**Measure:** Percentage of data collected and analyzed for the development of nutrient criteria in SFY14-18.

**Baseline:** The SFY14 inventory of existing nutrient criteria data.

**Action 1.2.1:** Continue collection and assessment of data for consideration of numeric criteria (nitrogen and phosphorus) for wadeable streams and reservoirs/lakes in accordance with the nutrient criteria development plan and PPA.

**Action 1.2.2:** Update the Kentucky Nutrient Reduction Strategy as necessary and appropriate, and develop an annual report of the NRS by June 30, 2019.

**Action 1.2.3:** Participate in the Mississippi River/Gulf of Mexico Hypoxia Task Force and work to implement the 2008 Gulf Hypoxia Action Plan to meet 2035 goals of the Mississippi River/Gulf of Mexico Hypoxia Task Force.

**Action 1.2.4:** Participate in meetings of the Kentucky Agriculture Water Quality Authority.

## Department for Environmental Protection

**Action 1.2.5:** Develop technology-based limits and implementation plan for nutrients in KPDES permits. Incorporate in affected municipal permits by June 30, 2019.

**Action 1.2.6:** Work with Kentucky Agriculture Water Quality Authority in implementing Authority protocols and the AWQA strategic plan.

### Status:

**Tactic 1.3:** Assess water quality to develop, implement, maintain and enhance aquatic resources.

**Measures:** Water quality standards developed to protect, maintain and restore water resources.

Number of surface water resources monitored and assessed.

Number of Primary Contact Recreation (PCR) or fish tissue consumption advisories issued or updated.

**Baselines:** Current water quality standards.

Surface waters assessed for support of the designated use in the 2016 Integrated Report to Congress (2016 IR).

Number of PCR or fish tissue consumption advisories issued or updated in SFY18.

**Action 1.3.1:** Collect surface water quality data in accordance with the state monitoring strategy and PPA by establishing monitoring sites, and special study locations to determine water quality conditions of the Commonwealth.

**Action 1.3.2:** Review and revise the statewide water quality monitoring strategy by December 31, 2018.

**Action 1.3.3:** Review and assess water quality monitoring data to determine designated use support for the waters of the Commonwealth for the 2018 Integrated Report (2018 IR) by October 2018.

**Action 1.3.4:** Coordinate with other agencies to enhance water quality monitoring of the surface waters of the Commonwealth before March 1, 2019 for the 2019 monitoring season.

**Action 1.3.5:** Provide water quality data and geospatial information to coordinating agencies for PCR (including Harmful Algal Blooms (HABs) and fish consumption advisories).

**Action 1.3.6:** Provide public notices through the Division's website, the Water Maps, reports, meetings and press releases for the PCR and fish consumption advisories as they occur or are updated.

**Action 1.3.7:** Develop and promulgate water quality standards through the KRS 13A process by February 2019.

**Action 1.3.8:** Develop, implement and maintain volunteer monitoring programs.

### Status:

## Department for Environmental Protection

**Tactic 1.4:** Assess and protect groundwater resources.

**Measures:** Number of new opportunities identified in the monitoring network.  
Procedure developed to prioritize Groundwater Protection Program efforts in Source Water Protection and Watershed Planning areas.  
Number of Groundwater Protection Plans within planning areas.  
Collaborative efforts with other agencies.  
Operational eForms for well installation records and well plugging records.

**Baseline:** Level of completion at end of SFY18.

- Action 1.4.1:** Revise the Groundwater Monitoring Strategy by June 30, 2019.
- Action 1.4.2:** Better integration of Groundwater Protection, Source Water Protection and Watershed Planning programs by June 30, 2019.
- Action 1.4.3:** Investigate ESRI Collector Application for groundwater monitoring program by June 30, 2019.
- Action 1.4.4:** Build, maintain and strengthen relationships with KRWA, KGS, and USGS on groundwater issues, including collaboration on grants, statewide projects and data sharing by June 30, 2019.
- Action 1.4.5:** Create and implement eForm for groundwater well submittals by December 31, 2018.

**Status:**

### Objective 2 – Measure Safe Drinking Water Act (SDWA) compliance and provide technical assistance to Kentucky Public Water Systems.

**Tactic 2.1:** Assess public water system compliance by enforcing SDWA rules.

**Measure:** Number of violations issued to Kentucky drinking water systems for non-compliance with the SDWA in SFY19.

**Baseline:** Corresponding numbers from SFY18.

- Action 2.1.1:** Review compliance data submitted by public water systems for compliance with the SDWA.
- Action 2.1.2:** Continue to implement the Revised Total Coliform Rule in response to non-compliance.
- Action 2.1.3:** Present recommendations of the Lead in Drinking Water Work Group regarding the Lead and Copper Rule.
- Action 2.1.4:** Review Wellhead Protection Plans for compliance with SDWA and Water Supply Planning regulations.

**Status:**

**Tactic 2.2:** Provide technical assistance to drinking water systems.

**Measures:** Number of water systems provided technical assistance by the Drinking Water Compliance and Technical Assistance Section SFY19.

## Department for Environmental Protection

**Baseline:** Number of water systems provided technical assistance in SFY19.  
Corresponding numbers from SFY18.

- Action 2.2.1:** Provide technical assistance upon request to Kentucky’s drinking water systems.
- Action 2.2.2:** Provide targeted technical assistance to small drinking water systems that struggle with disinfection by-product compliance.
- Action 2.2.3:** Assist public water systems with emergencies or urgent situations.
- Action 2.2.4:** Conduct special studies and provide evaluations of drinking water systems that request technical assistance.
- Action 2.2.5:** Administer the Area Wide Optimization Program in Kentucky.
- Action 2.2.6:** Timely submittal of SDWA primacy packages.
- Action 2.2.7:** Assist drinking water systems with source water protection plan development and implementation.

**Status:**

### Objective 3 – Conduct effective water resources planning

**Tactic 3.1:** Integrate programs and promote the watershed approach.

**Measures:** Promotion and increased integration of Division programs to manage watersheds across the state.  
Number of partners in Center of Excellence.  
Promotion and increased usage of Recovery Potential Tool.  
Number of “Straight-to-Implementation Plans” in progress.  
Progress made in development of watershed success and tracking program.

**Baseline:** 1997 Watershed Framework.

- Action 3.1.1:** Develop a Healthy Watersheds Program by June 30, 2019.
- Action 3.1.2:** Target recoverable Watersheds for “Straight-To-Implementation Plans” and begin plan development in targeted watersheds by June 30, 2019.
- Action 3.1.3:** Work to institutionalize use of the Recovery Potential Tool for the Division’s programs by June 30, 2019.
- Action 3.1.4:** Promote the Kentucky Watershed Center of Excellence and involve and recruit Watershed Framework partners.
- Action 3.1.5:** Utilize the Water Supply Sustainability workgroup to coordinate responses to common issues with water systems by June 30, 2019.
- Action 3.1.6:** Refine and implement the watershed success and tracking program by June 30, 2019.

**Status:**

**Tactic 3.2:** Promote the EPA’s Sustainable Infrastructure Initiative.

**Measures:** The number of dam safety inspections completed during SFY19.

## Department for Environmental Protection

The number of sustainable infrastructure outreach activities completed in SFY18.

The number of projects approved that incorporated “green” methods or practices such as regionalization, conservation, water and energy. Expenditure of State-Owned Dam Repair (SODR) funds in SFY19.

**Baseline:** The corresponding numbers from SFY18.

**Action 3.2.1:** Finalize and begin implementation of the Drinking Water Action Plan to assist Public Water Systems to implement Resilient and Sustainable Infrastructure Management by June 30, 2019.

**Action 3.2.2:** Conduct training and public outreach workshops to implement changes to the Water Resource Information System to explain the Asset Management Tool and how it can help to implement sustainability by June 30, 2019. This action will depend on the partnership with KIA to implement this tool.

**Action 3.2.3:** Reevaluate the State Revolving Fund (SRF) project priority ranking systems to award more points to projects that implement sustainable concepts by September 1, 2018.

**Action 3.2.4:** Implement SODR program strategies and projects. Effectively manage the Bullock Pen and Scenic Lake Dam construction projects.

**Action 3.2.5:** Develop tools to assist local officials, floodplain coordinators, emergency management personnel, dam owners and the public to better understand the benefits and risks of dams.

### Status:

**Tactic 3.3:** Plan for sustainable infrastructure.

**Measures:** The number of facility plans and asset inventories reviewed and approved during SFY19.

The number of dam safety inspections completed during SFY19.

The number of environmental information documents reviewed and approved in SFY19.

The number of projects approved which implement regionalization, and addresses the abandonment of aging private wastewater facilities in SFY19.

**Baseline:** The corresponding numbers from SFY18.

**Action 3.3.1:** Develop with KIA, PSC, and other stakeholders regulations to implement the requirements of House Bill 513 by December 2018.

**Action 3.3.2:** Participate in the Area Development District Water Management Planning Council meetings to assist with planning future water infrastructure.

**Action 3.3.3:** Evaluate and provide recommendations regarding the relationships between floodplain permitting, floodplain compliance, and dam safety.

**Action 3.3.4:** Complete dam safety inspections as scheduled to ensure dams are properly maintained.

## Department for Environmental Protection

**Action 3.3.5:** Evaluate the Capacity Development program and revise the Capacity Development Strategy by December 31, 2018.

**Status:**

**Tactic 3.4:** Support and Coordinate water supply planning.

**Measures:** Coordinate Water Resources Board committee members and activities.  
Identification of current gaps in water resources planning.  
Status of Water Supply Planning process.  
Evaluation and assessment of current efficiency measures.

**Baseline:** Promulgation of 401 KAR 4:220 in 1991.  
Water Management Plan updates from 2008.

**Action 3.4.1:** Develop State Water Plan by June 30, 2019.

**Action 3.4.2:** Update Water Supply Planning process by December 31, 2018.

**Action 3.4.3:** Pilot the Water Efficiency Program with select Public Water Systems by June 30, 2019.

**Action 3.4.4:** Implement the On-Farm Water Management Program with the Governor's Office of Agricultural Policy, Agricultural Development Board by June 30, 2019.

**Status:**

### Objective 4 - Meet federal and state program requirements.

**Tactic 4.1:** Meet Federal grant guidance requirements.

**Measures:** On-time submittal of all federal grant applications, work plans and reports.  
Percentage of PPA inspections conducted.  
Submittal of required primacy packages.  
Completion of sanitary surveys within the regulatory timeframe.  
Implementation of Drinking Water State Revolving Fund (DWSRF) set-asides work plans.

**Baselines:** Number of special appropriation projects (SPAP) inspected.  
FFY18 and FFY19 federal commitments.  
Completion of sanitary surveys within the regulatory timeframe during FFY18.  
The number of SRF and SPAP inspections completed in 2018.

**Action 4.1.1:** Comply with the FFY18 and FFY19 PPAs.

**Action 4.1.2:** Submit work plans, grant applications and all reports to grantors within deadline specified in the PPA.

**Action 4.1.3:** Develop the FFY20 106 PPA work plan commitments in coordination with EPA.

## Department for Environmental Protection

- Action 4.1.4:** Submit the final FFY20 CMS work plan inspections completed to EPA by due date.
- Action 4.1.5:** Meet federal work plans, primacy requirements and applicable National Program Measures within federal timeframes.
- Action 4.1.6:** Submit DWSRF set-asides work plans and Intended Use Plan Project Ranking to Kentucky Infrastructure Authority by April 2019.
- Action 4.1.7:** Conduct field inspections of projects that received SPAP grants in accordance with the federal grant work plans.
- Action 4.1.8:** Conduct field inspections of projects that received financial assistance from the SRF.
- Action 4.1.9:** Implement Risk MAP (Mapping, Assessment and Planning) watershed prioritization plan and conduct activities pursuant to the National Flood Insurance Program workplan.

### Status:

**Tactic 4.2:** Review and revise administrative regulations, and propose legislative amendments to comply with federal regulatory requirements.

**Measure:** Number of legislative proposals drafted in the current fiscal years.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number of regulatory packages developed, promulgated and finalized in the current fiscal year.

**Baseline:** Corresponding measure for FY2018.

**Action 4.2.1:** Develop regulation packages for division programs that comply with federal and state statutory requirements to manage, protect and enhance the quality and quantity of the Commonwealth's water resources.

**Action 4.2.2:** Prepare draft legislative agenda to address any issues requiring legislative solutions.

**Action 4.2.3:** Develop regulation packages that are inclusive of stakeholder concerns.

**Action 4.2.4:** Coordinates the Division's response to federal and state proposed rule changes within the allotted comment period.

### Status:

**Tactic 4.3:** Ensure water programs are fiscally and administratively viable.

**Measure:** The division staffing levels as compared to cap and budgeted amounts.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number of grant programs administered and completed within the program period.

**Baseline:** Corresponding measure for FY2018.

## Department for Environmental Protection

**Action 4.3.1:** Assist DEP budget staff with the development of the fiscal year budget based on the division's needs.

**Action 4.3.2:** Monitor revenues and expenditures to ensure programs are within designated budgetary amounts.

**Action 4.3.3:** Monitor staffing levels and ensure timely processing of personnel actions.

**Action 4.3.4:** Educate division staff on changes to Cabinet, Department and Division policies and procedures.

**Action 4.3.5:** Monitor grant programs to ensure compliance with federal and state requirements.

### Status:

**Tactic 4.4:** Provide current information to the public through the division's website and educate staff regarding operations, special needs training and program opportunities within the division.

**Measure:** The FY19 number of information updates and staff trainings developed and conducted.

**Baseline:** The number of web updates and training seminars for FY18.

**Action 4.4.1:** Update website regarding programs, permitting process and personnel's contact information.

**Action 4.4.2:** Conduct employee orientation twice monthly for all new division employees. Maintain an updated orientation manual.

**Action 4.4.3:** Assist division employees and supervisors with the mandatory training requirements. Coordinate ARM 2.1 training. Ensure completions are entered into Cornerstone.

**Action 4.4.4:** Coordinate with division staff to identify specialized training needs. Assist in scheduling and facilitating of training. Maintain a training calendar on the department SharePoint.

### Status:

**Tactic 4.5:** Meet state requirements and maintain progress toward achieving and maintaining minimal permit backlogs.

**Measures:** The total number of permits pending June 2019.  
The total numbers of permits pending that exceed regulatory timeframes (RTF) by June 2019.

The total numbers of "major" facilities with permit applications that exceed RTF by June 2019.

The number of general permits that have expired and not been issued or that have not been addressed by June 2019.

The number of general permits Notices of Intent (NOIs) for which coverage has not been issued or that have not been addressed by June 2019.

## Department for Environmental Protection

The percentage of permit reviews completed within RTF during SFY19.  
The percentage of construction plan approvals issued within the RTF for drinking water facilities.

The percentage of floodplain permits issued within the RTF.

The percentage of dam safety construction permits issued within the RTF.

The percentage of 401 certifications issued within the RTF.

The percentage of water withdrawal permits issued within the RTF.

**Baselines:** The corresponding percentages from 2018.

The SFY18 Division permit backlog.

SFY18 backlog percentages.

**Action 4.5.1:** Meet RTF on permit issuances and plan reviews.

**Action 4.5.2:** Re-issue general permits scheduled to expire prior to expiration.

**Action 4.5.3:** Issue permits for all “major” facilities that exceed the RTF by June 30, 2019.

**Action 4.5.4:** Issue permits for all facilities that exceed the RTF by >1.5 years by June 2019.

**Action 4.5.5:** Meet regulatory timeframes pertaining to 401 Water Quality Certifications.

**Action 4.5.6:** Resolve remaining power plant permits that did not require implementation of the 316(b) rule.

### Status:

**Tactic 4.6:** Maintain the Drinking Water and Wastewater laboratory certification programs in compliance with federal and state program requirements.

**Measures:** The number of water laboratories certified in SFY19.

The number of wastewater laboratories certified in SFY19.

The number of drinking water audits performed in SFY19.

The number of wastewater audits performed in SFY19.

The total number of laboratory accountability actions in SFY19.

**Baselines:** The number of certified labs on July 1, 2018.

The number of audits performed in SFY18.

Total number of laboratory accountability actions in SFY18.

**Action 4.6.1:** Maintain a drinking water laboratory audit schedule of two audits per three-year cycle for all non-equivalent laboratories.

**Action 4.6.2:** Maintain a wastewater laboratory audit per five-year cycle for all non-equivalent laboratories.

**Action 4.6.3:** Address complaints and field referrals through investigations and audits.

### Status:

## Department for Environmental Protection

### Objective 5 - Promote better management and communication of data.

**Tactic 5.1:** Implement an integrated data management system for water quality data.

**Measures:** Implementation of Kentucky Water Assessment Data for Environmental Monitoring (K-WADE).

Successful data exchange with EPA via K-WADE.

**Baseline:** Level of completion on July 1, 2016.

**Action 5.1.1:** Increase data type, flow, reporting and efficiency to the Division of Water and EPA using the exchange network.

**Action 5.1.2:** Develop new database – KATTS (Kentucky Assessment and TMDL Tracking System) to maintain the Kentucky Water Health Portal, flow assessment data, and submit TMDLs to EPA, complete test flow by July 31, 2018.

#### Status:

**Tactic 5.2:** Promote better decision making through GIS and Data Analysis (GDA).

**Measures:** Number of GIS training events in SFY19.

Number of data analysis projects completed in SFY19.

Numbers of GDA help desk requests fulfilled in SFY19.

Number of location corrections processed in SFY19.

Number of National Hydrologic Database (NHD) and Geographic Names Information System corrections processed in SFY19.

Number of Watershed Boundary Dataset (WBD) HUC 12 boundary updates and HUC 14 boundary creations processed in SFY19.

Percentage of ADB upgraded and ready for data migration to KATTS.

**Baseline:** Corresponding measures for SFY18.

**Action 5.2.1:** Conduct training events for Division staff regarding GIS and for management regarding GIS analysis and applications by June 30, 2019.

**Action 5.2.2:** Work with Division programs to continue systematically analyzing data from current databases.

**Action 5.2.3:** Evaluate the Kentucky portion of the NHD to ensure accurate data to adhere to federal standards.

**Action 5.2.4:** Update HUC 12 boundaries and create new HUC 14 boundaries through WBD stewardship program to adhere to federal standards by June 2019.

**Action 5.2.5:** Develop GIS tools (including mobile applications and desktop solutions) for inspectors, permit writers, Division staff and the public by June 30, 2019.

**Action 5.2.6:** Upgrade ADB to facilitate development of KATTS by June 30, 2019.

#### Status:

## Department for Environmental Protection

**Tactic 5.3:** Manage the Safe Drinking Water Information System (SDWIS).

**Measures:** Maintain data in state and federal Safe Drinking Water Information System (SDWIS).

Implementation of state and federal tools for online data entry.

**Baseline:** Level of completion for SFY 2016.

**Action 5.3.1:** Collaborate with DEPS to maintain SDWIS until SDWIS Prime implementation.

**Action 5.3.2:** Participate on SDWIS Prime workgroups.

**Action 5.3.3:** Develop an implementation plan for utilizing SDWIS Prime.

**Status:**

**Tactic 5.4:** Implement ICIS data flows and data entry via netDMR to improve permit compliance, tracking and data analysis.

**Measures:** Implementation of permit and compliance data flows into ICIS.

Implementation of netDMR.

**Baseline:** Status of flowing data to ICIS and entering data into netDMR for SFY16.

**Action 5.4.1:** Implement eNOI system and flow permit data from ARM 2.1 into ICIS for applicable reissued general permits by the effective date of coverage.

**Status:**

**Tactic 5.5:** Improve the utility of ARM 2.1 to provide more accurate facility information data.

**Measure:** Improved accuracy demonstrated by ARM 2.1 audit report in SFY19.

**Baseline:** ARM 2.1 audit reports generated during SFY18.

**Action 5.5.1:** Improve the utility of ARM 2.1 through data validation.

**Action 5.5.2:** Ensure that new employees receive the latest version of ARM 2.1 training so they are effectively using all features of ARM 2.1.

**Action 5.5.3:** Regular auditing of water/wastewater permit locations by staff. Develop better methods for synchronization between ICIS and ARM 2.1 database.

**Action 5.5.4:** Implement the latest version of ARM 2.1.

**Status:**

**Tactic 5.6:** Maintain and improve data quality.

**Measures:** Improved accuracy demonstrated by database audit reports.

Number of staff receiving quality assurance (QA) training in SFY19.

## Department for Environmental Protection

Number of Division-approved SOPs for SFY19.

Number of Quality Assurance Project Plans (QAPPs) reviewed for the Division.

Number of QAPPs reviewed from outside organization data.

**Baselines:** Audit reports and laboratory flags generated during SFY18.

Number of Division-approved SOPs for SFY18.

**Action 5.6.1:** Conduct regular training for Division staff regarding QA and the review process.

**Action 5.6.2:** Assure cross-database accuracy demonstrated by regular database audit reports.

**Action 5.6.3:** Upgrade Dam Safety database to a more robust version that will ensure quality data flows into ARM 2.1 by June 30, 2019.

**Status:**

## Department for Environmental Protection

### Goal 3



### Waste Management & Land Restoration

*Preserve and restore Kentucky's land through the development and implementation of fair, equitable and effective waste management programs.*

As Kentucky's population grows, the number of homes, businesses and industries that provide jobs, services and goods for residents continues to increase. This population and economic growth results in increased use of chemicals and residential and industrial materials, which increases the waste stream associated with these activities. The Department for Environmental Protection safeguards and ensures protection of human health and the commonwealth's land, air, water and groundwater resources.

To accomplish this, the department administers an array of programs that work together to protect human health and the environment from the impacts related to increased waste in landfills and other waste facilities, ranging from hazardous chemical and petroleum contamination to illegal trash disposal. This strategy protects and benefits the commonwealth in a number of ways. It protects the citizens of the Commonwealth as well as protects and restores Kentucky's natural resources through preventative monitoring programs and remediation. Programs also preserve existing green space through the restoration and reuse of old brownfield space for new commercial and industrial ventures. They develop properties with existing infrastructure, beautify communities, and raise the value of surrounding properties. The department regulates and educates the public on these issues concerning solid and hazardous waste management, site remediation at contaminated properties, redevelopment and reuse of impacted properties, operation and corrective action of underground storage tanks, and recycling waste products.



*In June 2018, DWM Field Staff attended training for the FROG 4000 Portable Gas Chromatograph used on-site for groundwater, surface water, vapor intrusion, soil vapor and extraction process monitoring, environmental remediation and site characterization and process monitoring.*

The management of solid and hazardous wastes are achieved through comprehensive permitting, registration, monitoring, reporting and training requirements. In addition, the department promotes solid and hazardous waste minimization, landfill inspections, conducts public hearings and provides evaluation of waste streams to ensure proper protection of our state's natural resources.

## **Department for Environmental Protection**

The health and environmental threats from leaking underground storage tanks are managed by a two-fold approach that monitors and prevents leaks and spills, and assesses and remediates contaminated sites. Prevention is achieved through a focus on compliance with state and federal operation and maintenance requirements. The complementary focus on oversight of site assessment and cleanup is supported by the department's management of state funds available for these activities.

The department uses state and federal funds to address environmental emergencies, state-lead assessments, cleanup and remediation of State-Lead and National Priority List sites that are contaminated and abandoned which pose a serious threat to human health and the environment, and redevelopment programs to support and encourage redevelopment of properties with real or perceived adverse environmental conditions. Department personnel work with regulated businesses, contractors, government agencies, and various stakeholders to characterize and remediate sites where contamination has been released into the environment. In addition, the department uses regional field offices to support the programs by performing inspections, and ensuring that facilities are compliant with regulatory requirements.

The department encourages public participation through various programs to protect our environment by recycling and reducing waste in order to minimize land disposal and to conserve energy and natural resources. These programs educate citizens and industry on environmentally friendly practices in the proper management of waste while emphasizing the significant environmental and economic benefits of reducing, reusing and recycling materials.

The department also maintains a 24-hour emergency environmental response line for accidental spills and releases of toxic and hazardous material that threaten the environment. The Environmental Response Team (ERT) responds immediately to environmental emergencies and provides efficient, coordinated and effective action to minimize damage to Kentucky's environment. Addressing the technological needs of our environmental management systems is an essential aspect of providing web-based electronic services to the public. Advancement of the department's technology and streamlining environmental response programs will provide the best possible service to Kentucky's local governments and communities.

## Department for Environmental Protection

### Objective 1 - Ensure programs adhere to federal and state statutory and regulatory requirements.

**Tactic 1.1:** Review and revise administrative regulations, and propose legislative amendments to comply with federal regulatory requirements.

**Measure:** Number of legislative proposals drafted in the current fiscal year.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number of regulatory packages developed, promulgated and finalized in the current fiscal year.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number of public notices issued and public hearing conducted by branch.

**Baseline:** Corresponding measure for FY2018.

**Action 1.1.1:** Develop regulation packages for division programs that comply with state statutory and federal requirements in a manner protective of human health and the environment that accurately reflect programmatic policy.

**Action 1.1.2:** Prepare draft legislative agenda to address any issues requiring legislative solutions and pursue enactment.

**Action 1.1.3:** Develop regulation packages that are inclusive of stakeholder concerns.

#### **Status:**

**Tactic 1.2:** Provide resources and oversight to the regulated community to achieve compliance with federal and state regulations.

**Measures:** Number of underground storage tank owners and operators that have completed operator training.

Percentage of underground storage tank owners and operators in compliance with the requirement to have a trained Class A and Class B operator.

**Baseline:** Corresponding measures for FY2018.

**Measure:** Number and percentage of solid waste sites submitting the Environmental Remediation Fee in accordance with KRS 224.43-500.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number and percentage of solid waste sites submitting the annual renewal fee in accordance with 401 KAR 47:090 and 46:120.

**Baseline:** Corresponding measure for FY2018.

**Measures:** The percentage of authorized hazardous waste facilities in compliance.

The percentage of registered underground storage tanks in compliance.

**Baseline:** Corresponding measures for FY2018.

## Department for Environmental Protection

**Measure:** Number of facility inspections completed by staff to ensure regulatory compliance.

**Baseline:** Corresponding measure for FY2018.

**Action 1.2.1:** Utilize KY TOOLS as the program for UST Operator Certification in accordance with the federal Energy Policy Act. KY TOOLS has implemented a site-specific approach to training and testing to support certification, which will significantly aid in increased overall compliance and leak prevention.

**Action 1.2.2:** Maintain and enhance TEMPO reporting to accurately track and report on measures.

**Action 1.2.3:** Inspect regulated sites at established intervals to facilitate and ensure compliance with agency requirements.

**Action 1.2.4:** Take enforcement action on regulated sites as necessary to facilitate and achieve compliance with agency requirements.

**Status:**

**Tactic 1.3:** Review and revise quality assurance documents annually and update as necessary.

**Measure:** Number of Standard Operating Procedures and guidance documents developed or revised in the current fiscal year.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number of Quality Assurance Project Plans developed or revised in the current fiscal year.

**Baseline:** Corresponding measure for FY2018.

**Action 1.3.1:** Develop and revise standard operating procedures that comply with state and federal requirements, and agency policy.

**Action 1.3.2:** Revise Quality Assurance Annual Report.

**Action 1.3.3:** Prepare the division annual report and update the Strategic Operational Plan.

**Action 1.3.4:** Develop and revise Quality Assurance Project Plans as necessary.

**Status:**

**Tactic 1.4:** Ensure waste management programs are fiscally and administratively viable.

**Measure:** The division staffing levels as compared to cap and budgeted amounts.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Number of grant programs administered and completed.

**Baseline:** Corresponding measure for FY2018.

**Measure:** Amount of Environmental Remediation Fee collected.

## Department for Environmental Protection

**Baseline:** Corresponding measure for FY2018.

**Action 1.4.1:** Prepare the division budget for the state fiscal year.

**Action 1.4.2:** Communicate and coordinate with DEP budget staff on the needs of the division.

**Action 1.4.3:** Track expenditures and receipts to ensure programs are within designated budgetary amounts.

**Action 1.4.4:** Implement cabinet, DEP and the division's operational, personnel, and human resource policies and procedures.

**Action 1.4.5:** Monitor staffing levels and ensure timely processing of personnel actions.

**Action 1.4.6:** Educate division staff on cabinet, DEP, and division policies.

**Action 1.4.7:** Track grants programs and ensure grant programs are meeting expectations.

**Action 1.4.8:** Ensure accurate and timely data entry and reporting.

**Action 1.4.9:** Track amount of environmental remediation fee collected to build trending data on the success of division administration of the fee.

### **Status:**

## **Objective 2 - Ensure permits are protective of human health and Kentucky's land resources.**

**Tactic 2.1:** Issue appropriate, lawful permits in a timely manner.

**Measures:** Number of hazardous waste permit applications received.  
Number of hazardous waste permits pending review.  
Percentage of hazardous waste permit reviews completed within regulatory timeframes.  
Number of solid and special waste permit applications received by type.  
Number of solid and special waste permits pending review.  
Percentage of solid and special waste permit reviews completed within regulatory timeframes.  
Number of approved solid and special waste permit applications.

**Baseline:** Average of the five previous state fiscal years.

**Measure:** Number of training classes completed by DWM staff.

**Baseline:** Corresponding measure for FY2018.

**Action 2.1.1:** Issue permitting actions that are inclusive of all federal and state regulatory requirements.

**Action 2.1.2:** Issue permitting actions within the regulatory timeframes.

**Action 2.1.3:** Utilize TEMPO to accurately track and report on permitting actions.

**Action 2.1.4:** Evaluate and implement streamlining opportunities to address procedural and institutional inefficiencies.

**Action 2.1.5:** Allocate staff as necessary to assist in data entry and permit review.

## Department for Environmental Protection

**Action 2.1.6:** Recruit qualified staff.

**Action 2.1.7:** Provide training to increase knowledge and enhance retention of qualified staff.

### **Status:**

**Tactic 2.2:** Reduce, eliminate, and maintain zero permit and permit activity backlogs.

**Measures:** Number of hazardous waste permits pending review outside regulatory timeframes.

Percentage of hazardous waste permit reviews completed outside regulatory timeframes.

Number of solid and special waste permits pending review outside regulatory timeframes.

Percentage of solid and special waste permit reviews completed outside regulatory timeframes.

**Baseline:** Corresponding measures for FY2018.

**Action 2.2.1:** Obtain a zero backlog on all remaining applications beyond regulatory time frames.

**Action 2.2.2:** Allocate staff as necessary to assist with data entry and permit review.

### **Status:**

## **Objective 3 - Ensure remedial investigation, restoration, and management in place decisions are site specific, risk based, and environmental performance standards prone.**

**Tactic 3.1:** Restore sites or manage contamination at sites with known or suspected releases to soil or groundwater.

**Measures:** The number of sites with known or suspected releases with potential human exposures where no further action is required or otherwise controlled as a result of implementing a management in place technique:

Number of underground storage tank cleanups conducted that resulted in a no further action being issued and number remaining.

Number of hazardous waste program corrective actions completed and number remaining.

Number of EPA corrective action environmental indicators achieved.

Number of historic landfills remediated and number remaining.

Number of ongoing historic landfill projects.

Number of solid and special waste facilities in groundwater assessment.

Number of illegal open dumps remediated under the Kentucky PRIDE Program and number remaining.

Number of tire dumps remediated under the Waste Tire Trust Fund and number remaining.

Number of new Superfund sites.

## Department for Environmental Protection

Number of PRP-Lead State Superfund sites under review and number remediated.

Number of State-Lead sites that require remediation, number remediated utilizing the Hazardous Waste Management Fund, and number under review.

Number of sites with a release of petroleum or a petroleum product remediated from a source other than a petroleum storage tank and number of under review.

Number of methamphetamine contaminated properties reported and number decontaminated.

Number of emergency or incident responses made and number of cases closed.

**Baseline:** Corresponding measures for FY2018.

**Action 3.1.1:** Identify resource and program constraints hindering achievement of our measures; pursue program changes and request funding as necessary in budget. At a minimum, work to maintain current level of funding in cleanup programs.

**Action 3.1.2:** Provide technical oversight and directives for projects to investigate, remediate, manage, or restore properties with contamination.

**Action 3.1.3:** Review analytical and reporting data for projects.

**Action 3.1.4:** Issue letters upon the completion of all corrective actions for facilities.

**Action 3.1.5:** Inventory the list of sites with known or suspected contamination.

### Status:

**Tactic 3.2:** Plan, design and execute Final Closure Period activities at Maxey Flats while maintaining regulatory compliance.

**Measures:** Substantial completion of final cap construction was achieved on November 14, 2016.

Complete Institutional Control Period Work Plan by October 2017.

**Baseline:** Entry into the Final Closure Period, November 2012.

**Action 3.2.1:** Substantial completion of final cap was achieved on November 14, 2016.

**Action 3.2.2:** Final construction completion walk-through scheduled for June 15, 2017.

**Action 3.2.3:** One-year warranty period for final cap construction ends October 2017.

**Action 3.2.4:** Prepare Institutional Control Period Work Plan to ensure compliance and maintenance and monitoring activities beyond the final cap completion.

**Action 3.2.5:** Draft institutional control work plan completed May 25, 2017. Complete institutional control work plan by October 2017.

### Status:

## Department for Environmental Protection

### Objective 4 - Support and encourage economic redevelopment of property with real or perceived contamination.

**Tactic 4.1:** Provide oversight to the investigation, remediation, management, or redevelopment of properties with real or perceived contamination.

**Measures:** Number of sites under review pursuant to the Voluntary Environmental Remediation Program.  
Number of brownfield sites assessed under the Targeted Brownfield Assessment Program and number awaiting review.  
Number of KRS 224.1-415 Brownfields Redevelopment Program applications received, number of eligibility letters issued, number of concurrence letters issued.

**Baseline:** Corresponding measures for FY2018.

**Action 4.1.1:** Review project data and determine compliance with program requirements.

**Action 4.1.2:** Issue notices and letters for projects in accordance with regulatory guidelines.

**Status:**

### Objective 5 - Minimize waste generation and disposal.

**Tactic 5.1:** Assure proper management and disposal of waste.

**Measures:** The compliance rates for authorized solid waste management facilities.  
The amounts, by weight, of litter, open dump waste, and household hazardous waste collected by counties through the Kentucky Pride program.

**Baseline:** Corresponding measures for FY2018.

**Action 5.1.1:** Inspect regulated sites at established intervals to facilitate and ensure compliance with agency requirements.

**Action 5.1.2:** Increase communications between permitting central office staff and field operations staff.

**Status:**

### Objective 6 - Encourage beneficial reuse and recycling.

**Tactic 6.1:** Encourage reduced waste generation and disposal by promoting beneficial reuse, recycling, waste minimization, and pollution prevention.

**Measures:** Tonnage of municipal solid waste recycled or reused, by type.  
Tonnage of material recycled through the State Government Recycling Program.

## Department for Environmental Protection

Number of solid waste beneficial reuse determinations.  
Number of registered special waste beneficial reuse sites.  
Number of land farming and composting facilities.  
Tonnage of solid or special waste used as Alternate Daily Cover (ADC).  
Percentage of solid or special waste used as Alternate Daily Cover (ADC).  
Number of waste tires used in tire-derived fuel projects, crumb rubber grants and other beneficial reuse purposes as a percentage of number of tires generated.  
Number of recycling grants and total amount of funding administered.

**Baseline:** Corresponding measures for FY2018.

- Action 6.1.1:** Maintain and enhance TEMPO reporting or other databases to accurately track and report on measures.
- Action 6.1.2:** Provide education and outreach for recycling opportunities.
- Action 6.1.3:** Update recycling fact sheets, as more current information is available.
- Action 6.1.4:** Administer grant programs in accordance with regulatory requirements.
- Action 6.1.4:** Publish The Marketplace for Recycling Commodities newsletter.
- Action 6.1.5:** Identify resource and program constraints hindering achievement of measures; pursue program changes and request funding as necessary in budget.

### Status:

## Objective 7 - Continue to Support and Coordinate Ongoing Programmatic Activities.

**Tactic 7.1:** Identify recommendations that will assist in providing the service and responsiveness required for carrying out the day-to-day activities in the DWM.

**Measure:** Activities performed and coordinated in FY19.

**Baseline:** Corresponding measures for FY2018.

- Action 7.1.1:** Coordinate the activities of the Environmental Response Team (ERT) to effectively respond to environmental incidents.
- Action 7.1.2:** Develop and maintain all Standard Operating Procedures and Standard Operating Guidelines of the Environmental Response Team (ERT) that include (ERT Operations and Procedures Plan, On-Scene Coordinators Field Guide, Drinking Water Emergency Plan, and Response Coordinators Guidelines, BGAD Re-entry & Recovery Plan, Emergency Transition Plan).
- Action 7.1.3:** Coordinate training for the Environmental Response Team (ERT) On-Scene Coordinators (Hazwoper, QCS Training, Air Monitoring, Oil Spill Containment Training, Flood Control Training, and Hazardous Materials Training).

## Department for Environmental Protection

- Action 7.1.4:** Coordinate grant activities for the Environmental Response Team (ERT) to receive grant money for equipment and training through Homeland Security, Emergency Management, and EPA.
- Action 7.1.5** The Environmental Response Branch will seek to acquire a boat that is suitable for the navigation of the Ohio and Mississippi River and has the ability to shelter staff from harsh weather. This acquisition would allow a boat to be placed in the Western Kentucky area and give the Branch quicker response times and flexibility during spills in that area.
- Action 7.1.6** The Environmental Response Branch will acquire three cargo trailers. The trailers will allow the Branch to outfit the trailers with supplies consisting of sample containers, absorbent pads and booms, etc. This will allow the Branch to respond quicker with supplies during spills throughout the Commonwealth.
- Action 7.1.7** The Environmental Response Branch will work with Kentucky Division of Emergency Management to acquire a quick deployment trailer for air monitoring and sampling. This trailer will give the Branch the ability to have equipment on charge, and loaded in the trailer, allowing for quicker deployment of air monitoring equipment during incidents throughout the Commonwealth.

**Status:**

## Department for Environmental Protection

### Goal 4



### Environmental Compliance

*Ensure environmental compliance using a clear and consistent approach of enforcement.*

Proper enforcement stops violators from releasing illegal pollution into the air, water and onto the ground. In situations where federal and state environmental laws have been violated, enforcement ensures responsible parties are held accountable for the contamination of the environment. Responsible parties are directed to clean up contaminated property or reimburse the department for the cleanup.

The Division of Enforcement serves both compliance and enforcement functions. Through its Compliance and Operations Branch, the Division's compliance efforts focus on identifying violations, notifying the regulated entity of the violations and returning the regulated entity back to compliance through informal processes without the assessment of penalties. This is uniquely different from the responsibilities of the Civil Enforcement Branch, which focuses on addressing violations that have already been cited, following formal administrative processes to resolve the violations and routinely assessing civil penalties as a part of the resolution.



*Solid Waste case in Butler, Pendleton County, Kentucky*

## Department for Environmental Protection

The enforcement process is conducted through referrals either from the Department's program divisions or internally from the Compliance and Operations Branch. When regulated entities fail to return to compliance through the compliance process, the referring party prepares, organizes and summarizes case-specific documentation and refers the violation to the Division of Enforcement's Civil Enforcement Branch for formal enforcement action.

The Division's Compliance and Operations Branch operates an extensive program of performing compliance reviews of discharge monitoring reports (DMRs), which are submitted by facilities to demonstrate compliance with Kentucky Pollutant Discharge Elimination System (KPDES) Permits. The DMR compliance program has been critical in addressing numerous wastewater non-compliance issues in the Commonwealth, with most reviews being conducted of municipal and private wastewater treatment facilities and surface coal mining facilities. The Compliance and Operations Branch also issues Notices of Violation for violations referred by Central Office Programs from the Division of Air Quality, Division of Waste Management and the Division of Water. Between SFY 2006 and SFY 2017, the Compliance and Operations Branch has issued over 7,500 Notices of Violations, averaging more than 500 Notices of Violation each state fiscal year.



*Wastewater case in Paducah, McCracken County, Kentucky*

The Division of Enforcement continues to implement changes to conduct work more efficiently, while continuing to achieve 'timely and appropriate' enforcement actions. In FY2019, the Division will continue to implement new procedures in the Civil Enforcement Branch, aimed to more consistently apply the 'Maggard Factors' across media types for similar violations. The Division will also continue to implement and improve the DMR automation process for reviews within the Compliance and Operations Branch. In FY2018, the Division only reviewed Major facilities

## **Department for Environmental Protection**

through automation, but plans to extend this to other KPDES permit types in FY2019. The goals of both of these process changes are to address non-compliance throughout the Commonwealth with improved timeliness and in a more consistent manner.

## Department for Environmental Protection

### Objective 1 - Facilitate the return of regulated entities to compliance with environmental statutes and regulations.

**Tactic 1.1:** Facilitate processes that result in the successful resolution of environmental enforcement cases.

**Measure:** The number of new cases received in the Division during the fiscal year.  
**Baseline:** From July 2005 through June 2013, the Division received an average of 36 new cases per month and an average of 427 new cases per fiscal year.

**Measure:** The number of cases closed by the Division during the fiscal year.  
**Baseline:** From July 2005 through June 2013, the Division closed an average of 35 cases per month and an average of 416 cases per fiscal year.

**Measure:** The total number of enforcement cases in the Division.  
**Baseline:** From July 2005 through June 2013, the Division had an average of 994 open enforcement cases.

**Measure:** The number of cases open in the Division of Enforcement only for monitoring compliance with an Agreed Order or Secretary's Order.  
**Baseline:** From July 2005 through June 2013, the Division had an average of 255 enforcement cases open for monitoring of an executed settlement document (Demand Letter, Agreed Order and Secretary's Order).

**Measure:** The number of cases in the Division that are unassigned.  
**Baseline:** From January 2008 through June 2013, the Division had an average of 12 unassigned enforcement cases. Data developed prior to January 2008 is incomplete.

**Measure:** The total amount of civil penalties collected and supplemental environmental projects imposed from enforcement cases during the fiscal year.  
**Baseline:** From SFY05 through SFY13, the Division collected and average of \$2,032,680.69 in civil penalties per fiscal year.

**Measure:** The number of Agreed Orders signed by the responsible party in enforcement cases or cases otherwise resolved.  
**Baseline:** From July 2005 through June 2013, the Division has received an average of 9 Agreed Orders signed by the responsible party per month and has received and average of 113 Agreed Orders signed by the responsible party per fiscal year.

**Measure:** The number of Demand Letters or Settlement Letters issued per fiscal year.  
**Baseline:** The use of Demand Letters to resolve enforcement cases was reinstated in February 2008. From February 2008 through June 2013, the Division mailed an average of 6 Demand Letters to the responsible party per month

## Department for Environmental Protection

and an estimated average of 73 Demand Letters to the responsible party per fiscal year.

**Measure:** The number of agreed orders and Administrative Orders signed by the Secretary in enforcement cases per year.

**Baseline:** From July 2005 through June 2013, an average of 10 Agreed Orders was executed per month and an average of 122 Agreed Orders was executed per year.

**Action 1.1.1:** Maintain and update protocols and the mechanisms necessary to implement timely and effective enforcement of environmental laws.

**Action 1.1.2:** Develop staff expertise in air, waste management and water programs to allow the Division to more effectively facilitate compliance with environmental laws.

**Action 1.1.3:** Work closely with program divisions to resolve enforcement cases in a timely and effective manner.

**Action 1.1.4:** Develop criteria and format for monthly reporting of Division activities and accomplishments to program divisions and Department and Cabinet management.

**Action 1.1.5:** Develop and implement criteria and mechanism for prioritizing enforcement cases to be referred to Cabinet attorneys for legal action.

### Status:



*Air Quality case involving open burning in Somerset, Pulaski County, Kentucky*

## Department for Environmental Protection

**Tactic 1.2:** Resolve enforcement cases in a timely manner.

**Measure:** The length of time required to draft a case resolution proposal for approval once a case has been assigned to staff.

**Baseline:** The average time is 39 days to draft a case resolution proposal once a case has been assigned to staff.

**Measure:** The length of time required to hold a settlement conference after a case resolution proposal has been drafted.

**Baseline:** The average time is 101 days to hold a settlement conference after a case resolution proposal has been drafted.

**Measure:** The length of time required to reach an agreement in principle or refer a case to EPLD after a case resolution proposal has been drafted.

**Baseline:** The average time is 159 days to reach an agreement-in-principle after a case resolution proposal has been drafted, and an average of 289 days to refer a case to EPLD after a case resolution proposal has been drafted.

**Measure:** The length of time required to draft an agreed order or demand letter once an agreement-in-principle has been reached.

**Baseline:** The average time is 30 days to draft an agreed order once an agreement-in-principle has been reached, and 19 day to draft a demand letter once an agreement-in-principle has been reached.

**Measure:** The length of time required to have the responsible party under an executed settlement document once a case has been assigned to staff.

**Baseline:** The average time is 324 days from case assignment to execution of a DEP agreed order, 205 days from case assignment to mailing of a demand letter, 697 days from case assignment to execution of an EPLD agreed order, 752 days from case assignment to execution of a Secretary's Order, and 921 days from case assignment to execution of a court decision. There is currently insufficient data to determine a baseline for length of time from case assignment to a consent decree.

**Status:**

## Department for Environmental Protection



*Underground Storage Tank Case in Inez, Martin County, Kentucky*

### **Objective 2 – Provide assistance to Department programs by issuing and tracking compliance with letters of warning and notices of violation.**

**Tactic 2.1:** Facilitate processes for the issuance and tracking of compliance with letters of warning and notices of violation.

**Measure:** The number of letters of warning and notices of violation issued by DENF per year.

**Baseline:** From July 2006 through June 2013, the Division issued an average of 3 Letters of Warning per month and an average of 31 Notices of Violation per month. From FY05 through FY13, the Division issued an average of 62 Letters of Warning per fiscal year and an average of 455 Notices of Violation per fiscal year.

**Action 2.1.1:** Monitor and report on a yearly basis the number of letters of warning and notices of violation issued by DENF.

**Action 2.1.2:** Work closely with program divisions to issue letters of warning and notices of violation in a timely and effective manner.

**Status:**

## Department for Environmental Protection

### Goal 5



### Compliance Assistance and Environmental Stewardship

*Promote responsible environmental stewardship.*



The Division of Compliance Assistance administers four programs: certification and licensing, environmental compliance assistance, environmental leadership (KY EXCEL), and brownfield redevelopment. The division's innovative approach to facilitating compliance and stewardship is improving the environment for all Kentuckians.

**Certification** – *DCA provides training and testing services for environmental professionals certified for operations of wastewater, drinking water and solid waste facilities.* Everyday these well-trained, knowledgeable professionals are entrusted with protecting public health and the Commonwealth's water and land resources.

**Outreach** – *DCA is a technical resource for all individuals with environmental questions and needs.* Understanding and complying with a very diverse and extensive set of environmental requirements can be confusing. Even committed and experienced environmental professionals face times when they simply need help. DCA provides assistance for anyone seeking help with an environmental concern. The division also works closely with small business operations that may lack in-house expertise or resources to adequately navigate environmental regulations.



DCA staff work one-on-one with regulated entities to assist them with annual air reporting requirements.

**Recognition and Redevelopment** – *DCA strongly believes that the future of Kentucky's environment depends on the stewardship of its citizens and sustainability of its communities.* Every day, people make both large and small decisions in their homes, workplaces and communities that can benefit or harm the environment. DCA is helping these individuals and regulated entities become more aware of the economic and environmental benefits that result from sustainable decisions and provides recognition of those efforts through its programs. Additionally, Kentuckians benefit both economically and environmentally from redevelopment of abandoned properties with environmental issues. These sites provide opportunities to grow small businesses provide public spaces for social benefit and address potential health impacts.

## Department for Environmental Protection

**Education** - *DCA is providing Kentucky with the knowledge it needs to care for Kentucky's environment.* In a survey performed by the University of Kentucky, respondents identified a lack of knowledge regarding environmental requirements as one of the greatest barriers to ensuring environmental compliance. The training opportunities provided by DCA equip front-line environmental professionals with the information they need to attain compliance as well as become leaders in environmental stewardship.

DCA is uniquely positioned to partner with Kentucky's corporate and private citizens to proactively build environmental values and facilitate positive behaviors throughout Kentucky. DCA is accomplishing this through partnerships, training, mentoring and technical support.



The 2017 Sustainable Spirits Summit brought together approximately 60 individuals representing the distilling, brewing and winery sectors to discuss environmental process innovations and sustainability.

## Department for Environmental Protection

### Objective 1 - Certify qualified environmental professionals.

**Tactic 1.1:** Certify environmental professionals to maximize appropriate actions and effective operations at regulated locations.

**Measure:** The number of certification licenses issued annually.

**Baseline:** In FY09, the Division of Compliance Assistance issued the following certification licenses:

Wastewater Certifications -	180
Wastewater Certification Renewals -	1068
Drinking Water Certifications -	273
Drinking Water Certification Renewals -	273
Solid Waste Certifications -	138

**Action 1.1.1:** Process certification applications and administer examinations in an accurate and timely manner to ensure that individuals possess the minimum competencies necessary to properly perform their professional duties.

**Action 1.1.2:** Participate in outreach and recruitment efforts to encourage individuals to consider the operator profession.

**Action 1.1.3:** Provide administrative support for the Kentucky Board of Certification of Wastewater System Operators and the Kentucky Board of Certification of Water Treatment and Distribution System Operators.

**Action 1.1.4:** Increase the program's state and national involvement to stay informed of operator issues, ensure the program is prepared to respond to changing needs and influence the state and national policy related to certified operators.

**Status:**

### Objective 2 - Help entities comply with Kentucky's environmental requirements.

**Tactic 2.1:** Provide quality, one-on-one assistance services that help regulated entities comply with environmental obligations.

**Measure:** Changes in environmental knowledge and behavior resulting from one-on-one assistance activities.

**Baseline:** In FY08, the Division of Compliance Assistance responded to and received feedback from clients:

Client Assistance Requests -	867
Small Business Assistance Requests -	289
Client Response -	72% indicated a change in knowledge 83% indicated a behavior change

## Department for Environmental Protection

**Action 2.1.1:** Implement effective, proactive and reactive multi-media compliance assistance services with a special emphasis on small businesses and communities to enhance environmental performance.

**Action 2.1.2:** Serve as point of contact and advocate for the public and entities regulated by the Department to ensure that department programs are appropriately implemented.

**Action 2.1.3:** Communicate the availability of compliance assistance and the benefits of the program.

### Status:

**Tactic 2.2:** Implement meaningful programming that provides individuals with the knowledge needed to increase environmental compliance and performance.

**Measure:** Percent satisfaction from training events and the number of individuals reached through training and resources developed.

**Baseline:** FY12 indicators for communication tools and training:

88.5% satisfaction from training evaluations

1833 – Number of individuals trained on compliance topics (OCP and ECAP trainings)

11 – Number of regulatory resources developed

8 – Number of regulatory trainings provided

**Action 2.2.1:** Work with agencies within DEP to produce and facilitate quality training that includes accurate and timely technical and regulatory information.

**Action 2.2.2:** Work with agencies within DEP to provide resources that clarify environmental requirements and offer technical solutions to common challenges.

**Action 2.2.3:** Establish communication tools that empower the regulated community to determine the environmental obligations that apply to their location and the resources that are available to make it easier for them to comply.

**Action 2.2.4:** Work with other state and federal agencies to develop comprehensive educational resources for the public.

### Status:

## Objective 3 – Facilitate Environmental Stewardship

**Tactic 3.1:** Encourage environmental stewardship by making the public more aware of the opportunities they can act on to make their communities stronger and healthier.

**Measure:** Number of entities assisted with stewardship projects and individuals trained.

**Baseline:** FY12 indicators are as follows:

## Department for Environmental Protection

10 – Number of entities assisted with stewardship projects

112 – Number of individuals trained on stewardship topics (Brownfield and KY EXCEL)

10,586 – Audience reached through DCA communication tools (Facebook, Exhibits, Presentations and LAW)

**Action 3.1.1:** Provide quality, one-on-one assistance services that help individuals identify, plan, and implement environmental projects that are not required by Kentucky law.

**Action 3.1.2:** Offer quality environmental stewardship training to enable actions that improve Kentucky’s environment and create healthier, stronger communities.

**Action 3.1.3:** Develop and compile stewardship resources in partnership with organizations, state and local agencies, nonprofit entities and other stakeholders.

**Action 3.1.4:** Establish communication tools that empower the regulated community to determine the stewardship resources that are available to increase their sustainability.

### Status:

**Tactic 3.2:** Recognize and publicize voluntary actions that improve Kentucky’s environment and promote environmental awareness.

**Measure:** The number of voluntary actions identified as a result of DCA programs.

**Baseline:** In FY10, the number of voluntary actions observed was as follows:

New KY EXCEL Voluntary Projects -	121
Environmental Stewardship Award Nominations -	44
Eco-Art Submissions -	13

**Action 3.2.1:** Implement KY EXCEL, an environmental leadership program that recognizes entities for their voluntary commitments to improve Kentucky’s environment.

**Action 3.2.2:** Administer the Department’s environmental stewardship award program and recognition events.

**Action 3.2.3:** Communicate the successes of Kentucky’s environmental stewards.

### Status:

**Tactic 3.3:** Increase visibility of the Brownfield Redevelopment Program by providing technical and fiscal assistance opportunities.

## Department for Environmental Protection

**Measure:** The amount of Brownfield communication tools developed and Targeted Brownfield Assessments conducted.

**Baseline:** In FY13, the DCA's Brownfield program conducted the following outreach and assessment activities:

22 - Communication tools developed

8 - Number of applicants assisted with grant applications

5 - Number of Targeted Brownfield Assessments (Phase I assessments, Phase I updates, Phase II assessments)

**Measure:** Amount of funds issued through the Cleaner Commonwealth Fund.

**Baseline:** In FY13, the DCA's Brownfield program managed the following funding support activities:

5 - Number of grant or loan applications received

\$98,000 - Amount of CCF grants obligated

\$0 - Amount of CCF loans issued

**Action 3.3.1:** Serve as a resource that encourages environmentally sustainable communities and facilitates the cleanup and beneficial reuse of Brownfield properties.

**Action 3.3.2:** Establish communication tools that raise awareness and empower communities to initiate Brownfield redevelopment projects.

**Action 3.3.3:** Provide Targeted Brownfield Assessments with the goal of redevelopment.

**Action 3.3.4:** Develop procedures and tracking mechanisms for CCF.

**Action 3.3.5:** Promotion of federal funding opportunities and assisting eligible entities in grant preparation.

**Action 3.3.6:** Process applications for CCF and award eligible applicants.

**Status:**

## Department for Environmental Protection

### Goal 6

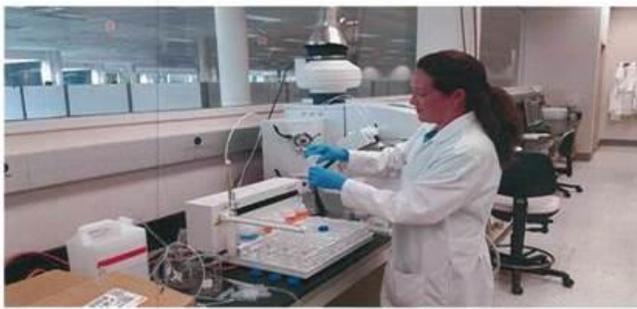


### Environmental Program Support

*Improve quality, efficiency and effectiveness of environmental programs and activities through innovative strategies, tools and approaches.*

The Department for Environmental Protection involves a range of activities that collectively provide support to ensure decisions made by the department are practical and consistent with the department's mission. These activities provide a foundation to achieve desired environmental benefits in the best interest of Kentucky's citizens.

Assessing the environmental status of Kentucky's air, land and water is important to determine



potential threats, evaluate risks and identify solutions to protect the environment and safeguard human health. The department maintains a centralized laboratory that performs analytical sample testing of water and soil to determine the nature and extent of pollutants within the Commonwealth. The department also maintains a 24-hour emergency environmental response line for accidental spills and releases of toxic and hazardous material that threaten the environment. The Environmental Response

Team (ERT) responds immediately to environmental emergencies and provides efficient, coordinated and effective action to minimize damage to Kentucky's environment.

Administrative support of information technology enables the department to efficiently manage data in a timely manner. Addressing the technological needs of our environmental management systems is an essential aspect of providing web-based electronic services to the public. Advancement of the department's technology and streamlining environmental response programs will provide the best possible service to Kentucky's local governments and communities.

Improvement in organizational and employee development, quality assurance and workplace safety are important areas to facilitate the accomplishment of the agency's mission and goals. Empowering employees with the tools, knowledge and skills to contribute effectively and efficiently enables employees to achieve long-term sustainable results to protect and enhance Kentucky's environment.

## Department for Environmental Protection

### Objective 1 – Provide accurate and defensible chemical analytical services to the program divisions of the Department for Environmental Protection.

**Tactic 1.1:** Analyze environmental samples collected by the Water and Waste Management divisions for chemical constituents.

**Measure:** The number of environmental samples analyzed each year.

**Baseline:** In calendar year 2017, there were 4018 samples analyzed by the Environmental Services laboratory. There were 4335 samples in the previous year.

**Action 1.1.1:** Provide testing services for samples in accordance with the allocated budget.

**Action 1.1.2:** Maintain an average turn-around-time of less than 30 days for samples submitted beyond July 1, 2018. The average turn-around-time for all samples received in CY17 was 14.40 days. In CY16 the lab averaged 22.08 days for 4335 samples.

**Status:**

**Measure:** The number of individual tests performed by the Environmental Services laboratory.

**Baseline:** In calendar year 2017, there were 43,399 individual tests performed by the Environmental Services laboratory.

**Action 1.1.3:** Provide individual testing services in accordance with the allocated budget.

**Status:**

**Measure:** The number of individual chemical parameters reported by the Environmental Services laboratory.

**Baseline:** In 2017, there were 195,780 individual chemical parameters reported by the Environmental Services laboratory.

**Action 1.1.4:** Provide chemical parameter reporting to meet department needs.

**Status:**

**Measure:** The number samples reported by the Environmental Services laboratory outside the 30 day from delivery.

**Baseline:** In 2017, there were 67 individual sample reports reported by the Environmental Services laboratory outside the 30-day mark. This represented 1.86% of the total samples for the year.

## Department for Environmental Protection

**Action 1.1.5:** Provide reports to clients within 30 days of delivery. The division goal is less than 5.0%.

### Status:

**Tactic 1.2:** Maintain accreditation by USEPA and the National Environmental Laboratory Accreditation Program (NELAP).

**Measure:** Accreditation status of the Environmental Services laboratory.

**Baseline:** Currently, the laboratory is certified as the State Principal Laboratory for Drinking Water by USEPA. In July 2007, the New Hampshire Department of Environmental Services granted the laboratory NELAP accreditation. Continuing accreditation status is dependent on successful ongoing participation in the NELAP program.

**Action 1.2.1:** Participate in a minimum of 2 Proficiency Testing (PT) studies approximately 6 months apart.

**Action 1.2.2:** Pass 2 out of the last 3 consecutive studies to maintain accreditation for various analytical methods.

**Action 1.2.3:** Secure funding through budget planning and contract writing that will pay for the on-site auditing fees biannually so that accreditation can be maintained.

**Action 1.2.4:** Review Environmental Services Laboratory analytical and administrative SOPs and Laboratory Operations and Quality Assurance Manual (LOQAM) annually and update as necessary. Maintain all SOPs with 23-point criteria.

### Status:

**Tactic 1.3:** Upgrade the analytical instrument base of the Environmental Services laboratory.

**Measure:** The analytical capacity and dollar value of new and replacement instrumentation.

**Baseline:** The Environmental Services lab maintains a major analytical instrument inventory with a baseline dollar value in excess of \$2 million.

**Action 1.3.1:** Secure additional funding that will allow replacement of old or outdated equipment and instruments.

**Action 1.3.2:** Secure additional funding that will allow purchase of equipment that utilizes new technologies to meet the department's changing program needs.

### Status:

# **APPENDICES**

**Kentucky Department for Environmental Protection**

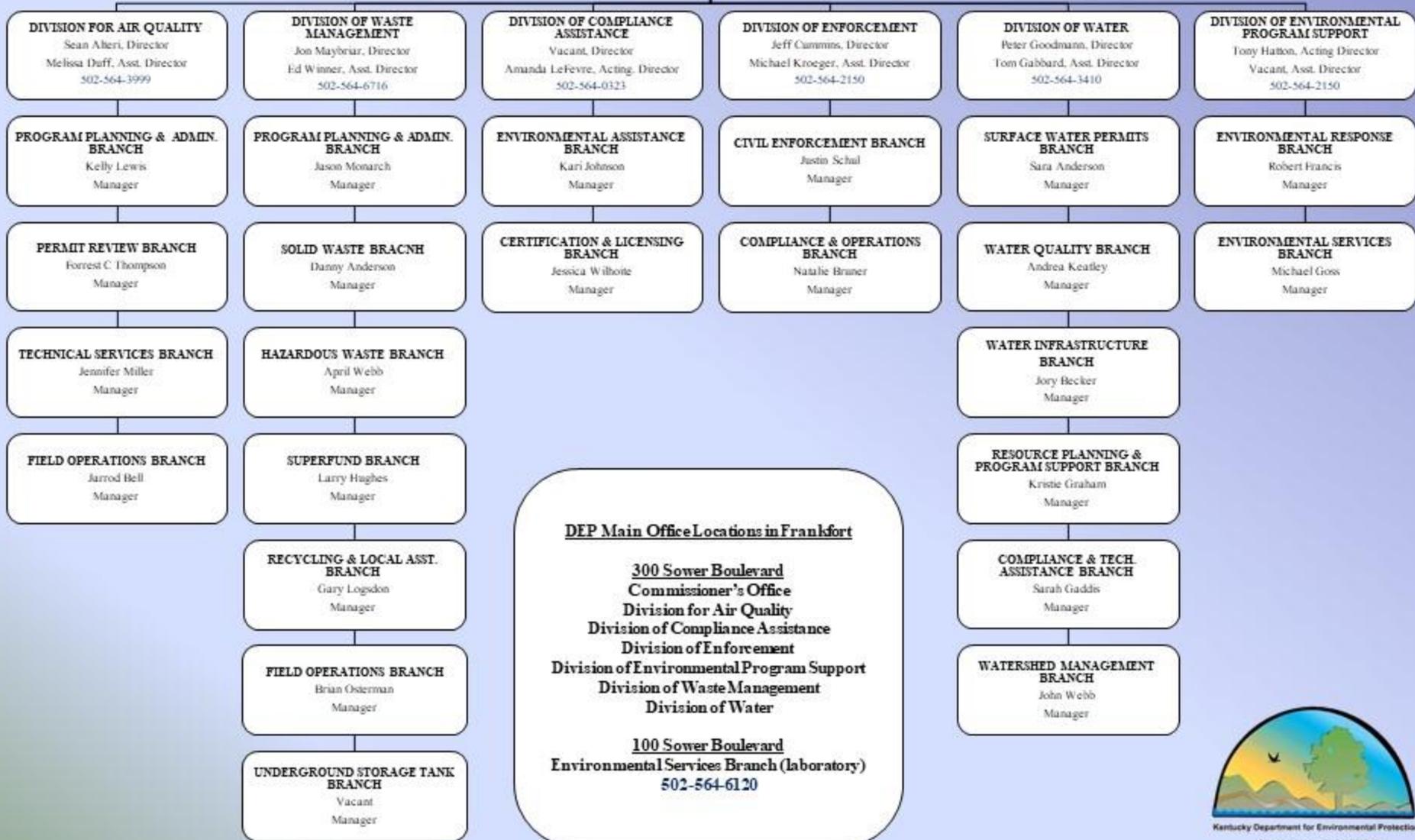
**Tony Hatton, Commissioner**

**Vacant, Deputy Commissioner**

**Lanny Brannock, Executive Staff Advisor**

**Vacant, Staff Assistant**

**Larry Taylor, Environmental Scientist Consultant**  
502-564-2150



Kentucky Department for Environmental Protection

Revised 6/1/2018

**Office of the Commissioner**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-2150

Fax: 502-564-4245

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

**Division for Air Quality**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-3999

Fax: 502-564-4666

[www.air.ky.gov](http://www.air.ky.gov)

**Division of Environmental Program Support**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-2150

Fax: 502-564-4245

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

**Division of Compliance Assistance**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-0323

Fax: 502-564-9720

[www.dca.ky.gov](http://www.dca.ky.gov)

**Environmental Services Branch**

100 Sower Boulevard

Suite 104

Frankfort, KY 40601

Phone: 502-564-6120

Fax: 502-564-8930

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

**Division of Enforcement**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-2150

Fax: 502-564-9710

[www.dep-enforcement.ky.gov](http://www.dep-enforcement.ky.gov)

**Division of Waste Management**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-6716

Fax: 502-564-4049

[www.waste.ky.gov](http://www.waste.ky.gov)

**Division of Water**

300 Sower Boulevard

Frankfort, KY 40601

Phone: 502-564-3410

Fax: 502-564-0111

[www.water.ky.gov](http://www.water.ky.gov)