



2010

Kentucky Evaluation Report

**Office of Surface Mining Reclamation and Enforcement
Department of the Interior**



Office of Surface Mining Reclamation and Enforcement

Twenty-Eighth Annual Evaluation Summary Report

For the

Regulatory and Abandoned Mine Land Reclamation Programs

Administered

By the

Commonwealth of Kentucky

For

Evaluation Year 2010

(July 1, 2009 through June 30, 2010)

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I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) to oversee the implementation of State regulatory programs and provide Federal funding for State programs that have been approved by OSM as meeting the minimum standards of SMCRA. This report contains summary information regarding the Kentucky Regulatory and Abandoned Mine Lands (AML) programs and the effectiveness of the programs in meeting the purposes of SMCRA as specified in Section 102. The Kentucky Energy and Environment Cabinet's (EEC) Kentucky Department for Natural Resources (KYDNR) is the Regulatory Authority (RA) responsible for administering the approved program in Kentucky.

The format for this report is established by OSM Directive REG-8. REG-8 enables OSM and the States to take innovative, results-oriented evaluation approaches tailored to individual State programs and stakeholder interests and needs. During the Evaluation Year (EY), OSM and the States develop state-specific oversight plans or performance agreements to identify specific program areas and evaluation methodologies directed toward end-results measurement. A team of Lexington Field Office (LFO) and KYDNR personnel developed the oversight procedures and special studies for EY 2010. The EY 2010 Performance Agreement was finalized and signed by KYDNR and LFO on September 03, 2009.

The oversight process provides two national measurements of end results: (1) the number and degree of off-site impacts resulting from mining, and (2) the number of acres meeting all reclamation requirements as documented by different phases of bond release. In addition, OSM conducts oversight inspections to determine compliance with the approved State Regulatory Program. This process allows OSM to focus oversight on those aspects of the State program that OSM determines to be most important.

This report covers EY 2010 or July 1, 2009, through June 30, 2010.

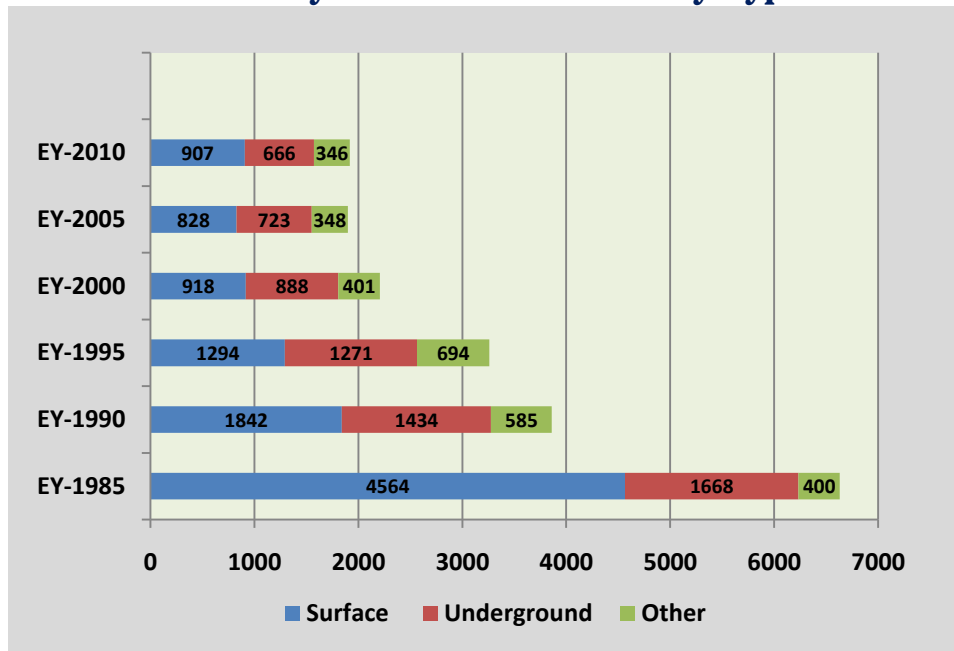
II. Overview of the Kentucky Coal Mining Industry

Kentucky is the third largest coal-producing state in the nation, with an annual production averaging over 160 million short tons during the 1990's. Kentucky was the nation's leading coal producer until 1988, holding that position for over a decade until the production from Wyoming and West Virginia exceeded that in Kentucky. Kentucky's coal production has steadily decreased from the late 1990's through this EY. Kentucky's 2009 coal production had decreased significantly in comparison to the two previous years (See Table 1, Appendix B).

In Kentucky, nearly every type of coal mining and reclamation practice is found due to the differing coal bearing regions within the State and the availability of coal. Kentucky's coal reserve base, the fifth largest in the nation, consists entirely of bituminous coal. The Eastern Kentucky Coalfield is part of the Appalachian Coal Province where underground, contour, and mountaintop mining occurs. The Western Kentucky Coalfield is part of the Interior Coal Province (Illinois Coal Basin) where area and underground mining occurs.

Kentucky currently inspects 1,919 coal mining permits of which 907 are surface mining permits and 666 are underground mining permits. The graph below shows the overall decrease in inspectable units over the past 25 years. The graph also displays a decrease of underground mining permits over the last few years and the gradual increase in surface mining permits.

Kentucky Coal Mine Permits by Type



In contrast to the number of mine permits, coal produced from underground mines has steadily increased over coal produced from surface mines. Underground mines account for approximately three-quarters of the acreage permitted in the State. The high percentage of acreage is due to the State requirement that the shadow area overlying the underground works must be permitted. However, most underground mines actually disturbed very little surface acreage. Of the total disturbed acreage from coal mining in Kentucky (246,402 acres), only 25,938 acres (or approximately ten percent) are attributed to underground mines. The table below depicts a review of the permitted acreage for underground mines in Kentucky and indicates the following changes in size during the last four EYs:

Underground Mines Permitted Acreage	EY 2007	EY 2008	EY 2009	EY 2010
Less than 20 acres	1%	1%	1%	1%
20-99 acres	4%	4%	3%	3%
100 acres or more	95%	95%	96%	96%
Underground Mine Surface Disturbance Acreage	EY 2007	EY 2008	EY 2009	EY 2010
Less than 20 acres	68%	68%	67%	67%
20-99 acres	25%	25%	26%	26%
100 acres or more	7%	7%	7%	7%

Table 1

Surface mines and associated facilities (haul roads and preparation plants, etc.) account for approximately one-quarter of the acreage permitted in the State. A review of the permitted acreage for surface mines and associated facilities indicates a minimal change in size during the last four EYs.

Permitted Acreage	EY 2007	EY 2008	EY 2009	EY 2010
Less than 20 acres	13%	12%	11%	11%
20-99 acres	24%	23%	22%	23%
100 acres or more	63%	65%	67%	66%

Table 2

The number of surface mines that are greater than 100 acres has increased significantly over the last 12 evaluation periods in Kentucky. OSM's tenth annual report stated that 42 percent of the surface mines were larger than 100 acres. The fifteenth annual report reported that 55 percent of the surface mines were larger than 100 acres. As of June 30, 2010, the data shows that two-thirds of the surface mines are larger than 100 acres and appear to have stabilized in the past five EYs. The following table further categorizes the number of surface mines above 100 acres by size.

Permitted Acreage	Number of Surface Mines			Percent of Total Surface Mines		
	EY 2008	EY 2009	EY 2010	EY 2008	EY 2009	EY 2010
100-250	247	246	245	20	20	20
250-500	235	244	232	19	20	19
500-1,000	194	196	210	16	16	17
>1,000	122	124	130	10	10	10

Table 3

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

The enactment of SMCRA created many avenues for citizen involvement. Citizens have a statutory role in practically every phase of the surface mining program, from permit issuance to bond release. Since SMCRA's enactment in 1977, coalfield citizens have used those rights to help shape virtually all policies and programs that govern surface coal mining and reclamation in America.

Kentucky has two citizen organizations that are very active in coal mining issues. They are Kentuckians for the Commonwealth and the Kentucky Resources Council. In addition to these organizations, the Kentucky River Keeper, Inc., the Kentucky Waterways Alliance, Inc., Ohio Valley Environmental Coalition, and the Sierra Club are active regarding issues associated with the U.S. Army Corps of Engineer's (COE) Nationwide Permit #21, under Section 404 of the Clean Water Act (CWA) as well as SMCRA. The Heartwood citizen's group has also been active on issues concerning mining operations on United States Forest Service (USFS) property.

Joining the individual groups named above, is an alliance of citizen organizations known as the Alliance for Appalachia. The Alliance for Appalachia is a collaboration of thirteen organizations in Central Appalachia.

There are four major coal associations in Kentucky. They are the Kentucky Coal Association, the Western Kentucky Coal Association, the Coal Operators and Associates, Inc., and the Friends of Coal.

An example of citizen participation in the regulatory process is a March 2010 meeting where representatives from KYDNR and OSM met with members of the Kentuckians for the Commonwealth at the Cold Springs Baptist Church in Caney Fork, Kentucky. Some 25 to 30 community members were present from this small town near Martin, Kentucky. Discussion of a pending permit and the impacts mining would have on the community was very frank and open. KYDNR committed to immediately respond to blasting complaints and to closely monitor blasting operations if a blasting permit was issued.

There have been new major priorities during the EY that OSM is working diligently to accomplish. Initiatives are as follows:

- Improving Oversight – under the Memorandum of Understanding (MOU) with the U.S. Department of the Interior (DOI), U.S. Environmental Protection Agency (EPA), and the COE, we have partnered to significantly reduce the harmful environmental consequences of Appalachian surface coal mining operations. Efforts have been made to take immediate actions to strengthen oversight of state surface coal mining programs and to promulgate Federal regulations to better protect streams affected by surface coal mining operations.

- Creating a Stream Protection Rule - OSM has published an advance notice of proposed rulemaking regarding the protection of streams from the adverse impacts of surface coal mining operations. Under the terms of a settlement agreement signed on March 19, 2010, OSM agreed to use best efforts to publish a proposed rule by February 28, 2011, and a final rule by the end of June 2012.
- A Stream Protection Rule Environmental Impact Statement (EIS) is being developed for use in writing the new rule to better protect streams from the adverse effects of coal mining. OSM has held Open Houses within nine various locations, including Hazard, Kentucky, in July 2010, to accept public comment on the scope of this EIS.
- Ensuring Better Permit Coordination – OSM is working with other agencies with responsibilities for permitting various aspects of surface coal mining activities to better coordinate our efforts.

The public outreach for these new initiatives is listed below for Kentucky:

In August 2009, Appalachia Regional Director, Tom Shope, conducted informal outreach in Kentucky with the coal industry, State agencies and the environmental community to discuss OSM's oversight outreach efforts as required by the National MOU signed by DOI, EPA, and COE in June 2009. Specifically, OSM was reevaluating its oversight policies and processes to determine how to conduct more effective oversight of the approved State's program.

In February 2010, OSM Director, Joe Pizarchik, visited Kentucky on a fact finding and listening tour. The tour included a firsthand look at mining operations in Kentucky. While in Kentucky, Director Pizarchik met with State officials, coal industry and the environmental community. His visit also included touring active and reclaimed mine sites in the area.



OSM Director, Joseph Pizarchik and Kentucky Resources Council Director, Tom Fitzgerald

In April 2010, the OSM Director conducted stakeholder meetings to develop the proposed rule to protect streams. The stakeholders included State agencies, coal industry, and the environmental community. These meetings were held in Lexington, Kentucky. The EIS and input from stakeholders will give OSM the information to write the best rule possible.

IV. Major Accomplishments/Issues/Innovations in the Kentucky Program

In July 2008, the Environmental and Public Protection Cabinet (EPPC) was reorganized by Governor Steve Beshear in order to provide better access to services for the people of Kentucky. The EPPC was reorganized to form the Public Protection Cabinet, the Labor Cabinet and the Environment and Energy Cabinet (EEC). This organization was approved by the 2010 Kentucky General Assembly. On March 25, 2010, Governor Steve Beshear signed House Bill (HB) 393 that completed this reorganization.

The Department for Environmental Protection (DEP) and KYDNR were moved into the new EEC. Within the EEC, KYDNR is the RA responsible for the regulation of coal mining of Federal and non-Federal lands in Kentucky. KYDNR is headed by Commissioner Carl E. Campbell. There are three divisions responsible for SMCRA implementation. The three Divisions and their Directors are as follows: Division of Mine Permits (DMP), Allen Luttrell; Division of Mine Reclamation and Enforcement (DMRE), James L. Dickinson; and the Division of Abandoned Mine Lands (DAML), Steve Hohmann. The DMRE has five regional offices located in Madisonville, Middlesboro, Prestonsburg, Pikeville, and London.

In addition to the three existing divisions, the Division of Technical and Administrative Support provides staff support for the coal mining regulatory program under KYDNR. The Director of the Division of Technical and Administrative Support is Leo Miller. KYDNR also contains the non-SMCRA Division of Forestry, Office of Mine Safety and Licensing, Division of Oil and Gas, and the Division of Conservation.

A. Regulatory

1. Budget and Staffing

The FY 2009 Administration and Enforcement (A&E) grant covering the period of September 1, 2009, through August 30, 2010, funds the Kentucky regulatory program, in the amount of \$11,806,483. The A&E grant supports 297 positions. The regulatory program is 50 percent Federally-funded, except for the \$1,585,397 that Kentucky received to administer the Federal Lands Program. The Federal Lands Program is 100 percent Federally-funded. Kentucky has been allocated \$12.6 million for the upcoming FY.

Kentucky continues to experience a severe budget shortfall that could have a significant impact on all programs funded in-part or wholly by general fund revenues.

The Kentucky General Assembly passed a two-year budget on June 4, 2010, for Kentucky's fiscal years 2011 and 2012, which went into effect July 1, 2010. As expected, it will negatively impact the regulatory programs related to mine permits and surface mine reclamation and enforcement. The decrease in General Fund appropriations to these programs is reflective of a continuing problem of declining revenue available. This may impact the ability of KYDNR to match all available federal funds for the surface mining program, as was evidenced by KYDNR returning \$1.8 million of the FY 2008 A&E grant due to their inability to provide the necessary matching funds. As part of OSM's grant process, KYDNR is required to submit three-month budget projections for monitoring to ensure that the A&E grant will be matched.

The Kentucky General Assembly passed HB 283, and the law became effective April 8, 2010. This Bill authorized an increase in the permit application fee and changed the way these fees are deposited. As a result, the DMP was able to hire an additional 16 employees and significantly decrease the number of delinquent applications. DMP began the new State fiscal year with an authorized level of 99 full-time employees.

The enacted 2008-2010 Kentucky Executive Budget reduced the DMRE's authorized staff by nine employees. At the same time, the division inherited nine employees from the former Division of Explosives and Blasting. On paper, this kept the Division's personnel cap number the same at 185, but in reality, the Division lost nine positions that were responsible for performing inspection duties necessary for the enforcement of SMCRA. As of July 1, 2010, DMRE had 72 inspector positions filled and six vacancies.

In a Federal Register dated July 31, 1998 (63 FR 40825), OSM and KYDNR agreed to field inspector staffing levels at one field inspector per 24 inspectable units. As of January 1, 2009, KYDNR had an inspector staffing level of one inspector per 32 inspectable units (permits). This represented a significant increase in inspector workload from previous years. As of January 1, 2010, the inspection staffing workload stood at one inspector per 26 inspectable units. As a result of the aggressive and successful hiring strategy of KYDNR, significant progress was made in filling vacant positions. By the end of EY 2010, the inspector workload had risen slightly to one field inspector per 27 inspectable units. Since May 2010, KYDNR has not been able to fill several vacancies. This will negatively impact workload and KYDNR's ability to meet inspection frequency.

The DAML's trend in staffing over the last five years shows that the program increased in size by 24 people due to the increase in grants from the 2006 AML Reauthorization Act. The division plans to hold at 94 positions unless the emergency program is mandated upon the states. If that happens, staff will increase but by how many is undetermined at this point.

It is imperative that the present budgeting levels be increased in order to continue positive trends in inspector workload and inspection frequency. A reduction in budget and staffing levels for inspection and enforcement would have negative

impacts on the State's ability to carry out the mandated provisions of SMCRA. This includes the inspector staffing levels agreed to in a Federal Register, 63 FR 40825. LFO is closely monitoring the budget and staffing issues and will develop recommendations for actions, as appropriate.

2. KYDNR/MSHA Impoundment Coordination

KYDNR hosted two coordination meetings on September 8, 2009, and April 6, 2010, with Mine Safety and Health Administration (MSHA) Districts 6, 7, and 10 impoundment engineers, OSM, and KYDNR permitting and inspection personnel. These biannual meetings focus on current Kentucky-specific issues. Discussions continued from the spring 2009 meeting, providing updates on impoundment related issues involving permitting and inspection, reclamation of inactive impoundments, geo-technical investigations, and breakthrough risk assessments. The spring 2010 meeting included a group discussion of the findings from the impoundment special study. This prompted a lengthy discussion on the various views on impoundment technical details, review and enforcement authority of the various agencies, and appropriate enforcement of technical elements as contained in the impoundment designs.



Slurry Impoundment in Union County, Kentucky

3. Threatened and Endangered Species – Indiana Bat

KYDNR and the U.S. Fish and Wildlife Service (USFWS), Frankfort Field Office, disagreed on the implementation of KYDNR's Indiana Bat Protection and Enhancement Plan guidelines. Due to the lack of resolution, LFO and KYDNR elevated their concerns to the regional offices of OSM and USFWS as per the conflict resolution protocol outlined in the 1996 OSM/USFWS Biological Opinion. The regional offices concluded that Indiana Bat protection guidelines were inconsistent among the coal states and USFWS field offices. As a result, the agencies formed a work group to address and formulate guidelines to be used by all states. The workgroup is composed of representatives of the USFWS, OSM, and representatives from the State regulatory authorities of Kentucky, West Virginia, and Indiana on behalf of the Interstate Mining Compact Commission. Work products of the group were circulated to a wider number of USFWS Offices and State Regulatory Agency interested parties, with ample opportunity for input into document development and finalization. The "Range-wide Indiana Bat Protection and Enhancement Plan Guidelines" document was completed by the working team that had convened over the past three years. Secretary of the Interior, Ken Salazar announced the guidelines on September 2, 2009. On September 18, 2009, KYDNR issued Reclamation Advisory Memorandum (RAM) #142. The RAM provides range-wide Indiana bat protection and enhancement guidelines. To implement the guidance, outreach efforts conducted by the States and their FWS field office counterparts were initiated on September 17, 2009, with training provided to State permitting, consultants and bat biologists.

4. Reforestation

KYDNR continues to be actively involved in the Appalachian Regional Reforestation Initiative (ARRI). This initiative transfers research findings and new technology as it develops to industry, landowners, other government agencies, and other interested parties for implementation on minesites.

The goal of ARRI is to encourage the planting of more high-value hardwood trees on reclaimed coal mined lands in Appalachia and to increase the survival rates and growth rates of the planted trees. ARRI promotes using the Forestry Reclamation Approach (FRA) to reclaim the mining disturbance. This approach involves selecting suitable rooting medium and loosely grading it, using native and non-competitive ground covers that are compatible with growing trees, planting early succession and commercially valuable crop trees, and using proper tree planting techniques.

During calendar year (CY) 2009, KYDNR issued 114 permits (new, amendments, and revisions) encompassing 24,133 acres with a post-mining land use where the permittee committed to planting trees. The FRA techniques are incorporated into the backfilling, grading, and revegetation plan for these permits.

During the CY, Phase III bond release was granted on 1,988 acres of land planted in trees. This translates to the coal industry adding over 1.3 million established and growing trees to Kentucky mined lands. Nearly 30% of acres granted Phase III bond release were planted using the FRA.

Significant reforestation related events during the EY included the following:

- **2009 ARRI Conference - “Forestry Reclamation Approach in Action”** – This conference was hosted by KYDNR, University of Kentucky (UK), and OSM. Over two hundred representatives of government, environmentalists, coal industry and private landowners participated in the three-day event, that included a field tour of an active ICG Hazard, Inc. surface mine utilizing FRA, the Big Elk Mine “Starfire” reforestation research plots, UK’s Guy Cove headwater stream reconstruction project, honey bee research, and UK’s Appalachian Fuels, LLC’s Bent Mountain research cells. One day was devoted to conference speakers who provided information that will enable the coal industry to implement successful permitting and reclamation strategies for forested post-mining land uses. Panels of regulatory and industry personnel also discussed the challenges and successes of utilizing the forestry reclamation approach. The academic community presented progress and results reports of reforestation research.
- **RAM #144 – Reforestation Initiative Expanded for Commercial Forestland** This new RAM, issued on November 4, 2009, is an addendum to RAM #124- Reforestation Initiative. It expands the provisions of RAM #124 to commercial forest land to allow “under very exacting and limited conditions, additional grading and reclamation practices for post-mining reforestation.” The expansion comes as a result of ongoing research by UK that shows that high value hardwood trees can survive in higher numbers and grow much better on stable areas that are backfilled and left ungraded.
- **Interstate Arbor Day 2010** - On April 30, 2010, over 100 students and their teachers from Arlie Boggs Elementary in Letcher County, Kentucky and Appalachia Elementary in Wise County, Virginia planted more than 1,000 native hardwood seedlings and wetland plants to promote reforestation and wetland creation on mined lands. The “Forest Without Borders” Arbor Day event was hosted by the Cumberland River Coal Company on its surface mine operation located atop Black Mountain on the Kentucky-Virginia state line. The Virginia Mining Association sponsored an art contest and provided tee shirts for all the students. The Kentucky Department of Fish and Wildlife

Resources (KDFWR) provided the plants the students used to create the wetland areas. The enthusiasm of the students, coupled with a perfect spring day, made this first interstate Arbor Day a memorable event for all participants. It was the perfect backdrop for KYDNR's presentation of the 2009 Kentucky ARRI Award to ICG East Kentucky, LLC, for their collaborative work with UK in using FRA on steep slopes.



2010 Joint Kentucky/Virginia Arbor Day "Forests without Borders"

- **ARRI Volunteer Tree Planting Events** - KYDNR participated in several volunteer events that went on across the state in the spring. The events mostly involved mined lands disturbed prior to the passage of SMCRA. Many of the seedlings for the event were provided by the DAML and planted by volunteers from colleges and various organizations under the guidance of foresters from OSM and KYDNR. Over 54,000 tree seedlings were planted on 80 plus acres of mined lands.



Volunteers listen to tree planting instructions at Morgan County, Kentucky site

- Governor Award to Appalachian Coal Country Watershed Team/AmeriCorps VISTA** - OSM/VISTA received the Governor's Environmental Leadership Award at an awards ceremony held September 30, 2009, at the Lexington Convention Center in Lexington, Kentucky. The Appalachian Coal Country Watershed Team, (ACCWT) and ARRI partnered for the first time to successfully sponsor and organize eight tree planting events on previously mined lands throughout the Appalachian coal region, two of which were in KY. The ACCWT and ARRI share the successes of over one hundred citizens and industry volunteers that planted 9,200 trees on 15 acres of mine lands.



(From Left) Sam Adams, KY OSM/VISTA, accepted the Governor's Environmental Leadership Award from Kentucky Governor, Steve Beshear while Larry Arnett, KYDNR and Joe Blackburn, Lexington Field Office Director for OSM, look on. (Photo by Natalie Jensen, KY EEC)

- OSM Applied Science Research** -KYDNR continues to work jointly with OSM and UK to provide outreach and technology transfer regarding reforestation of surface mines. Field work for UK's Department of Mining Engineering's applied science project titled "Field Investigation of Best Practices for Steep-Slope Mine Reclamation Employing the Forestry Reclamation Approach" continued this EY. This \$199,927 project will facilitate the broader application of FRA on steep slopes in Appalachia. The project entails evaluating selected backfilling and grading practices on the basis of operational efficiency, economics, slope stability, and reforestation potential of the reclaimed site with slope stability being the primary focus.

The field investigation portion of the project was initiated in the spring of 2009 on ICG East Kentucky, LLC's Peelpoplar Mine in Pike County, Kentucky. One section of highwall was backfilled with gray sandstone, graded laterally, and then final graded with a single pass of the bulldozer. Another section was backfilled with a brown soil and sandstone mixture, then bulldozed down from above the slope. Both sections were steep-slope with all final grade work performed according to FRA. High value hardwoods were

planted on both backfilled sections. ICG received the Kentucky 2009 ARRI Award for their participation and cooperation in this important applied science project.



Hank List presents ICG Coal, Inc. with the Kentucky 2009 ARRI Award

Another approved applied science project involves the evaluation of alternatives for restoring headwater streams during and after sediment pond removal. This project, titled “Investigation of Alternatives for Restoring Headwater Streams via Sediment Pond Removal in the Appalachian Coal Belt Region,” includes establishing high-value hardwood trees to provide shading, organic matter, habitat, and stream bank stability as part of the restoration design. The field construction aspects of the study cannot be initiated until a CWA Section 404 permit is obtained from the COE.

5. Kentucky Mine Mapping Initiative

Kentucky continues to make significant progress on its mine mapping initiative. There are over 35,260 final maps that have been scanned. Of these, over 29,329 have been geo-referenced and are available for viewing or downloading at Kentucky's mine map web site. There are also 29,329 transmittal documents and 2,171 stitch partials that also can be downloaded from the Web site. This totals 66,760 documents that are available by download from the site. The remaining maps are not geo-referenced, but are available for viewing or downloading. The scanned and geo-referenced maps include all mines that have operated since 1984, including most of the mines that have operated under Kentucky's approved permanent regulatory program.



Map compliments of the Kentucky Geologic Survey Geologic Map Information Service

Kentucky Mine Map initiative staff also provided two continuing education training sessions for the Kentucky Society of Professional Engineers and one for the Kentucky Division of Water in the fall and winter of 2009. These sessions provided over 200 registered engineers and 30 State employees with training on how to fully utilize the Web site.

KYDNR continues to supply scanned copies of annual deep mine maps and surface mining reclamation plan maps (MRPs) to the public through two web sites: <http://minemaps.ky.gov> and <http://www.minepermits.ky.gov>. KYDNR's Office of Mine Safety and Licensing (OMSL) is responsible for scanning and geo-referencing the underground and surface coal mine license maps, as well as historic maps from outside sources. Geographic Information System (GIS) personnel in the DMP provide the scanned and geo-referenced MRPs. The EEC Information Technology staff maintains the underground mapping web servers and offers development support to OMSL.

The success of the system is evidenced by the fact that the minemap web site now gets over 600,000 internet queries every month, averaging 19-20,000 hits per day. The Web site and scanned mine maps also support the 2009 KRS 352.510 and 353.737. This law reduces the prohibition to mining within a 500 foot radius around an oil or gas well to 300 feet. Both proximity and depth to minable coal may be determined using the mapping system. In addition to training the Division of Oil & Gas employees, mapping personnel have also trained over 30 AML employees in usage of the system.

6. Training Initiative

Several factors contributed to the continued need for substantial training. In this EY, KYDNR continued efforts to hire and train new permit reviewers and field inspectors to replace the unusually high number of experienced employees who retired in 2008, and to fill new positions created by funding from increased permit fees. DAML also hired both new and experienced employees to increase capacity in response to the increase

in federal funding. KYDNR utilizes both in-house training and the OSM sponsored National Technical Training Program (NTTP). KYDNR personnel are also instructors for NTTP.

The DMP in particular, continued with an aggressive internal training program that combined a second New Reviewer Boot Camp and field trips to both west and east Kentucky with 14 Reviewer Roundtables for all permit review staff throughout the year on specific technical topics. Those topics included: SMIS, permanent ponds, KY's 33-1/3 uncontrolled minerals policy, acid forming materials, the new Indiana Bat Protection Enhancement Plan Guidance, RAM#124-Kentucky Reforestation Initiative, right to mine, ownership and control, geology, administrative review, statutes and regulations, public roads, incremental bonding, probable hydrologic consequences and overlaps. Finally, interim employees (retirees returning in a temporary capacity to assist with permit reviews) conducted intensive training for reviewers in each section on the topics of blasting and subsidence.

In June 2010, six OSM-funded interns came to work with DMP on the implementation of the new Cumulative Hydrologic Impact Assessment (CHIA) protocol. These interns, who had no previous mining background, received a week of structured training on the basics of mining, mine permitting, geology, map reading, surface and groundwater hydrology, water quality data, map digitizing, the history of CHIA in Kentucky, CHIA writing, and use of DMP data tools such as ArcMap, SMIS and DocTree.

The DMRE held trainings at regional offices for inspectors and support staff regarding electronic submittal of Kentucky Pollutant Discharge Elimination System (KPDES) and SMCRA water monitoring data. These trainings were prompted by the issuance of a new KPDES Coal General Permit on August 1, 2009, and by the disproportionately high staff time and resources required to process paper submittals. Regional training sessions were also offered to help permittees, labs and consultants make the transition to electronic submittal through the file transfer protocol site. DMRE inspectors also attended numerous NTTP sponsored trainings during the year.

KYDNR personnel also provided outreach and training to KYDNR inspectors, citizens and industry on the new Indiana Bat Guidelines and the FRA and associated opportunities.

KYDNR blasting inspectors attended blasting related seminars and training throughout the year to enhance their professional development. This included State and national level seminars, OSM sponsored NTTP basic and advanced blaster training courses, and MSHA sponsored training.

KYDNR not only received training, but also provided training. During this EY, KYDNR conducted blasting training classes and administered Blaster License and Certification Exams throughout the State.

7. The Approved State Program

During this EY, OSM reviewed one proposed program amendment regarding underground waste development. KYDNR developed regulations that resolve an outstanding 30 CFR 732 issue dated May 27, 1997, and an outstanding program issue. This program amendment is in OSM's review.

At the end of the EY, KYDNR submitted three bills passed by the 2010 Kentucky General Assembly. The three bills are as follows:

- **House Bill 215** - amended KRS 350.130 to allow notices of noncompliance and cessation orders to be transmitted by email to those individuals interested in the service. If interested in receiving this optional service, individuals must submit a form to KYDNR as a means of notification.
- **House Bill 268** - amended KRS 351.315 to increase the number of training hours that are required to renew a blaster license. With this amendment, the blaster will be required to attend eight hours of blasting training annually. Also, as part of this amendment, no more than four hours of the annual blaster training may be attributed to attending a conference unless otherwise approved by KYDNR. A senate committee substitute was approved that attached the original provisions of Senate Bill 63 that amended KRS 304.44-030 to increase subsidence insurance from \$100,000 to \$300,000 of insured value and also extended coverage for up to \$25,000 of additional living expenses incurred by the owner of a residence who has been temporarily displaced as the direct result of damage caused by mine subsidence.
- **House Bill 283** - amended KRS 350.060, KRS 350.070, and KRS 350.135 to increase permitting fees to the following amounts: \$2,500 for an original application; \$1,750 for an amendment or major revision; and \$750 for a minor revision, renewal or transfer. KRS 350.139 was amended to ensure that the fee amounts over \$375 are strictly for the use of the DMP. The original \$375 will continue to be deposited into the general fund with $33^{1/3}$ percent of the money being transferred to the fiscal court of the county in which the permitted operation is located. In addition to HB 283, KYDNR submitted the proposed implementing regulations at 405 KAR 8:010.

8. Geographic Information Systems (GIS)

Over the last year there have been several steps taken to strengthen Kentucky's GIS program. One area is hiring more people to assist with the workload. A full-time GIS position was added this year, and there is another full time person who digitizes mining data part-time, to be available for use in GIS applications. KYDNR has also hired two interns who are digitizing mine data part time and one intern who is committed full time to digitizing mine data.

GIS continues to serve the KYDNR mining Divisions with a variety of applications, data, and custom maps. OSM's Technical Information Processing System (TIPS) program provides the licenses for the GIS software, and the State monitors license usage. The primary GIS application used by the State of Kentucky is ArcMap, which has recently been upgraded to version 9.3.1.

In the field, terminal service is the preferred method to access data, as it displays maps and data quickly. ArcPad is utilized in special cases for mobile GIS needs, and Google Earth is being evaluated for quick viewing of aerials.

In 2009, a pilot project with the Kentucky Geologic Survey (KGS) was initiated to determine the feasibility of digitizing the older permit boundary overlay images to add to their GIS mining layers. Having Kentucky's permit boundaries digitized and available for the National Map project is a high priority, and proper funding is critical. Thus far, thirteen 7.5 minute quadrangles have been digitized from the Permit Boundary Overlay Maps. These maps depict surface and underground coal mine boundaries and selected mining features for mining that took place during six different time periods in the permitting of surface mining in Kentucky. These maps have captured mining features from coal mining activities from the early 1960s up until 1999. Since 1999, information from new coal mining activities has been captured in the form of the Mining and Reclamation Plan (MRP) maps. The MRPs are geo-referenced and made available to the public for GIS applications from the KYDNR Web site.

KYDNR continues to create digital data for agency needs and train KYDNR staff on both the software systems and data availability.

9. Technical Information Processing System (TIPS)

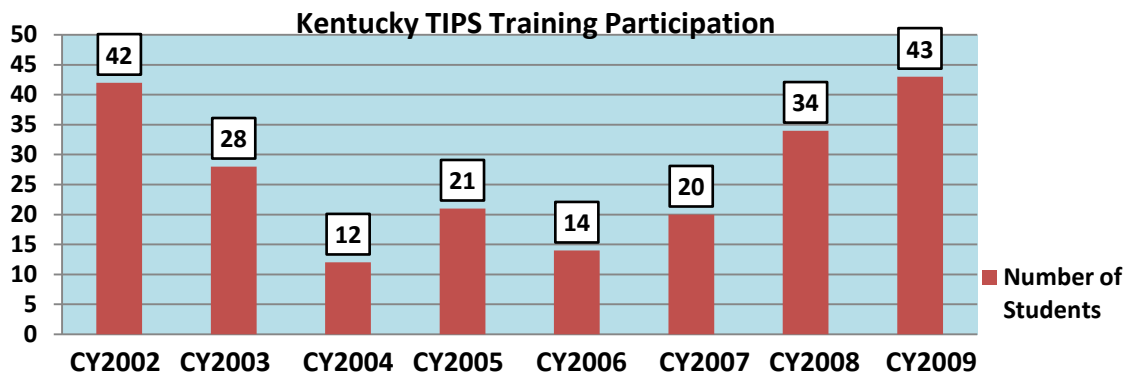
KYDNR is responsible for inspecting all surface and underground coal mining permits within the State to assure compliance with SMCRA. The State utilizes different resources in an ongoing effort to become more efficient, including TIPS.

On October 1, 1987, OSM began distributing computer hardware and software to the States, Indian tribes, and OSM offices in coal-producing states, to meet technical and programmatic needs in developing decision-making processes enabling objective decisions based on competent and scientifically sound data. OSM created the TIPS Technical Task Force on February 26, 1988, and delegated authority to TIPS to meet this nationally important agency objective. On July 22, 1991, OSM issued Directive INF-12 to provide guidance for TIPS.

TIPS continues the original goal, started in 1987, of providing specialized hardware, scientific software, customized software training, and technical assistance to its user community. This enhances the technical skills of States, Tribes, and OSM staff by providing them with equipment, training, and expertise necessary to use it.

KYDNR has utilized TIPS for equipment/hardware needs (and associated software) when their projects require additional support. One initiative that KYDNR participates in is the “Seeding Technology” initiative. This initiative enables TIPS to make technology available to the State to assess the benefits of the supplied equipment to the program. TIPS continues to make technology, and the expertise needed to operate the new technology, available to KYDNR employees as needs are identified.

Kentucky participates with TIPS training opportunities that enhance State employees’ abilities to use computer resources to aid in productivity on the job. In past years, Kentucky’s participation in available TIPS training was minimal. As depicted in the graph below, that trend is changing. KYDNR participation rose from 14 participants in CY 2006, to 43 participants in CY 2009.



Some of the TIPS classes include: GIS; AutoCAD training; Groundwater analysis software; and other software/hardware support. Some of the training can be offered on-site to help states that have a more urgent need to get their staff trained in a particular area. These trainings can be tailored to assist the State’s staff with training more specific to their needs. TIPS taught an AutoCAD class onsite May 12 - May 14, 2009, with a total of 13 participants.

Training staff for all classes includes both OSM employees and employees from the states and tribes TIPS serves. Currently, there are 77 instructors to teach the 20 different classes that are offered through TIPS. This instructional group of 77 includes two employees from the State of Kentucky.

KYDNR has maintained the software their staff has been trained on through TIPS. There have been three software updates received by Kentucky this EY. This allows the users to have fully functioning software and equipment in the office and in the field.

10. OSM Youth Initiative – Student Internships

Kentucky is an enthusiastic participant in the OSM Youth Initiative. The initiative is aimed at employing students in mining and reclamation related fields that introduce them to State regulatory work in a carefully supervised and mentored environment.

Kentucky has taken advantage of the OSM offer of cooperative agreement money to fund six students working exclusively on the effort to significantly revise Kentucky's CHIA procedures. The students are KYDNR employees hired on an interim basis, not to exceed nine months. The students compile and record historical water quality data; write watershed assessments describing such things as land uses, past, present, and anticipated mining; and assist with various GIS projects related to CHIA. OSM also has one additional student intern who works exclusively on the CHIA effort. In addition to the assigned CHIA specific duties, the students are provided with opportunities for training and field exposure aimed at further enhancing their education and career development. Many positive experiences for both the students and KYDNR are resulting from this initiative.



Student interns working with the CHIA Initiative

11. Federal Lands Management

KYDNR administers the Federal Lands coal program in Kentucky. OSM provides support to KYDNR in managing the coal program by assisting federal agencies that have a role in the mining of coal on lands managed by these agencies. OSM is also responsible for making determinations of Valid Existing Rights (VER) for KYDNR's use in the issuing of permits.

The two agencies most often involved in coal related activities are the COE and USFS. The COE has several projects within the eastern coal field and the USFS manages the Daniel Boone National Forest (DBNF) in eastern Kentucky as well.

Currently, both agencies have coal permit actions on their lands; however, they are in various stages of the process between acquiring the permit and active mining.

The COE has several projects in Kentucky that were established to monitor the development and management of projects and programs that provide for inland navigation, flood-damage reduction, environmental protection and restoration, recreation, water supply, and other public benefits. Lakes in Kentucky being monitored are: Dewey Lake, Fishtrap Lake, Grayson Lake, Paintsville Lake, and Yatesville Lake. Fishtrap Lake and Dewey Lake have the majority of the coal mining activity for the COE.

In EY 2010, three mining permit applications were submitted to KYDNR (issuance is still pending) on COE managed land; and six other permits were issued during the year. The COE reviews permit applications and monitors ongoing mining activity, balancing the respect for the rights of mineral owners and the mission of their agency. All but one of these permits is on the Fishtrap Lake property.

The DBNF is located along the Cumberland Plateau in the Appalachian foothills of eastern Kentucky. The forest encompasses over 707,000 acres of mostly rugged terrain. In EY 2010, KYDNR had two permits on DBNF properties. They are in McCreary and Whitley counties, and are in the USFS review process.

The DBNF has several mining companies interested in developing coal beneath their property. Due to the provisions in Sec. 522(e)(2) of SMCRA, only underground mining methods are allowed on National Forest Lands in the eastern U.S.; surface mining would only be allowed after a successful VER request of OSM and KYDNR.

The DBNF is completing the NEPA document on one coal lease proposal in the Stearns Ranger District. There are three other proposals for coal mining in the Redbird Ranger District that are awaiting NEPA review. These will be completed by various means, such as in-house DBNF staff and third-party contractors. Generally, the USFS is the lead agency for these decisions; however, the Bureau of Land Management may also be the lead agency if both agencies are in agreement. OSM can be a cooperating agency to support the review needs of the NEPA document if needed. OSM compiles necessary information for the mine plan review and presentation to the Secretary of the Interior for signature of federally leased coal. In some cases, if staff is available, OSM may supply technical input when the lead agency requests support.

On July 15, 2008, a VER request was submitted to OSM in regard to conducting surface coal mining operations on approximately 238 acres of land managed by the DBNF. The land involved was located in Clay County, Kentucky, in the Redbird Ranger District. Based on information provided in the VER application, OSM determined that the request failed to demonstrate VER for land within the DBNF. This decision was published in a Federal Register on June 25, 2009. In June 2010, the requester supplied

more information to support the VER request, and new information is currently being considered by OSM.

On October 21, 2008, a request for VER was submitted seeking a determination to use a road across Federal Lands within the DBNF. The land involved was located in Leslie County, Kentucky, in the Redbird Ranger District. The review process concluded with a decision that the applicant provided information that demonstrated VER. The decision granting VER for this request was issued in July 2009.

12. Approximate Original Contour (AOC)/ Fill Minimization

On December 16, 2009, KYDNR released RAM #145 on the Fill Placement Optimization Process (FPOP). This RAM was the culminating effort of a multi-organizational technical study group that was created in 2008 to analyze excess spoil fill construction and to minimize stream impacts while maintaining AOC. The group consisted of engineers from KYDNR, COE, the mining industry, a citizen group, and OSM. FPOP considers the Stream Buffer Zone Rule, COE Section 404 Clean Water Act (CWA) permit requirements, KYDNR regulations and policies, new KYDNR backfill and excess spoil policy, AOC requirements, and mining operational considerations to outline a mine design process that maximizes backfill on the mine site and minimizes the stream length under excess spoil disposal fill. FPOP was formally presented to the mining industry at a special meeting in Frankfort, the annual Kentucky Society of Professional Engineers meeting, the annual Professional Engineers in Mining, and the annual SME meeting to an international audience. An Interagency Memorandum of Understanding (MOU) was signed by KYDNR and other participating agencies on August 12, 2010, to implement this protocol.



Aerial view of a hollowfill during construction

13. Cumulative Hydrologic Impact Assessment (CHIA)

As reported in the 2009 annual report, KYDNR is significantly revising its approach to their CHIA process. KYDNR has moved from gauging the effects of a proposed mining operation on a larger Hydrologic Unit Code (HUC)-6 watershed scale to a more localized HUC-12 watershed. To evaluate watershed impacts, KYDNR is reviewing data from past (reclaimed), present, and anticipated mining.

The continued success of the effort will, in part, be driven by the availability of funds and personnel. A CHIA Section has been added to the DMP and is currently staffed with four persons. Added to this are seven student interns funded with 100% OSM money. These interns are tasked with writing watershed assessments; collecting, analyzing, and entering water quality data; and, digitizing permit area boundaries.



Interns funded by OSM for the CHIA Initiative

In support of the CHIA initiative, approximately 200 trend stations in the eastern coalfield and 37 in the western coalfield will be established and sampled for SMCRA monitoring parameters, plus certain identified metals of concern. This trend station sampling will occur at a specified time interval consistent with seasonal high and low flow conditions. Benthic sampling may be conducted at selected trend station sites. Information gathered at the trend stations will provide a measure of cumulative effects of these activities as well as multiple mining operations and provide the ability to predict water quality parameter outcomes for each proposed operation in that watershed. Through a one-time cooperative agreement, OSM is providing \$200,000 in start-up funding for this monitoring. An additional \$50,000 was secured from EPA. The coal industry has indicated a willingness to assist KYDNR by providing recurrent funding to secure future operation of the stations.

As of the end of the EY, all HUC-12 watersheds and trend station locations had been mapped. Mining history for each HUC-12 watershed has been compiled and sorted into a report format and is updated daily. A workflow process from technical reviewer to CHIA writer has been created. Water quality data from paper permit applications are being uploaded to an electronic database. Water quality and biological data from EPA and State water, geology and fish and wildlife agency databases have been downloaded to in-house servers and sorted by watershed for the CHIA writer. A template delineating basic conditions of the watershed has been completed on over 75 of the HUC-12's.

The Notice of Violation (NOV) and Notice of Intent to Sue (NOI) filed May 12, 2009, by the Kentucky Resources Council, Kentuckians for the Commonwealth, and the Sierra Club to the Kentucky KYDNR, the Kentucky EEC, and OSM remains in place. The NOI alleges that KYDNR has engaged in a pattern and practice of unlawfully approving permits for surface mining operations without performing CHIA's in accordance with SMCRA and the approved Kentucky regulatory program.

An ad-hoc committee consisting of industry representatives, environmental representatives, OSM, EPA, COE, and DOW provided support to the KYDNR effort. The continued involvement by the ad-hoc committee is impacted by the recent filing of an administrative request for review of a permit decision for the CHIA in a permit issued in April 2010. The request was filed in May 2010 by the Sierra Club and Kentuckians for the Commonwealth, two of the three parties involved in the 2009 NOI. The CHIA being challenged was produced under KYDNR's revised procedures.

14. Interagency Coordination

KYDNR is an active participant in the staff level Interagency Permit Coordination Meetings between EPA, COE, USFWS, KYDOW, and KYFWR. As of the end of EY 2010, eight meetings have been held. The first meeting was a two-day event that included a field trip to a large active surface mine complex in eastern Kentucky. The purpose of these meetings is to foster communication and coordination between all agencies on SMCRA and CWA issues with the objective of identifying points of coordination between different agency permitting or consultation responsibilities.

KYDNR also hosts and participates in the Enhanced Coordination Procedure (ECP) meetings and pre-ECP meetings held by the COE. These meetings include representatives from the COE, EPA, OSM, DOW, USFWS, and the coal company seeking a CWA 404 permit. The purpose of these meetings is to ensure the applicant and applicable regulatory agencies are aware of the nature of the subject project and all entities have an opportunity to comment.

KYDNR is also an active participant in the Quarterly Interagency Fill Meeting hosted by OSM/LFO. All Federal and State agencies with an interest in permitting excess spoil fills attend these meetings. Permitting the placement of the excess spoil into the waters of the U.S. is the major focus of these meetings.

B. Abandoned Mine Land Reclamation (AMLR)

The Kentucky AMLR program has been, and continues to be, successful in achieving lasting and effective reclamation of mined lands that eliminates hazards to the public and restores land to beneficial uses. Construction grants continue to include high priority projects. Kentucky also continues to consider high priority project selection criteria for AML emergency complaints referred to them by OSM. During the EY, Kentucky completed 45 high priority AML projects and submitted 43 new projects for authorization to proceed. Nine of the new projects will: (1) upgrade and/or extend existing water supply facilities to provide safe domestic water supplies for approximately 829 new residential customers, (2) allow the proposed construction of five new water storage tanks, and (3) allow installation of approximately 451,602 linear feet of new water line at an estimated cost of \$11,945,207. In addition, Kentucky is contributing \$2,500,000 to build a new water treatment plant at Paintsville Lake in Johnson County. This will fund about 12% of the construction cost of the plant that will serve 7,400 customers, which will include 1,000 new customers who did not have public water service previously.



AMLR protecting a home from an unstable hillside resulting from the drainage impacts of an old underground coal mine road at Wheelwright in Floyd County, Kentucky

DAML manages their program in a cost effective and efficient manner. All projects comply with applicable laws and regulations, are well designed and constructed using the best technology available, are completed with minimal disturbance to the environment, and are well monitored to ensure projects meet contract specifications, project objectives, and program goals.

Since the reauthorization of the Federal AML Fund collection provisions, DAML has been planning for the future of their AML program. On their own initiative during EY

2007, they made changes in their program to implement the reauthorization provisions, which were approved by OSM in EY 2008.

Prior to FY 2008, KYDNR did not feel their allocation of the AML Fund was large enough to take part in SMCRA's Acid Mine Drainage (AMD) Set-Aside provisions and accomplish other AML reclamation work needed during each year. Based upon projections of KYDNR's distributions beginning in FY 2008, provided by the 2006 reauthorization provisions, Kentucky established an AMD Set-Aside interest bearing fund from their FY 2008 AML Fund distribution. Kentucky has requested, and OSM has awarded, funding for their AMD fund each FY thereafter. Kentucky was awarded \$4,000,000 from their FY 2010 distributions from the AML Fund. This brings the total AML grant deposits in the KYDNR AMD fund account to \$10,898,871, since FY 2008. KYDNR's first AMD project was announced in April 2008. At the end of this EY, Kentucky had completed 11 AMD projects, and the fund balance is \$6,843,145.10. AMD funds are authorized by SMCRA to address the costs associated with accomplishing AMD remediation of AML eligible problems, such as program administration, planning, design, construction, and construction monitoring.

1. AML Inventory System (AMLIS)

KYDNR fully supports the direct access to the AMLIS, which allows DAML to electronically input AML problem data. DAML has been directly updating the AMLIS since the fall of 1995. DAML submitted a letter dated July 6, 2004, certifying that they have a system that ensures the accuracy of data they input into the AMLIS. DAML continues to use this system along with current OSM AMLIS guidelines. Kentucky has taken advantage of the option in the AMLIS input program to scan the physical source documentation into the AMLIS program. The contents, at a minimum, generally include the written Problem Area Description form, Priority Documentation Forms for each problem type, reclamation estimate sheets, and a location map. OSM's routine review of selected data entered into the AMLIS accurately reflected DAML's physical source documentation.

2. Bond Forfeiture Reclamation

DAML also administers the reclamation of forfeited SMCRA Title V permits using the forfeited reclamation bonds. During EY 2010, DAML issued five new group contracts containing nine permits covering a total of 167.76 acres. DAML continued reclamation activities on five group contracts containing ten permits covering 208.43 acres from EY 2009. Reclamation was completed by DAML on eight group contracts containing 13 permits with a total of 297.13 acres and five small purchase contracts consisting of 11.7 acres. At the end of EY 2010, two group contracts containing five permits with 79.06 acres were ongoing (See Appendix B, Table 6).

3. AML Emergency Program

KYDNR has elected not to include an AML emergency program as part of their approved AML plan. AML emergency reclamation in Kentucky is administered by OSM. During this EY, OSM investigated 151 emergency complaints reported from abandoned mines. OSM referred 82 complaints directly to DAML when the site conditions did not meet Federal emergency criteria during the preliminary investigation. OSM evaluated 69 complaints for declaration as Federal emergency projects; 44 of these complaints were declared Federal emergency projects. Two are still being evaluated by OSM as of the finalization of this report. The remaining 23 complaints did not meet Federal emergency criteria and were referred to DAML for consideration under its non-emergency AML program.



Mine drainage contributing to slides in Perry and Whitley Counties, Kentucky.

At the end of EY 2010, OSM notified Kentucky that the OSM administration of the AML Emergency Program in Kentucky will terminate on September 30, 2010, as proposed in the FY 2011 Presidential budget. LFO will continue to work closely with DAML to develop and implement a transition plan for State assumption of the AML emergency program, if Kentucky elects to administer AML emergency reclamation under their State AML Plan.

4. AML Enhancement Rule (ER)

The AML ER guidelines were published in the Federal Register on February 12, 1999. The rule addresses projects that involve incidental coal removal of some sort, requiring a determination under the provision of CFR 707 and 874.16. In 1997, just prior to the ER guidelines, OSM authorized Kentucky to enter into a reclamation agreement on the East Diamond Tipple project for removal of a large course refuse pile and several large slurry ponds in western Kentucky that saved the AML Fund an estimated \$4.5 million. Since 1999, Kentucky has entered into reclamation agreements with contractors for the removal of refuse from other AML sites, resulting in additional savings to the AML Fund.

Prior to the current EY, Kentucky requested and was authorized to proceed on 16 ER projects. Generally, for an ER project to be considered completed by KYDNR, all refuse removal and initial reclamation by the contractor has to be completed, and the State funded portion of the government financed project has to be completed. This generally involves the planting of trees a year or so later. At the end of this EY, Kentucky had completed ten projects, with an estimated savings to the AML Fund of \$1,834,225. Seven of these were completed prior to this EY: Octavia Church Refuse (Pike County), Vogue Mine Slurry/Refuse (Hopkins County), Potter Fork Refuse (Letcher County), Mine 203 Refuse (Letcher County), Mine 213 Refuse (Letcher County), Mine 201/Burdine Refuse (Letcher County), and Masters Branch Refuse (Letcher County). The Virgie Refuse (Pike), Mine 206/Dunham Refuse (Letcher), and Hemphill Refuse (Letcher) projects were completed during this EY.

The River Queen Slurry (Muhlenburg County) project, authorized at the very end of EY 2008 and projected to save the AML Fund about \$1.9 million, has been active through this EY, and has a projected completion date of July 15, 2013. The Left Fork of Beaver Creek (Pike County), Beetree Refuse (Letcher County), Mine 210 Shea Fork Refuse (Letcher County), Johnson Branch Refuse (Letcher County), and First Fork Refuse (Pike County) were in some phase of activity during the EY. These five projects are estimated to save the AML Fund approximately \$440,261.



Virgie Refuse Reclamation Enhancement Project before and after reclamation

During the EY, KYDNR requested and was authorized to proceed with five new ER projects: the Ohio Mo. 11 Refuse (Union County), Haymond Refuse (Letcher County), Second Fork Refuse (Pike County), Cromona Refuse (Letcher County), and the Jenkins Refuse (Letcher County). These projects are estimated to save the AML Fund approximately \$320,915.

These projects are located in both eastern and western Kentucky and generally involve the removal of coal refuse from abandoned refuse piles, on about 41 acres, using loaders and coal trucks. The refuse will be hauled on private or public roads to nearby permanent program permitted coal processing facilities, where any further waste from the reprocessing will be disposed of under permanent program permit

requirements. No processing of the refuse is allowed on the AML project sites. All of the projects require the contractor to reclaim the areas to a near pre-mining configuration, establish a growth medium on the surface, and establish a general vegetative cover. Kentucky will plant trees on the sites using AML funds, usually within the following two years when tree survival conditions are optimal for seedlings.

5. AML Water Supply Projects



Water storage tank installed under the City of Elkhorn Multi-Site Water Project, Pike County

Kentucky provides AML funds for water supply projects that are administered by local governments, such as city, county, and/or public water commission agencies. The projects provide municipal domestic water supply to areas whose private domestic water supply, such as dug or drilled wells, has been impacted by eligible AML coal mining operations. Many times, these projects include other federal, state, and local governmental funding that is included with AML funds in the AML impacted areas or is used to fund non-AML impacted areas of a larger water supply project. AML funds a portion of the cost of these water replacement projects based on the mining impacts found in groundwater quality studies. The funds are most commonly used to install water storage tanks, booster pump stations, and residential water meters and/or extend or enhance existing water trunk lines and water facilities serving AML impacted areas.

Based on information from closed AML grants, Kentucky has expended over \$76.5 million dollars for waterline improvements and has provided over 11,894 households with potable water supplies in 24 counties in eastern, southern, and western Kentucky. During EY 2010, Kentucky submitted, and OSM authorized, nine new projects that will upgrade and/or extend existing water supply facilities to provide safe domestic water supplies for about 829 new residential customers at an estimated cost of \$11,945,207. The projects located in eastern Kentucky are as follows: Vicco Waterline Expansion (Perry and Knott Counties), Butcher Hollow Water Supply (Johnson County), Trace Fork-Spicy Ridge Waterline (Martin and Johnson Counties), Ridgeline Road-Hurricane

Creek Waterline (Pike County), City of Booneville-Whoopflarea Water Supply (Owsley and Perry Counties), City of Jenkins-Camden Road (Letcher County), Brentwood Drive (Lawrence County), Breathitt County HWY 1110-Turners Creek (Breathitt County), Flat-Mary/Bethany Phase 1 (Wolfe County).



Water line pump station installed under the Irishman Creek Water Supply Project, Knott County

Additionally, Kentucky is contributing \$2,500,000 to the proposed Paintsville Lake Water Treatment Plant project, which is 12% of the construction cost, to build a new water treatment plant at Paintsville Lake in Johnson County. The plant will serve 7,400 customers, which will include 1,000 new customers who did not previously have public water service. The project has been bid, but the bids were slightly over the committed funding. Currently, Paintsville Utilities are looking at options to lower the costs.

During the EY, DAML had 17 water supply projects under various phases of construction, which include some of the newly authorized projects. Nine of these projects were completed during the EY: Clear Creek Water Supply (Knott County); Irishman Creek Water Supply Phase III and Irishman Creek Water Supply Phase IV (Knott County); Highway 1110 Water Supply (Phase I) (Breathitt County); Cane-McPeak Branch Water Supply (Letcher County); Elkhorn City Multi-site (Beaver Creek) Water Supply (Pike County); Whitehouse Water Supply (Johnson County); Butcher Hollow (Sycamore-Head of Grassy-Patterson) Water Supply (Johnson County); and Brentwood Drive Water Supply (Johnson County).

Ongoing projects at the end of the EY were: the City of Jenkins – Camden Road Waterline Extension (a.k.a. Cane Branch McPeak Phase II (Letcher County); Hazard Trunkline Water Supply (Perry County); Breathitt County HWY 1110 (Turner's Creek) Water Supply (Phase III) (Breathitt County); Highway 1110 Water Supply (Phase II) (Breathitt County); Vicco Waterline Expansion (Interconnector Sassafras Red Oak) (Knott & Perry Counties); Ridgeline Road-Hurricane Creek Waterline Extension (Pike County); Carr Fork KY Highway 1410 Logan Gap (Knott County) and KY

Highway 1410 Trace Fork (Letcher County) Waterline Supply; and the City of Booneville-Whoopflarea Water Supply (Owsley and Perry Counties).

During waterline installation, it is sometimes necessary for Kentucky to cross under water bodies (such as streams, rivers, and lakes), railroads, and major highways. Traditionally, this involved “sinking” a pipe across a lake or open cutting a creek and encasement in concrete of waterlines. The waterline would still be exposed to impacts from the currents and materials carried by the water body. Crossing railroads and highways could involve significant traffic holdups, affect existing facilities, and sometimes require extensive negotiation with the railroad or highway departments.



A directional drill used cross a narrow section of Carr Fork Lake in Knott County connecting the Carr Fork KY Highway 1410 Waterline Supply Project and Vicco Waterline Expansion Projects

Kentucky has found that in many situations “directional drilling” is the best alternative to be used to install waterline beyond obstacles such as water bodies, railroads, and major highways. It involves drilling a bore hole beneath the obstacle and up to the other side. It allows for flexibility of the bore hole in a “U” shape under the obstacle into stable rock. A small pilot hole is first drilled using radio communication with the drill head to assure proper angle during the drilling process. Once the pilot bore is completed, the hole is then reamed to a bit bigger than the PE waterline pipe that will be pulled through the completed bore hole. This process generally does not result in a cost savings over the more traditional methods and may be a bit more expensive, but it is very secure, more environmentally sound since it reduces impacts, and provides for a long-term stable environment which is a more enduring and long-term solution to extending waterline past these obstacles.

This technique was particularly beneficial in crossing a constricted section of Carr Fork Lake in Knott County to connect the Carr Fork KY Highway 1410 Waterline Supply Project and Vicco Waterline Expansion Project as shown above.

6. Appalachian Clean Streams Initiative (ACSI)

The ACSI was developed to encourage the cleanup of streams in Appalachia polluted by AMD. The Lower Rock Creek Watershed Phase III AML Reclamation project was the only ACSI funded project active during the EY; it was authorized on April 22, 2008, and a final inspection was conducted on November 12, 2009. Completion of this project used the remaining ACSI funding available to KYDNR. Kentucky received no additional ACSI funding during the previous or current EY. OSM no longer proposes to fund this type of work as a separate project classification. Therefore, this is the final report on the ACSI section.

C. Outstanding Issues

1. Clean Water Act Issues

The COE continues working with KYDNR and OSM to identify coal mining operations without authorized CWA 404 permitted excess spoil fills. Placement of fill material into waters of the United States cannot occur without prior authorization from the COE. Also, KYDNR and OSM are working with the COE and EPA to improve regulatory stability for permitting excess spoil fills. On June 11, 2009, DOI, EPA, and COE signed a MOU to implement an Interagency Action Plan on Appalachian surface coal mining.

Quarterly during the EY, an interagency meeting is held to discuss coordination related to permitting excess spoil fills. In attendance are representatives from OSM, COE, EPA, USFWS, KYDNR, DOW, and KDFWR. The permitting of placement of the excess spoil into the waters of the U.S. is one of the main topics discussed. In January 2010, an interagency permitting workgroup was formed and tasked with improving coordination for coal mine permits in Kentucky.

On September 11, 2009, EPA identified 79 proposed surface mining projects in Appalachia for enhanced coordination review of the CWA permits (CWA Sections 402 on water quality and 404 on applications pending before COE). Forty-nine of these projects involved Kentucky coal mine operations. KYDNR had issued SMCRA permits on 45 of the 49 projects and issued nine enforcement actions to permittees for violating the SMCRA permit condition that prohibits disturbance of waters of the U.S. prior to obtaining a CWA 404 permit. At the end of the EY, 22 of Kentucky projects remain on the list for the enhanced coordination process.

2. Flyrock Events

There were 12 flyrock events during the EY, which is a decline from the 19 from the previous EY. Yet, flyrock remains the most troublesome off-site impact in the State. Flyrock events are jointly investigated by KYDNR and LFO. Six of the events involved flyrock either directly impacting or falling in close proximity to a residential structure.

KYDNR utilizes sanctions available under the State Mine Safety statutes, combined with SMCRA penalties, to penalize operators who had repeated occurrences and particularly egregious cases. Early in the EY, the Joint Coal Association, a mining industry special interest group, responded to KYDNR's request for recommendations on how to curtail the number of flyrock events occurring in the state by submitting 'Recommendations for Flyrock Prevention.' KYDNR is actively working on the implementation of some of these recommendations. On March 19, 2010, KYDNR released a supplement to the existing blasting enforcement protocol in response to the apparent plateau in the rate of flyrock occurrences. This protocol strengthened the existing enforcement action protocol for responding to flyrock events by temporarily suspending the blaster's license until an investigation is complete, prohibiting blasting on the entire permit until a Blast Remediation Plan is submitted and approved, and temporarily suspending the "use and possess" license of blasting contract companies that are involved with repeat flyrock events in a six-month time frame. There have been no flyrock events in the four months since the March 19, 2010, protocol supplement.

KYDNR actively participates in a monthly joint conference call with OSM and other state blasting agencies in the nation. These calls focus on current blasting enforcement topics throughout the country, allowing for the sharing of ideas on how to address difficult blasting regulatory issues. The State has contributed valuable insight to both OSM nationally and blasting enforcement agencies in other states through their participation in these calls.

3. Bankruptcies

Bankruptcies continued to exert their influence on the coal industry in Kentucky and the surrounding coal states during EY 2010. Bankruptcies in the coal industry in Kentucky required considerable attention from KYDNR and OSM.

In November 2002, Horizon Natural Resources Company filed for Chapter 11 bankruptcy protection with hundreds of permit sites not fully reclaimed. This was the largest bankruptcy in the history of coal mining. Lexington Coal Company, LLC (LCC) was formed by the bankruptcy proceedings to acquire substantially all Horizon assets not otherwise acquired by other entities and to reclaim properties in five states. In EY 2005, OSM partnered with regulatory authorities from Kentucky, Illinois, Indiana, and West Virginia, and negotiated a reclamation agreement with LCC. The agreement ensured land and water reclamation at over 300 inactive coal mining permits in those four states and in Tennessee, where OSM has regulatory authority.

In EY 2006, the reclamation agreement was amended to provide for bond replacement for the LCC permits. LCC replaced its surety bonds with letters of credit. This action eliminated costs associated with the surety bonds, resulting in less capital outlay for administrative purposes and more funding for reclamation. In

June 2008, a second amendment to the reclamation agreement allowed distribution of excess LCC assets to shareholders when all permits achieve Phase I bond releases and when LCC fully funds all required water treatment trust funds. OSM and the States closely monitor the progress of LCC through an Executive Committee and through Federal field inspections.

LCC is working to fund water treatment trusts in Kentucky (5), Tennessee (4), and West Virginia (3). It has already funded two trust funds in Tennessee, three in Kentucky, and one in West Virginia. There are 79 permits left to reach Phase III status. KYDNR is monitoring the progress of LCC's efforts in completing reclamation on the remaining permits in Kentucky.

In June 2004, Lodestar Energy Corporation's (Lodestar) bankruptcy proceedings were settled. At that time, Kentucky and two other states reached a global settlement agreement with the responsible parties that included Court involvement that provided \$12.5 million in funds to Kentucky, Utah, and West Virginia. Kentucky's share was just over \$8 million to reclaim 19 orphan permits in the State. In August 2004, Kentucky entered into a MOU with a third party company to manage the reclamation on those 19 Lodestar permits. At present, 17 Lodestar permits (projects) have been reclaimed. The remaining project in western Kentucky is very near completion with only verification of revegetation success remaining. The other project in Eastern Kentucky should be reclaimed this coming EY. Additional money was secured from the responsible parties to complete reclamation of this site.

In addition to Horizon and Lodestar, the following bankruptcies are being actively monitored by EEC's Office of Legal Services for further action:

- Hannco Energy Corporation
- Alma Energy, LLC filed
- The James H. Taylor Mining Company, Inc.
- Black Diamond Mining Company
- Consolidated Energy, Inc.

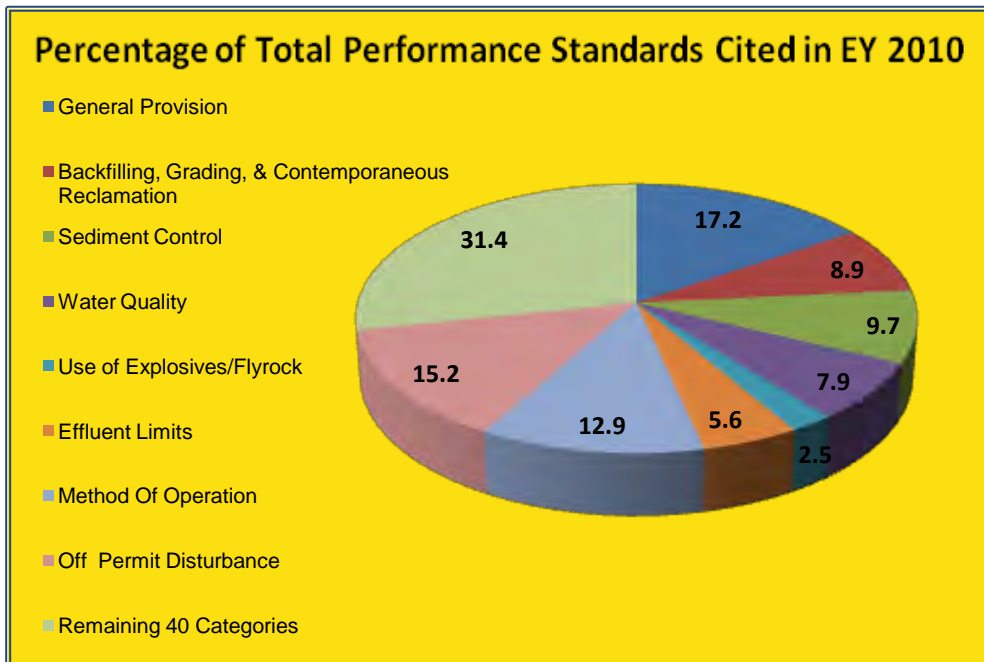
V. Success in Achieving the Purposes of SMCRA

1. Off-Site Impacts

KYDNR's program for protecting the public and the environment from off-site impacts was evaluated by collecting and analyzing known off-site damages from surface and underground coal mining permits in Kentucky. Throughout the EY, KYDNR supplies LFO with all Non-Compliance Orders (NCs) and Cessation Orders (COs) that contained off-site impacts. Additionally, KYDNR sends a monthly summary report of all NCs and COs and the accompanying Inspection Violation Statements with identified

off-site impacts. LFO analyzes this information and documents the extent of off-site impacts.

During EY 2010, KYDNR issued 1,144 NCs. These NCs cited 2,477 performance standards. This is an increase in enforcement actions from the EY 2009 report that showed 1,020 NCs citing 2,301 performance standards. One hundred and seventy-two COs were issued by KYDNR (157 Failure-to-Abate COs and 15 Imminent Harm COs). A complete listing of enforcement actions (by company name) issued by KYDNR can be found in Appendices D and E. The most frequently cited violation type was general permit provisions followed by off permit disturbances. A breakdown by type of performance standards based on the 50 State category types presented as a percentage is as follows:



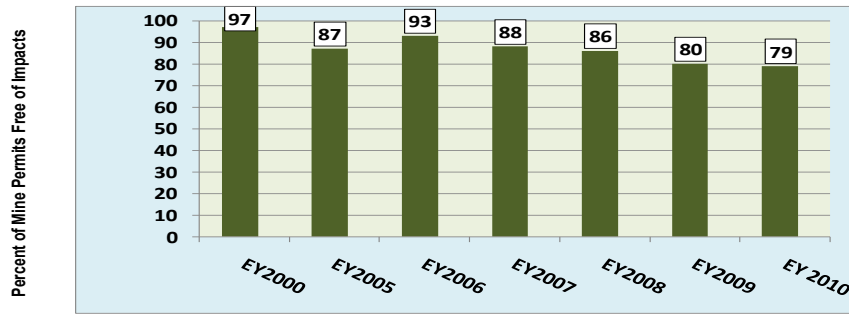
For this EY, Kentucky issued 697 NCs and 12 COs that contained off-site impacts. The 709 enforcement actions resulted in 842 performance standard violations. LFO determined that there were 987 measurable off-site impacts for the performance standard violations cited. The determination of off-site impacts was based on KYDNR's documentation and the LFO reviewer's interpretation of the enforcement language used in the inspection reports associated with the enforcement action. The review of the Inspection Violation Statement prepared for the penalty assessment is the primary resource document.

The 709 enforcement actions with off-site impacts involved 411 permits. This is approximately 21.2 percent of the permits in Kentucky. The remaining 78.8 percent of the permits were free of off-site impacts. There were 1,523 permits free of off-site

impacts during the EY. Those NCs with off-site impacts were analyzed for type of incident, resource affected, and degree of impact.

As can be seen in the chart below, the number of permits free of off-site impacts has been declining since EY 2006.

Off-Site Impacts Chart



Of the 997 measurable off-site impacts, approximately 33.3 percent were for Other. The next major type of off-site impact was for Hydrology (28.9 percent). The third type of off-site impact was Land Stability (13.8 percent). The remaining two types of impacts represented the remaining 24 percent.

From the data collected, the total impacts from coal mining operations for the EY included 41.5 miles of streams, 2,333.4 acres of land, 24 wells, and 122 homes. The findings for off-site impacts indicate that approximately 77.6 percent of the measured incidents involved land, 13.5 percent involved water, 7.9 percent involved structures, and one percent involved people. The majority of impacts were minor, making up 80.6 percent of the total, five percent of the incidents were considered moderate, and 14.4 percent were considered major incidents. The largest impacts occurred within a few permits.

Flyrock, which includes rock thrown through the air or rock that is forced off the blast site or rolls down the hill, continues to be a major off-site concern in Kentucky. During the last EY, 12 flyrock incidents occurred. Out of the 12 flyrock cases, three resulted in property damage to three homes. The remaining nine cases did not result in property damage, but had off-permit disturbances.

LFO also evaluates permanent program bond forfeiture permits for off-site impacts. The bond forfeiture permits included for this EY were the forfeited permits where the bond was collected and awaiting DAML to complete reclamation. KYDNR removes the permit from the inspectable units list once the bond is collected. The

data was collected from the DAML Bond Forfeiture Status Listing's second quarter 2009 report. In addition to this information, a review of the active AMD list supplied by KYDNR was used to determine if any of the bond forfeited sites were discharging AMD. From the information in AML's Bond Forfeiture Status Listing, data was collected on the acreage forfeited. The mine status at the time of forfeiture was also collected from the State's Surface Mining Information System (SMIS). This data was analyzed to determine impacts to land and water. To determine if the impact was minor, moderate, or major, the following assumptions were made:

- Minor. The permit was backfilled and graded with a mine status of a Phase I or II bond release ("PI" or "PII" status) and/or the forfeited acreage was less than two acres.
- Moderate. The permit was not backfilled and the forfeited acreage was from one to ten acres.
- Major. The permit was not backfilled and the forfeited acreage was greater than ten acres.

LFO found that 66 forfeited permanent program permits are awaiting reclamation; 16 of these permits were forfeited during this EY. A total of 3,256.83 acres are awaiting reclamation on the 66 permits. Six permits were identified as AMD permits on Kentucky's active AMD list. Table 4 was completed using this information.

2. Bond Release

The goal of reclamation is to reclaim land mined by a surface coal mining operation to a stable condition that is vegetated, non-polluting, and of equal or greater value than the pre-mining condition. To achieve the goals of reclamation, a system of phased bond releases has been implemented in Kentucky.

To satisfy Phase I requirements in Kentucky, the reclaimed area must be backfilled, regraded, top-soiled, seeded, mulched, drainage-controlled, and a planting report submitted. Phase II requires the reclaimed areas have established revegetation in accordance with the approved reclamation plan and meet the standards for revegetation success, except for productivity standards. Also, the reclaimed area must not contribute suspended solids to stream flow or runoff outside the permit area. Phase III requires: (1) the reclaimed area must successfully meet all surface coal mining and reclamation standards in accordance with the approved reclamation plan; (2) the reclaimed land must be capable of supporting the approved post mining land use requirements; and (3) the applicable liability period must have expired.

In Appendix B, Table 5, Kentucky reported that it granted bond releases on 8,062 acres for Phase I reclamation, 13,812 acres for Phase II reclamation, and 10,860 acres for Phase III reclamation. OSM's review of these mine sites through 44 joint inspections on Phase I and Phase III bond releases found that KYDNR is meeting the requirements of its bond release program on permanent program permits.

VI. OSM Assistance

During the EY, OSM awarded nearly \$50 million to Kentucky to fund the Title IV AML and Title V A&E Regulatory Programs. The grant cycle for AML begins on July 1, and the A&E grant cycle begins on September 1, of each calendar year. This means Kentucky draws from two separate Federal grant year monies during the EY. For example, Kentucky does not begin drawing their Federal Fiscal Year 2010 A&E grant money allocation until September 1, 2010. Prior to that time, they operate on FY 2009 money. The AML program does draw down the AMD set-aside money soon after the Federal allocation, but does not begin drawing the remainder of the grant allocation until July 1 of the following year. The following narrative details money awarded to Kentucky during the EY.

The AML program received \$37,591,345 to fund 100% of the total program cost for EY 2010. This includes \$4,000,000 for the AMD Set-Aside Fund. The AML grant money funds 94 DAML positions.

The A&E grant, which funds the regulatory program, was for \$11,806,483. The grant supports 297 positions. The regulatory program is 50% Federally-funded, except for the \$1,585,397 that Kentucky received to administer the Federal Lands Program. The Federal Lands Program is 100% Federally-funded.

Due to significant State budget shortfalls during the year that left them unable to provide matching funds, Kentucky was forced to return \$1.8 million of the FY 2008 A&E grant money they operated on from September 1, 2008, to August 30, 2009. This budget shortfall had a significant impact on Kentucky's ability to maintain staffing levels and inspection and enforcement obligations. Toward the end of the EY, a positive trend in filling vacancies and meeting mine site inspection obligations was seen. However, reductions seen in the Kentucky General Assembly FY 2011 and 2012 budget may present problems for maintaining this positive trend.

In addition to the AML and A&E grant money, OSM also funds applied science projects and other special cooperative agreement projects for various research and regulatory topics related to mining issues. Ongoing applied science projects include \$200,000 for "Investigation of Advanced Electronic Detonator Application in Surface Coal Mine Blasting," \$199,927 for "Field Investigation of Best Practices for Steep-Slope Mine Reclamation Employing the Forestry Reclamation Approach," and \$44,278 for "Investigation of Alternatives for Restoring Headwater Streams via Sediment Pond Removal in the Appalachian Coal Belt Region."

Cooperative Agreements funded this EY include \$49,996 to continue the Kentucky Mine Map Initiative, \$127,888 for the CHIA Student Intern program, and \$200,000 for partial one-time funding of the CHIA trend station lab analysis. OSM continues to loan Kentucky a student intern to assist them with CHIA data collection, input, and GIS related activities. This Kentucky State University student worked full time during the summer of 2009, part time during the fall and spring semesters, and is working full time during the summer of 2010 until school resumes.

OSM is committed to providing adequate funding and technical assistance to the Kentucky program. KYDNR personnel are encouraged to take advantage of available OSM Technical training courses. Regional and LFO technical staff are available to provide support to the Kentucky program when needed.

VII. General Oversight Topic Reviews

A. Title V Oversight Inspection Activity

During EY 2010, LFO conducted 479 oversight-related inspections: 49 of these were independent inspections conducted separately by LFO inspectors; 325 were random sample inspections; 19 were Phase III bond release inspections conducted jointly with KYDNR personnel; 43 field inspections resulting from special studies outlined in the EY 2010 Performance Agreement; and the remaining 92 inspections were citizen complaint referrals (9), flyrock investigations (10), bond forfeiture (22) and other oversight or State assisted inspections (57).

LFO issued 12 Ten-Day Notices (TDN) during the EY. These 12 TDNs contained a total of 20 alleged violations. Nine of the TDNs were the result of citizen complaints; three TDNs were the result of random oversight inspections; ten were satisfactorily resolved with the determination that KYDNR had either taken appropriate action or shown good cause for not taking action on the violations alleged by the citizen and two remaining TDNs are currently being reviewed, and one request for technical assistance is pending.

There was one Federal enforcement action taken during the EY. A Cessation Order was issued on June 24, 2010, and is addressed in Section VII, D.5. Random Sample.

At the beginning of EY 2010, KYDNR had 344 pending citizen complaints and a total of 734 citizen complaints were received during EY 2010. Of these 1,078 complaints, KYDNR investigated and responded to a total of 920 complaints. KYDNR was able to reduce the number of pending complaints during EY 2010. As of June 30, 2010, 158 actions were pending on citizen complaints.

B. Title IV Oversight Inspection Activity

LFO conducted 123 oversight inspections on State AMLR projects in accordance with the EY 2010 Performance Agreement as follows:

- 9 pre-authorization inspections
- 13 pre-construction inspections
- 42 active construction inspections
- 34 final construction inspections
- 25 post-construction inspections
- 0 citizen complaint inspection concerning a State AML project

OSM identified six concerns during inspections of six AMLR projects-during the EY. All of the concerns have been satisfactorily resolved with DAML. Five of the concerns were site-specific in nature and one was considered programmatic. Of the six concerns identified, three were considered minor and three considered major. All concerns were easily resolved. During the EY, Kentucky performed all construction monitoring in-house with State personnel.

One of the minor concerns was identified during a final-construction inspection on a water supply project. It was considered programmatic in nature, in that the concern and resolution impact all water supply projects. OSM questioned the final disposition of residential water meters not installed during the project; primarily resulting from some residents' final refusal of water supply. DAML found that these water meters would be stored by the local government agency administering the project and used later. KYDNR agreed with OSM that there should be more conclusive disposition of uninstalled meters and pipe at the end of an AML funded water supply project. KYDNR changed their policy on this issue and now requires the administering agency to restock unused meters and pipe, with a refund or adjusted project cost at final payment for the project.

The remaining five concerns were identified on separate AML enhancement projects. Two were considered minor, site-specific concerns involving revegetation efforts that were identified by OSM during final construction inspections that had been impacted by weather, i.e. heavy rains or the lack thereof. KYDNR plans to have the contractors replant the areas as weather allows. The remaining three were considered major, site-specific concerns. All involved NEPA issues, where NEPA mitigation compliance was in question or just not documented. In the first, during a pre-authorization inspection, OSM identified that KYDNR and the contractor had not documented in the project or NEPA documentation the mitigation agreements with an adjacent resident to resolve their access road impacts. This was resolved and the project was authorized to proceed.

On the remaining two projects during active-construction oversight inspections, OSM found the contractor had stockpiled cleaned coal from a nearby permitted coal facility on the temporarily idled AML project. On the other, the contractor did not appear to be aware of mitigation requirements authorized in the project from USFWS consultation for NEPA compliance that required the protection of a tree representing potential Indiana bat habitat. In both cases, KYDNR took swift, decisive action to notify the contractors of their obligations under their Reclamation Agreements and effect compliance with the authorized project conditions and specifications.

C. Ongoing Title V Oversight Special Studies

Five special oversight studies were in progress at the end of EY 2010. These studies are still underway due to their complex nature and the need to gather more information. They are as follows:

- AOC
- Blasting
- Bond Forfeiture
- Contemporaneous Reclamation
- Slurry Impoundments

On October 21, 2009, the Director of OSM chose two topics as a national priority review topic for oversight in EY 2010. The two topics are approximate original contour and determination of required bond amounts. A discussion of the two studies is as follows:

- **Approximate Original Contour**

The primary focus of the AOC evaluation is a review of the implementation of each State's program requirements for AOC where active surface coal mining is taking place. The review focused on three aspects of the States' programs:

- (1) AOC interpretation and permitting documentation;
- (2) Processes for on-the-ground AOC verification; and,
- (3) Field verification that backfilling and grading are following the approved reclamation plan.

OSM Directive INE-26, which deals primarily with OSM's oversight of individual sites, is the controlling directive in terms of violations or other actions concerning site compliance. The OSM National Workplan provided a series of questions to be answered during the review. The study was initiated in EY 2010 and is ongoing.

- **Determination of Required Bond Amounts**

This study is an evaluation of performance bond adequacy and is a joint review by OSM and KYDNR. This review includes evaluation of bonds using OSM’s “Handbook for Calculation of Reclamation Bond Amounts” (OSM Bond Handbook) and evaluation of whether or not forfeiture sites are being reclaimed in accordance with the reclamation plan in the approved permit.

A team of KYDNR and LFO personnel examined each permit and developed a “worst case scenario” for reclamation of the site as it was permitted to be mined and reclaimed. The “worst case scenario” is the point of maximum reclamation liability for either the individual increment or the total permit, based on the approved mine and reclamation plan, and associated maps, cross-sections or other data. This worst case was used in calculating the bond using the OSM Bond Handbook. This evaluation included mine site visits to compare permit information to field conditions. The study was initiated in EY 2010 and is ongoing.

D. Completed Title V Oversight Studies

Below are highlights of the oversight studies completed in EY 2010.

1. Impoundment Study

This portion of the ongoing impoundment study focused on performing a reasonable engineering field inspection based upon a brief permit review and a site visit. Five slurry impoundments were selected throughout the state for this engineering assisted field oversight review. Prior to visiting each impoundment, a half-day review of the permit was performed to ascertain approved engineering controls, approved impoundment stages, maximum monitoring levels, and to analyze the last annual impoundment certification. This information was then used to guide the site inspection.



Slurry impoundment embankment

OSM identified several items in the site review and permit review process. KYDNR and OSM met and discussed the issues, which resulted in several enforcement actions issued by the State. All of the identified concerns have either been corrected or are in the process of being satisfactorily resolved. The special study will continue into the following EY and include a detailed review of the impoundment designs in the permit.

2. Acid Mine Drainage (AMD) Active Inventory

The AMD Active Inventory is a part of the Long-Term Effluent Treatment Policy that addresses permit issues related to water quality problems after mining has commenced. It also helps establish a procedure for reporting, monitoring, and removing permits from the inventory. The inventory is routinely updated and is made available to the DMP review staff and the DMRE inspection staff.

LFO, working jointly with KYDNR, has developed and maintained a data table and basic GIS map of the inventory. An AMD-producing site may be removed from the active list if AMD production ceases after reclamation is completed. A site can only be removed from the active list if the water pH/iron/manganese levels meet applicable effluent limits before treatment for 12 consecutive months. Such sites are still maintained on a historic AML list.

During this EY, there were no permits added to or deleted from the list. Currently, there are three permits under review for addition to the list and two permits under review for removal from the list. Before the permits are removed from the list, inspections need to be done by LFO to confirm the results of the 12-month water quality monitoring provided by the permittees. At the end of EY 2010, there were 87 permits on the AMD active inventory list for Kentucky.

3. State Enforcement Study

During the first six months of EY 2010, OSM inspectors observed a total of 57 permits with 113 un-cited violations during the OSM random joint oversight inspections. During these joint inspections, DMRE inspectors issued non-compliances citing 110 observed violations. OSM issued TDN's on two of the permits, and a Federal Cessation Order on a third permit.

The three sites that were issued TDN's and the CO were re-inspected to observe the abatement of the cited violations. The violations had been abated. Several of the other sites were re-inspected to observe abatement of the cited violations as well. All site violations had either been abated or extended.

From these joint random oversight inspections, OSM found that KYDNR is meeting the requirements of State enforcement. This study will be continued into EY 2011 for the purposes of continued monitoring of inspection and enforcement.

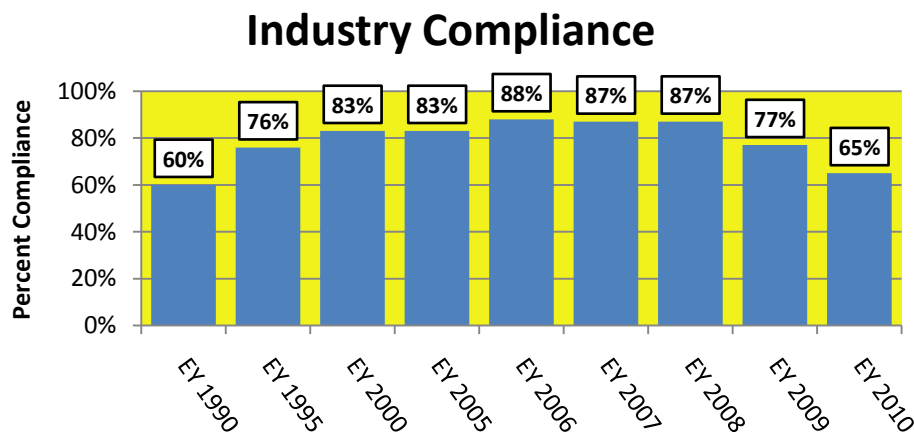
4. Fill Inventory

KYDNR and OSM conducted 50 file reviews on permitting actions issued by the State in eastern Kentucky for CY 2009. The file review collected pertinent fill and watershed information on 104 proposed or existing excess spoil fills. See Appendix F for the review findings.

5. Random Samples

LFO's oversight format provides for a general assessment through random oversight inspections. In addition, it focuses on specific program areas jointly selected for special emphasis in oversight studies. During this EY, LFO conducted 325 random comprehensive inspections for a general assessment of Kentucky's program. The random samples were selected from the list of active and Phase I bond released permits on both surface and underground coal mining operations in Kentucky. The purpose of these inspections was to evaluate the degree of industry compliance with the approved State program.

As part of the yearly evaluation, LFO has been tracking industry compliance. Industry compliance is the percent of OSM/KYDNR joint random inspections with no observed violations compared to the total number of OSM/KYDNR joint random inspections. For EY 2010, OSM found that 211 of the 325 (65 percent) mine sites in Kentucky were in full compliance with all performance standard categories. Below is a chart of the trends identified for industry compliance.



The chart shows that industry compliance has dropped significantly in the last two evaluations. Also, the last time that industry compliance was this low was 1990.

On 114 of 325 sites, 395 violations were observed. The performance standards most often cited in NCs were hydrologic balance, permit administration, and backfilling and grading. OSM inspectors evaluated the seriousness of violations on random

complete inspections. The data for the 395 violations shows that 66 percent of all the violations did not have an off-site impact, and 34 percent extend outside the permit area. In addition, 21 percent of the violations were minor, 55 percent had a moderate degree of impact and 24 percent had a major degree of impact. Of the violations with off-site impacts, 42 percent involved impact to land, 48 percent involved impacts to water, and ten percent impacted structures/people. For all 395 violations identified during complete inspections, the KYDNR took appropriate action. Two violations were involved with two Ten-Day Notices.

LFO issued a Federal Imminent Harm Cessation Order to Sequoia Energy, LLC (Sequoia) for mining without a valid permit. All mining operations except reclamation were ceased. Sequoia's underground permit expired on March 15, 2010, and the company continued to mine. This issue was discovered by an LFO Reclamation Specialist during preparation for a random complete oversight inspection. On April 1, 2010, KYDNR issued a Cessation order for mining without a permit. On April 20, 2010, Sequoia obtained a restraining order from the Harlan County Circuit Court prohibiting KYDNR from enforcing the cessation order. The DMP notified Sequoia in August 2009, of the pending expiration of the permit. DMRE had been providing notice of the permit expiration on inspection reports over the last several months. Since the permit was allowed to expire without submittal of timely renewal application, a new permit had to be obtained. On July 2, 2010, the Federal Cessation Order was terminated because LFO received confirmation of permit issuance.

6. Inspection Frequency

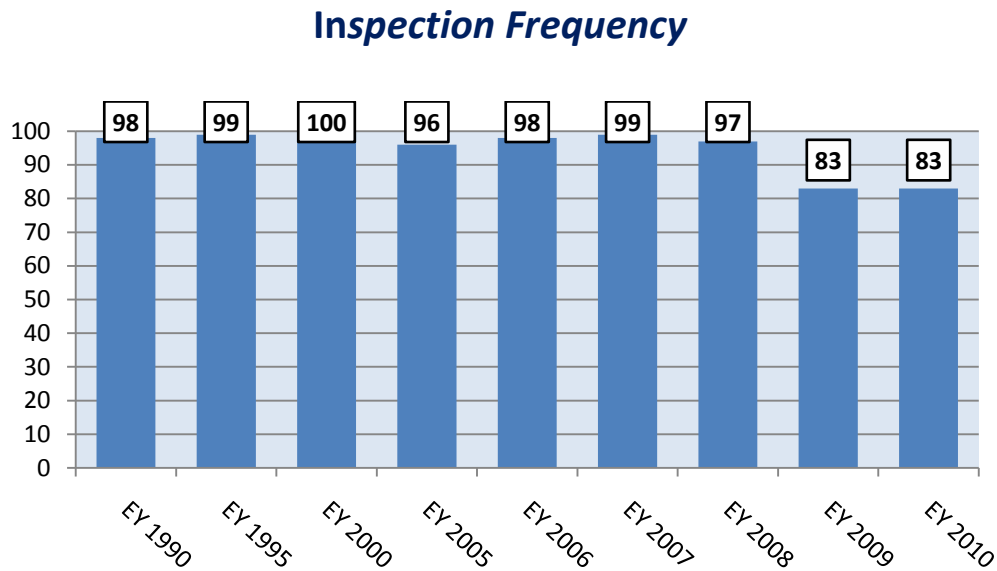
KYDNR reported Kentucky's inspection frequency at the end of the EY. The inspection frequency was based on 405 KAR 12:010, Section 3(5). This provision requires the State to conduct one complete and two partial inspections per calendar quarter for all mine sites, except Phase I or Phase II bond release sites. Those sites in the bond release process or in temporary cessation require KYDNR to conduct one complete inspection per quarter. KYDNR reported the following number of inspections.

Coal Mines and Facilities	Number of Complete Inspections	Number of Partial Inspections
Active	7,605	15,721
Inactive	274	171
Abandoned	35	23
TOTAL	7,914	15,915

Inspectable Unit Information

- Total Number of Permits Requiring Inspections 1,919
- Total Number Inspections Conducted 21,881
- Total Number of Permits Meeting Frequency 1,588
- Percentage of Permits Meeting Frequency 82.6%

LFO has gathered inspection frequency information for the past evaluation years. The chart below shows the long term trends for inspection frequency.



For the 12-month period in EY 2010, KYDNR met inspection frequency on 83 percent of inspectable units. This was a continuation of the downward trend seen in the last EY where inspection frequency was also met on only 83 percent of inspectable units. The drop from 97 percent in EY 2008 to 83 percent in EY 2009 and 83 in EY 2010 was a predictable result of the significant budget shortfall that impacted KYDNR's ability to backfill the numerous vacancies created by the high number of retiring inspectors.

Inspection frequency was tracked quarterly during this EY. The chart below shows the results.

OSM Evaluation Year 2010 By Quarter	Percent of Inspectable Units (permits) Meeting Inspection Frequency
July 1, 2009 – September 30, 2009	88.9
October 1, 2009 – December 31, 2009	97.6
January 1, 2010 – March 31, 2010	96.8
April 1, 2010 – June 30, 2010	96.6

It should be noted that the cumulative EY inspection frequency percentage of 82.6 was significantly impacted by the first quarter of the evaluation year. This quarter was before significant progress was made in hiring and training new inspection personnel. The first three months of EY 2010 saw 89 percent meeting inspection frequency. The remainder of the evaluation year saw significant improvement, with approximately 97 percent of the inspectable units meeting inspection frequency. This trend shows the improvement in replacing and training inspectors.

7. Bond Forfeitures

LFO and KYDNR agreed to initiate a study of permanent program bond forfeitures to determine if the reclamation performance bond amounts being set are adequate to complete reclamation in the event of forfeiture. The evaluation was a follow up to prior studies that identified potential problems with certain bonding issues.

The prior studies identified concerns with the adequacy of bond amounts and supplemental assurance, the lack of assurance that AMD discharges will be treated, and the timeliness of enforcement/legal actions. Also, the liability cap language had not been deleted from the alternative bonding program. However, because of the limited number of permanent program bond forfeitures included in the EY 2007 study (five permits), a decision was made that additional review should occur before making a determination of whether these concerns were indicative of program-wide problems with the adequacy of bond amounts. The additional review recommended is the EY 2010 study.

In this EY 2010 study, all of the bond forfeitures occurring during EY 2008 (twelve permits) were evaluated. The study found:

- Ten of the twelve permits did not have sufficient bond to complete the reclamation.
- Bond amounts do not always account for the increases in costs associated with reclamation work performed through DAML.
- Two of the twelve permits in this study had an issue with AMD treatment.
- No issues were indentified relating to timeliness of the enforcement/legal actions.
- The number of bond forfeitures had been steadily declining, and progress was being made in reducing the number of forfeited permits awaiting reclamation; however, that trend seems to be reversing as evidenced by 22 forfeitures in EY 2009 and 23 in EY 2010. This increase could be in part due to KYDNR aggressively pursuing forfeiture of expired permits with minor violations. This represents an ongoing effort by KYDNR to reduce the overall size of the inspectable units.

LFO recommended that KYDNR evaluate the adequacy and effectiveness of the current bond computation process. LFO and KYDNR are currently in the process of evaluating the EY 2009 bond forfeitures and will extend that review to include EY 2010 forfeitures. As mentioned earlier in this report, bond adequacy is a national priority review topic that was ongoing as of the end of this EY.

8. Phase I Bond Release Inspections

This study included 25 Phase I bond-released mine sites that were inspected as part of OSM's random oversight inspection program. The purpose of these inspections was to determine if all applicable bond release standards were met at the time the Phase I bond release was granted by KYDNR. OSM found that KYDNR is meeting its requirements for Phase I bond release on permanent program permits.

9. Phase III Bond Release Inspections

This study reviewed 19 Phase III bond release applications. OSM inspections on these Phase III bond release applications were conducted jointly with the KYDNR inspector and the bond release specialist. OSM found that KYDNR is meeting the requirements for Phase III bond releases on permanent program permits.

Detailed background information and comprehensive reports for the program elements evaluated during the EY are available for review and copying at the OSM Lexington Field Office (LFO) or the OSM Web site at <http://www.osmre.gov> or on the Appalachian Region Web site at <http://www.arcc.osmre.gov/FOs/LFO/LFO.shtm> . Requests for paper or electronic copies may be addressed to:

Joseph L. Blackburn, Field Office Director
Office of Surface Mining Reclamation and Enforcement
Lexington Field Office
2675 Regency Road
Lexington, Kentucky 40503

APPENDIX A

Acronyms Used in this Report

APPENDIX A

Acronyms Used In the Report

The following list of acronyms are used in this report:

A&E	Administration and Enforcement
ACSI	Appalachian Clean Streams Initiative
AMD	Acid Mine Drainage
AML	Abandoned Mine Land
AMLIS	Abandoned Mine Land Inventory System
AMLR	Abandoned Mine Land Reclamation
AOC	Approximate Original Contour
ARRI	Appalachian Regional Reforestation Initiative
BO	Biological Opinion
CHIA	Cumulative Hydrologic Impact Assessment
CO	Cessation Order
COE	U.S. Army Corps of Engineers
CWA	Clean Water Act
CY	Calendar Year
DAML	Division of Abandoned Mine Lands
DBNF	Daniel Boone National Forest
DEP	Department of Environmental Protection
DMP	Division of Mine Permits
DMRE	Division of Mine Reclamation and Enforcement
DOW	Division of Water
EEC	Environment and Energy Cabinet
EQC	Environmental Quality Commission
EPPC	Environmental and Public Protection Cabinet
ER	Enhancement Rule
EY	Evaluation Year
FOD	Field Office Director
FPOP	Fill Placement Optimization Process
FRA	Forestry Reclamation Approach
FY	Fiscal Year
GIS	Geographic Information System
HUC	Hydrologic Unit Code
KDF	Kentucky Division of Forestry
KPDES	Kentucky Pollutant Discharge Elimination System
KYDNR	Kentucky Department for Natural Resources
LCC	Lexington Coal Company
LFO	Lexington Field Office
LTT	Long-Term Treatment

MRP	Mining Reclamation Plan
MSHA	Mine Safety and Health Administration
MTM	Mountain Top Mining
NC	Notice of Non-Compliance
NEPA	National Environmental Protection Act
NOI	Notice of Intent to Sue
NOV	Notice of Violation
OMSL	Office of Mine Safety and Licensing
OSM	Office of Surface Mining Reclamation and Enforcement
PMLU	Post-Mining Land Use
RA	Regulatory Authority
RAM	Reclamation Advisory Memorandum
RD	Regional Director
SCP	Subsidence Control Plans
SMCRA	Surface Mining Control and Reclamation Act of 1977
SMIS	Surface Mining Information System
TDN	Ten-Day Notice
TVA	Tennessee Valley Authority
UK	University of Kentucky
USFWS	U.S. Fish and Wildlife Service
VER	Valid Existing Rights

APPENDIX B

Tabular Summary of Core Data

To Characterize the Program

TABLE 1

Coal Produced for Sale, Transfer, or Use
 (Millions of Short Tons)

Period	Surface Mines	Underground Mines	Total
Coal production^A for entire State:			
Calendar Year			
CY 2007	46.894	70.404	117.298
CY 2008	51.307	69.744	121.051
CY 2009	39.345	62.494	101.839

Coal production as shown in this table is the gross tonnage and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported to OSM during the following quarter by each mining company on line 8 (a) of form OSM-1, 'Coal Reclamation Fee Report.' Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.

A

Provide production information for the latest three full calendar years to include the last full calendar year for which data is available.

TABLE 2

**Inspectable Units
As of June 30, 2010**

Coal mines and related facilities	Number and Status of Permits								Nbr. of Insp. Units ^A	Permitted Acreage ^B (100's of acres)				
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals			Federal Lands		State/Private Lands		All Lands
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	IP	PP	Total
LANDS FOR WHICH THE STATE IS THE REGULATORY AUTHORITY														
Surface mines	0	855	0	48	0	4	0	907	907	0.0	37.0	0.0	4,907.0	4,944.0
Underground mines	0	647	0	17	2	0	2	664	666	0.0	1,098.0	0.0	12,777.0	13,875.0
Other facilities	0	342	0	3	0	1	0	346	346	0.0	10.0	0.0	552.0	562.0
Total	0	1,844	0	68	2	5	2	1,917	1,919	0.0	1,145.0	0.0	18,236.0	19,381.0

Total number of permits:	1,919
Average number of permits per inspectable unit (excluding exploration sites):	1.00
Average number of acres per inspectable unit (excluding exploration sites):	1,009.95
Number of exploration permits on State and private lands:	0
On Federal lands ^C :	0
Number of exploration notices on State and private lands:	240
On Federal lands ^C :	0

IP: Initial regulatory program sites
PP: Permanent regulatory program sites

^A Inspectable units include multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.

^B When a single inspectable unit contains both Federal lands and State/Private lands, enter the permitted acreage for each land type in the appropriate category.

^C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.

TABLE 3

**State Permitting Activity
As of June 30, 2010**

Type of Application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres ^A	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New Permits	65	54	16,027	17	15	41,299	14	14	899	96	83	58,225
Renewals	56	55		80	120		21	72		157	247	
Transfers, sales, and assignments of permit rights	101	66		76	29		31	19		208	114	
Small operator assistance	8	13		0	1		0	0		8	14	
Exploration permits										1	0	
Exploration notices ^B											240	
Revisions (exclusive of incidental boundary revisions)		29			6			5			40	
Revisions (adding acreage but are not incidental boundary revisions)	94	79	9,242	66	55	30,214	15	15	4,519	175	149	43,975
Incidental boundary revisions	200	165	399	68	50	114	57	48	65	325	263	578
Totals	524	461	25,668	307	276	71,627	138	173	5,483	970	1,150	102,778

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions: 287

^A Includes only the number of acres of proposed surface disturbance.

^B State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

TABLE 4

OFF-SITE IMPACTS (excluding bond forfeiture sites)

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	108	0	0	0	0	59	0	0	0	0	0	49
	Land Stability	136	0	0	0	129	2	2	0	0	0	3	0
	Hydrology	296	10	0	0	141	6	2	124	1	1	8	0
	Encroachment	128	0	0	0	103	16	7	0	0	0	2	0
	Other	329	0	0	0	263	25	18	9	0	0	12	0
	Total	997	10	0	0	636	49	88	133	1	1	25	0

Total number of inspectable units (excluding bond forfeiture sites): 1,919

Inspectable units free of off-site impacts: 1,508

Inspectable units with off-site impacts: 411

OFF-SITE IMPACTS ON BOND FORFEITURE SITES

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	60	0	0	0	24	16	20	0	0	0	0	0
	Hydrology	6	0	0	0	0	0	0	4	0	2	0	0
	Encroachment	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0
	Total	66	0	0	0	24	16	20	4	0	2	0	0

Total number of inspectable units (only bond forfeiture sites): 66

Inspectable units free of off-site impacts: 0

Inspectable units with off-site impacts: 66

TABLE 5

Annual State Mining and Reclamation Results

Bond release phase	Applicable performance standard	During this Evaluation Year		
		Total acreage released	Acreage also released under Phase I	Acreage also released under Phase II
A	B	C	D	E
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	8,062		
Phase II	- Surface stability - Establishment of vegetation	13,812	731	
Phase III	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity restored - Surface water quality and quantity restored	10,860	2,598	1,568
Bonded Acreage ^A		Acres during this evaluation year		
Total number of new acres bonded during this evaluation year		14,890		
Number of acres bonded during this evaluation year that are considered remining, if available		0		
Number of acres where bond was forfeited during this evaluation year		956		
Bonded Acreage Status		Cumulative Acres		
Total number of acres bonded as of the end of last review period (June 30, 2009) ^B		332,286		
Total number of acres bonded as of the end of this review period (June 30, 2010) ^B		331,504		
Sum of acres bonded that are between Phase I bond release and Phase II bond release as of June 30, 2010 ^B		34,206		
Sum of acres bonded that are between Phase II bond release and Phase III bond release as of June 30, 2010 ^B		7,330		
Disturbed Acreage		Acres		
Number of Acres Disturbed during this evaluation year		0		
Number of Acres Disturbed at the end of the evaluation year (cumulative)		246,402		
^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations. ^B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).				

Brief explanation of columns D & E. The States will enter the total acreage under each of the three phases (column C). The additional columns (D & E & E) will "break-out" the acreage among Phase II and/or Phase III. Bond release under Phase II can be a combination of Phase I and II acreage, and Phase III acreage can be a combination of Phase I, II, and III. See "Instructions for Completion of Specific Tables," Table 5 for example.

TABLE 6

State Bond Forfeiture Activity
(Permanent Program Permits)

Bond Forfeiture Reclamation Activity by SRA	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2009 (end of previous evaluation year) ^A	60		4,109
Sites with bonds forfeited and collected during Evaluation Year 2010 (current evaluation year)	16	\$ 1,203,792	756
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2010 (current evaluation year)	0		0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2010 (current evaluation year)	10		1,608
Sites with bonds forfeited and collected that were unreclaimed as of June 30, 2010 (end of current evaluation year) ^A	66		3,256
Sites with bonds forfeited but uncollected as of June 30, 2010 (end of current evaluation year)	0		0
Surety/Other Reclamation (In Lieu of Forfeiture)			
Sites being reclaimed by surety/other party as of June 30, 2009 (end of previous evaluation year) ^B	6		1,464
Sites where surety/other party agreed to do reclamation during Evaluation Year 2010 (current evaluation year)	0		0
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2010 (current evaluation year)	0		0
Sites with reclamation completed by surety/other party during Evaluation Year 2010 (current evaluation year) ^C	1		454
Sites being reclaimed by surety/other party as of June 30, 2010 (current evaluation year) ^B	3		312

^A Includes data only for those forfeiture sites not fully reclaimed as of this date

^B Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date

^C This number also is reported in Table 5 as Phase III bond release has been granted on these sites

TABLE 7

State Staffing
(Full-time equivalents at end of evaluation year)

Function	EY 2010
Regulatory Program	
Permit Review	103.00
Inspection	158.00
Other (administrative, fiscal, personnel, etc.)	10.00
Regulatory Program Total	271.00
AML Program Total	94.00
Total	365.00

TABLE 8

**Funds Granted To Kentucky
BY OSM**
(During the Current Evaluation Year)
(Actual Dollars, Rounded to the Nearest Dollar)

Type of Funding	Federal Funds Awarded During Current Evaluation Year	Federal Funding as a Percentage of Total Program Costs
Regulatory Funding		
Administration and Enforcement Grant	\$ 11,806,483	50.00 %
Other Regulatory Funding, if applicable	\$ 327,888	100.00 %
Subtotal	\$ 12,134,371	
Small Operator Assistance Program	\$ 0	100 %
Abandoned Mine Land Reclamation Funding ^A	\$ 37,591,354	100 %
Totals	\$ 49,725,725	

^A Includes funding for AML Grants, the Clean Streams Initiative and the Watershed Cooperative Agreement Program.

TABLE 9

**State Inspection Activity
During Current Evaluation Year**

Inspectable Unit Status	Number of Inspections Conducted	
	Complete	Partial
Active ^A	7,605	15,721
Inactive ^A	274	171
Abandoned ^A	35	23
Total	7,914	15,915
Exploration	1,968	878

^A Use terms as defined by the approved State program.

TABLE 10

**State Enforcement Activity
During Current Evaluation Year**

Type of Enforcement Action	Number of Actions^A	Number of Violations^A
Notice of Violation	1,144	2,477
Failure-to-Abate Cessation Order	157	378
Imminent Harm Cessation Order	15	22

^A Do not include those violations that were vacated.

TABLE 11

Lands Unsuitable Activity
During Current Evaluation Year

	Number	Acreage
Number Petitions Received	0	
Number Petitions Accepted	0	
Number Petitions Rejected	0	
Number Decisions Declaring Lands Unsuitable	0	0
Number Decisions Denying Lands Unsuitable	0	0

TABLE 12 Optional	
Post Mining Land Use Acreage (after Phase III bond release)	
Land Use	Acreage Released during this Evaluation Year
Cropland	272
Pasture/Hayland	2,546
Grazing Land	0
Forest	713
Residential	91
Fish & Wildlife Habitat	6,482
Developed Water Resources	0
Public Utilities	0
Industrial/Commercial	748
Recreation	3
Other (please specify):	0
Other (please specify):	0
Other (please specify):	0
Other (please specify):	0
Other (please specify):	0
Other (please specify):	0
Other (please specify):	0
Other (please specify):	0
Total	10,855

APPENDIX C

State Comments on the Report



**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES**

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Governor

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Leonard K. Peters
Secretary

Carl E. Campbell
Commissioner

August 19, 2010

Mr. Joseph L. Blackburn
Field Office Director
United States Department of the Interior
Office of Surface Mining
2675 Regency Road
Lexington, Kentucky 40503

RE: Draft Evaluation Year 2010 Annual Report on the Kentucky Regulatory and Abandoned Mine Land Reclamation Programs

Dear Mr. Blackburn:

Reference is made to your correspondence of August 3, 2010 wherein you conveyed the above referenced document to this office for our review and comment. Upon receipt, the draft was sent to the appropriate DNR divisions for review and, while we generally have no great concerns with the report, we offer the following comments and observations:

We observed a number of typographical errors that we assume will be corrected when the draft is finalized. The following comments, however, are specific to portions of the report.

1. Item II – Overview of the Kentucky Coal Mining Industry on page 1 references “Table 1” in the last sentence. You might want to clarify that you’re referencing Table 1 in Appendix B for there is also a Table 1 on page 3.
2. Page 2, 2nd paragraph- the graph displays a decrease in underground mines and an increase in surface mining activity. We would offer that the graph depicts an overall decline in the number of mining operations over the last 25 years.
3. Item III – Overview of the Public Participation Opportunities in the Oversight Process and State Program.
 - Unless you have received consent from the individuals that you specifically name on page 4, we don’t see any real purpose for including the names of those people representing the organizations listed on page 4.



Mr. Joseph L. Blackburn

Page 2

August 19, 2010

4. Reference is made to the statement OSM has included on page 5 pertaining to the public meeting with the Caney Fork residents. OSM should include a statement that recognizes that while there was a very frank and open discussion of a pending permit with the Citizens at the Cold Water Baptist Church, it was emphasized during the meeting that the Division of Mine Reclamation and Enforcement (DMRE) would immediately respond to any blasting complaint that alleged property damage, and that DMRE would closely monitor the blasting operations on the permit which was then still under review. It should be noted that since the issuance of this permit, the Prestonsburg Regional Office has not received any complaints. Our overall impression was that it was a very good meeting and that the citizens' group had a better understanding of what the Department could and could not do when it came to resolving blasting complaints.
5. Item IV – Major Accomplishments/Issue/Innovations in the Kentucky Program – On page 7 you list the “Office of Technical and Administrative Support” as a component of this Department. Please correct the name of that agency to the “Division of Technical and Administrative Support”.
6. Pages 7-8-Item A - 7 Regulatory, Section 1 on Budget and Staffing
 - We feel that OSM makes a good point in the observation that the number of DMRE inspectors has actually decreased, notwithstanding the inclusion of the blasting branch.
 - The 3rd paragraph on page 8 should recognize that DMRE is anticipating that the increasing workload trend and frequency concerns could continue due to several vacancies that we have not been able to fill since May, 2010.
 - The last paragraph on page 8 – The first sentence should be revised to reflect that state budget levels need to be increased, not simply maintained. DMRE personnel have indicated that the current budget is somewhat inadequate and the report should convey that impression. Due to the growing states budgetary shortfalls, OSM should consider providing non-matching supplemental funding for state SMCRA programs in FY 11 & 12. Providing this non-recurring supplemental funding to the state programs could ensure the survival of these state regulatory programs and would be far less expensive than OSM having to assume the state SMCRA programs.
7. Item A – 4. Reforestation - OSM Applied Science Research – The last paragraph on page 13 references the UK study on “Investigation of Alternatives for Restoring Headwater Streams via Sediment Pond Removal in the Appalachian Coal Belt Region” and recognizes that the field construction aspects have not been initiated. Please revise this statement to reflect that the field component hasn't been started because the U.S. Corps of Engineers still hasn't issued a 404 for this activity, and, as a result, this study is being closed out.

Mr. Joseph L. Blackburn

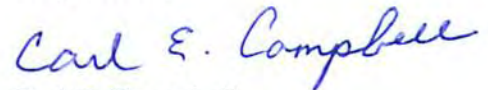
Page 3

August 19, 2010

8. Topic 6 on page 15 – Training Initiatives – Reforestation (RAM # 124) is also one of the topics being presented to the new mine permit reviewers. Further, page 16 references the training we are providing the KYDNR inspectors. We are providing the DMRE inspection personnel with Reclamation Advisory Memorandum # 124 (Kentucky Reforestation Initiative) training.
9. Item VII – General Oversight Topic Reviews – A. Title V Oversight Inspection Activity. The last statement in this section on page 38 indicates that the KYDNR received a total of 734 citizens' complaints during EY 2010, but goes on to say that of this total 920 were investigated and 920 responses were provided to the complainant. Please clarify this statement.
10. Item D – Completed Title V Oversight Studies – Topic 7 Bond Forfeiture
 - P 47 bond releases (bullet top of page) - The increase in bond forfeitures is actually the result of DMRE aggressively pursuing forfeiture of expired permits that have been dormant with minor violations, but for which OGC has not filed a formal action. It represents an on-going effort on our part to reduce the overall size of the inspectable units case load. However, we believe the increase of 1 addition forfeiture in one calendar year does not constitute a trend.

We sincerely appreciate the opportunity to provide review and input to the draft 2010 Kentucky Evaluation Report. Please let us know if you have any questions or if we can be of further assistance.

Respectfully,



Carl E. Campbell,
Commissioner

APPENDIX D

Permittees Issued Non-Compliances by KYDNR

(Listed by Descending Number of Non-Compliances)

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
NALLY & HAMILTON ENTERPRISES INC	65	136	22	62	37,830.69	17,361.74
FRASURE CREEK MINING LLC	61	155	21	41	30,271.34	13,427.78
CHAS COAL LLC	36	90	19	33	18,982.79	3,200.19
CAM MINING LLC	32	64	18	41	46,938.94	5,908.12
MILLER BROS COAL, LLC	31	67	21	16	9,374.23	4,111.70
DEANE MINING LLC	31	54	17	36	39,826.67	2,709.93
PREMIER ELKHORN COAL COMPANY	30	71	12	44	50,588.68	7,442.61
APPALACHIAN FUELS LLC	20	66	6	11	7,937.46	3,867.26
APEX ENERGY INC	20	45	9	20	12,196.80	4,091.00
JOHNSON-FLOYD COAL COMPANY LLC	19	58	5	7	1,325.55	532.00
SEQUOIA ENERGY LLC	19	37	8	17	18,195.20	941.50
LEECO INC	16	28	9	16	21,638.09	2,144.28
CZAR COAL CORPORATION	15	33	10	22	25,521.40	3,310.66
EVANS COAL CORP	14	43	6	8	2,461.69	415.00
MATT/CO INC	13	24	8	19	10,952.12	340.58
CLINTWOOD ELKHORN MINING COMPANY	13	16	12	54	50,313.60	1,649.51
ICG HAZARD LLC	12	30	11	42	32,703.88	13,134.80
XINERGY CORP	12	28	8	19	12,588.89	4,232.95
SAPPHIRE COAL COMPANY	12	20	5	14	19,495.73	714.96
LOCUST GROVE INC	11	22	8	11	5,629.76	2,230.44
MCCOY ELKHORN COAL CORPORATION	11	22	11	31	47,863.32	876.58
MARTIN COUNTY COAL CORPORATION	11	20	6	38	30,062.00	9,659.20
APPOLO FUELS INC	11	19	6	25	12,271.85	1,451.46
COMBINED ENTERPRISES, LLC	10	34	2	2	162.28	60.00
CHEYENNE RESOURCES INC	10	21	4	10	4,152.16	3,183.63
LCC KENTUCKY LLC	10	16	6	60	34,448.16	18,754.93
CONSOL OF KENTUCKY INC	9	24	7	29	48,185.25	2,098.59
FOUR STAR RESOURCES LLC	9	23	2	4	805.47	147.22
LICKING RIVER RESOURCES INC	9	21	7	9	4,721.41	1,753.00
BLACK HILLS COAL INC	9	15	4	4	1,269.60	925.00
ENTERPRISE MINING COMPANY LLC	9	15	6	33	44,929.40	4,621.95
REED CONSTRUCTION, INC.	9	15	2	2	42.12	19.00
REX COAL COMPANY INC	9	14	4	6	6,343.35	196.06
SIDNEY COAL COMPANY INC	9	14	7	47	87,695.16	1,952.02
MANALAPAN MINING COMPANY INC	9	13	7	13	17,215.24	945.82
HOPKINS COUNTY COAL LLC	8	16	7	21	21,529.45	6,754.95
JERICOL MINING INC	8	15	5	15	17,747.55	1,049.98
SANDLICK COAL COMPANY LLC	8	9	5	13	13,260.18	1,172.44
ADVANCE ENERGY II, LLC	7	22	1	1	236.40	85.00
DUSTY DIAMOND COMPANY INC	7	17	2	2	2,209.18	305.00
LEFT FORK MINING COMPANY INC	7	16	3	3	4,434.67	104.05
ENGLE HOLLOW MINING, LLC	7	15	2	2	107.83	66.67
STURGEON MINING COMPANY INC	7	15	5	13	2,287.95	629.60
INFINITY ENERGY, INC	7	12	2	2	645.40	450.00
BDCC HOLDING COMPANY INC	7	10	4	23	43,283.97	1,187.33

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
ALDEN RESOURCES LLC	7	7	5	16	9,706.66	911.00
THE RAVEN CO INC	6	29	1	1	636.95	85.00
NEW RIDGE MINING COMPANY	6	14	5	22	12,967.27	1,563.68
D & C MINING CORPORATION	6	11	2	3	1,158.24	55.75
BELL COUNTY COAL CORPORATION	6	10	3	15	25,792.73	636.70
CAMBRIAN COAL CORPORATION	6	9	3	14	5,560.12	3,516.50
ISLAND FORK CONSTRUCTION LTD	6	9	3	3	1,082.40	545.00
BLACK FIRE COAL COMPANY LLC	5	11	1	1	181.39	16.00
VIKING MINING, LLC	5	11	1	2	598.77	15.00
ALMA ENERGY, LLC	5	10	2	2	2,841.87	23.00
B & W RESOURCES INC	5	10	4	9	3,986.47	1,459.10
GATLIFF COAL COMPANY	5	10	4	6	2,294.31	734.76
LANDFALL MINING INCORPORATED	5	10	2	4	101.40	42.30
T & T ENERGY, LLC	5	9	2	2	187.92	72.50
CUMBERLAND RIVER COAL COMPANY	5	8	5	9	16,331.34	3,160.70
ARMSTRONG COAL COMPANY INC	5	7	4	14	13,324.78	2,569.20
KENAMERICAN RESOURCES INC	5	6	4	4	19,994.00	224.00
CANDLE RIDGE MINING INC	4	16	3	4	918.14	394.50
BLED SOE COAL CORPORATION	4	14	3	23	33,660.56	2,099.77
COOK AND SONS MINING INC	4	14	3	6	4,857.88	613.55
VERNON SPURLOCK	4	13	1	2	173.50	25.40
AM&E COAL, INCORPORATED	4	11	1	1	28.50	26.00
CLOVERFORK MINING & EXCAVATING INC	4	11	4	8	3,574.92	1,620.59
C & R COAL COMPANY INC	4	10	3	3	797.90	475.00
HANSCO ENERGY CORPORATION	4	10	2	6	1,880.68	1,582.46
REID & SONS CONSTRUCTION	4	10	2	2	85.20	25.00
R & L WINN INC	4	8	1			
WARRIOR COAL LLC	4	8	2	7	26,545.35	630.00
JAMIESON CONSTRUCTION COMPANY	4	7	3	10	1,983.30	743.70
NFC MINING INC	4	7	1	3	71.07	27.35
FCDC COAL INC	4	6	3	27	20,801.26	479.22
LANDMARK MINING COMPANY INC	4	6	2	11	5,819.50	172.02
LAUREL MOUNTAIN RESOURCES LLC	4	6	4	33	26,957.95	7,714.37
OXFORD MINING COMPANY KENTUCKY LLC	4	6	1	5	5,124.00	1,710.00
SHAMROCK COAL COMPANY INCORPORATED	4	6	2	8	22,362.81	503.05
REVELATION ENERGY LLC	4	5	1	7	3,396.22	2,069.90
WESTERN KENTUCKY MINERALS, INC	4	5	2	2	668.00	225.00
C & R HOLDING OF EASTERN KENTUCKY LLC	3	17	1	1	176.75	177.00
IRON EAGLE ENTERPRISES LLC	3	16	2	1	111.83	25.00
NORTH FORK COLLIERIES, LLC	3	15	1	2	555.30	176.00
GLOBAL ENERGY GROUP LLC	3	14	1	1	82.36	16.00
TWIN ENERGY LLC	3	13	1	1	232.86	59.00
B & C ENERGY INC	3	9	1	1	135.62	60.00
MONTIES RESOURCES LLC	3	9	2	2	219.27	55.00
MOUNTAINSIDE COAL CO INC	3	9	2	3	709.10	128.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
BEECH FORK PROCESSING INC	3	8	1	18	16,928.71	1,703.41
POWELL BRANCH ENERGY LLC	3	8	1	1	240.64	3.74
RICHARDSON FUEL INC	3	8	2	2	2,977.94	10.00
WHITAKER COAL CORPORATION	3	8	3	14	25,661.26	1,571.14
BLACKFOREST COAL, LLC	3	7	1	2	170.84	55.00
DAVIS ENERGY, LLC	3	7	2	4	612.77	73.00
IKERD MINING, LLC	3	7	2	5	1,139.49	332.97
MOUNTAIN FURY, LLC.	3	7	2	1	51.51	22.00
P & C MINING CO, INC	3	7	3	3	150.19	41.77
PATRICK PROCESSING LLC	3	7	3	5	3,318.33	42.36
POMPEY COAL CORPORATION	3	7	1	5	2,031.18	1,470.00
STRONG BROTHERS MINING	3	7	1	1	161.95	110.00
DIAMOND ENERGY, INCORPORATED	3	6	1	1	114.80	50.00
HARLAN-CUMBERLAND COAL COMPANY LLC	3	6	1	5	13,905.88	457.79
KENTUCKY SOUTHERN COAL CORPORATION	3	6	1	1	259.00	43.00
MIDSOUTH ENERGY INC	3	6	1	1	28.94	25.00
ANDALEX RESOURCES INC	3	5	1	1	187.14	17.00
C T & L COAL COMPANY	3	5	1	1	127.76	70.00
FRONTIER MINING COMPANY INC	3	5	2	2	1,719.90	338.00
MASSIVE MINING INC	3	5	1	1	167.10	17.00
PATRIOT COAL COMPANY, LP	3	5	2	13	21,002.64	4,617.00
WEBSTER COUNTY COAL LLC	3	5	3	9	51,896.11	569.50
CENTENNIAL RESOURCES INC	3	4	2	2	986.50	211.00
DIXIE FUEL COMPANY LLC	3	4	1	5	3,548.46	386.32
KINCAID ENTERPRISES INC	3	4	2	2	186.40	83.00
LONG CANYON COAL, LLC	3	4	1	1	32.90	14.00
MASON COAL INC	3	4	1	2	1,925.23	3.50
ROAD FORK DEVELOPMENT COMPANY INC	3	4	3	10	21,130.54	816.68
DAVENPORT COAL COMPANY, LLC	3	3	2	1	24.30	16.00
PHOENIX COAL CORPORATION	3	3	1			
SAND HILL COAL PROCESSING CO	3	3	3	2	135.01	76.00
SCHOATE MINING CO LLC	3	3	1			
WELLMORE COAL CORPORATION	3	3	2	9	11,337.52	246.40
OSCAR HATTEN COAL CO LLC	2	11	1	1	23.59	15.59
STRATA MINING INC	2	9	2	5	2,686.20	1,515.00
LESLIE MOUNTAIN COAL COMPANY INC	2	8	1	1	268.00	30.00
NEW HARLAN BLOCK COAL INC	2	6	1	1	113.95	3.95
BIG VALLEY COAL, LLC	2	5	1	1	200.90	25.00
EMLYN COAL PROCESSING, LLC	2	5	2	3	86.18	51.20
HENDRICKSON EQUIPMENT INC	2	5	2	3	279.30	65.00
HWP LLC	2	5	1	1	246.10	2.00
LOGAN GAP DEVELOPMENT CO., INC.	2	5	1	1	62.35	15.00
REDBIRD RESOURCES LLC	2	5	1			
ACME RESOURCES LLC	2	4	1	2	722.40	55.00
BLUE DIAMOND COAL COMPANY	2	4	2	4	6,850.76	323.09

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
CHAROLAIS MINING COMPANY, LLC	2	4	1	2	656.20	475.00
GOOSE CREEK ENERGY, INC.	2	4	2	4	2,312.91	59.48
H & D COAL COMPANY INC	2	4	2	3	684.80	490.00
HEARTLAND ESTATES INC	2	4	1	1	6.48	4.00
MINE RITE COAL CO INC	2	4	2	16	2,939.04	550.66
PICK & SHOVEL MINING	2	4	1	1	281.58	30.00
RENFRO EQUIPMENT INC	2	4	1			
BLACKSTONE COAL CO LLC	2	3	1	1	234.60	104.09
STEVEN D SINGLETON	2	3	1	1	91.00	18.00
ADDINGTON INC	2	2	1	4	3,200.44	2,635.81
DEKALB RECOVERY INC	2	2	2	2	225.32	5.50
FLEENOR, INC	2	2	1	1	476.60	50.00
HARLAN RECLAMATION SERVICES LLC	2	2	2	19	64,250.88	1,201.13
INDEVA CORP ENERGY, INC	2	2	1	1	747.98	6.00
KANNAN MINING COMPANY	2	2	2	2	231.36	115.52
MC MINING LLC	2	2	2	4	9,648.22	193.00
PONTIKI COAL LLC	2	2	2	7	31,817.20	195.00
PRATER CREEK COAL CORPORATION	2	2	1	3	79.35	45.00
CORBIN MINING LLC	1	8	1	2	601.91	370.00
R & T COAL CO INC	1	8	1	1	7.08	4.50
MILL CREEK MINING INC	1	7	1	1	3,006.00	7.00
RED BUSH COAL, LLC	1	6	1	1	61.17	18.00
CRABTREE MINING ENTERPRISES INC	1	5	1			
DOUBLE D ENERGY INC	1	5	1			
EAST KY EXCAVATION INC	1	5	1	1	119.56	29.00
LAUREL HILLS INVESTMENTS, INC.	1	5	1	1	22.10	22.00
PIGMY COAL COMPANY	1	5	1	1	1,768.00	22.00
SABER MINING COMPANY, INC	1	5	1			
DCM RESOURCE ENERGIES INC	1	4	1	1	30.70	10.00
J & L DRILLING INC	1	4	1	1	212.83	26.00
J & M EQUIPMENT AND CONSTRUCTION CO INC	1	4	1	1	97.17	97.00
COVOL FUELS NO 2 LLC	1	3	1	1	3,333.26	41.00
GOOSE CREEK MINING LLC	1	3	1	1	162.80	8.00
HOPKINS COAL COMPANY	1	3	1	1	170.50	48.82
K & T ENERGY AND MINING CORPORATION	1	3	1	1	462.00	39.00
KENTUCKY CHESTNUT COALS INC	1	3	1	1	145.35	55.00
L & R COALS	1	3	1	1	41.50	4.00
MORGAN COUNTY LEASING INC	1	3	1	1	61.00	29.80
P C & H CONSTRUCTION INC	1	3	1	2	1,936.75	500.00
SAND HILL COAL PROCESSING, LLC	1	3	1	6	814.25	239.00
SAYCO INC	1	3	1	1	426.00	4.91
B R C COAL COMPANY INCORPORATED	1	2	1	1	479.74	325.96
BEAR BRANCH COAL COMPANY	1	2	1	3	13,343.97	71.72
D & H COAL COMPANY OF LAUREL COUNTY INC	1	2	1	1	58.40	57.00
D BEST MINING, INC	1	2	1	1	33.30	5.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
ICG EAST KENTUCKY LLC	1	2	1	5	3,348.16	2,245.80
JOHNS CREEK PROCESSING COMPANY	1	2	1	2	494.47	142.00
KING BROTHERS COAL INC	1	2	1	2	1,596.51	20.47
M & T LOGGING INC	1	2	1	1	94.00	15.00
MARTIN COAL PROCESSING CORPORATION	1	2	1	1	12.00	10.00
PENNYRILE COAL CO INC	1	2	1	1	514.90	71.80
RED OAK LAND DEVELOPMENT, LLC	1	2	1	1	16.16	0.00
SKYLINE EXCAVATION INC	1	2	1	1	205.60	100.00
WENDELL ROBERTS	1	2	1	1	7.42	2.00
A & G COAL CORPORATION	1	1	1	1	684.42	150.00
AEP KENTUCKY COAL LLC	1	1	1	13	9,351.13	4,081.48
ARMSTRONG LOGISTICS SERVICES LLC	1	1	1	2	65.30	23.00
AUXIER ENERGY, LLC	1	1	1	1	23.31	1.00
B Y INC	1	1	1	1	28.50	28.50
BETHEL COAL COMPANY, INC	1	1	1	1	85.90	28.00
BMM INC	1	1	1			
BOTNER ENTERPRISES LLC	1	1	1	2	21.53	14.30
BURIED SUNSHINE TRANSPORT INC	1	1	1			
C & C MINING INC	1	1	1	1	13.90	9.00
CNS MINING INC	1	1	1	1	2,670.16	7.40
DELAWARE RESOURCES, LLC	1	1	1	1	4,526.00	12.00
EBW ENTERPRISES, INC	1	1	1	1	87.51	16.00
EXECUTIVE COAL LLC	1	1	1	2	91.31	42.00
G & S COAL INC	1	1	1	3	1,324.88	55.58
GIVENS COAL COMPANY INC	1	1	1	1	329.53	21.00
GREEN COAL COMPANY INC	1	1	1	1	364.00	50.00
HYLTON & WILLIAMS COAL COMPANY INC	1	1	1	1	64.00	8.50
ICG KNOTT COUNTY LLC	1	1	1	17	27,048.92	738.00
J R MINING INC	1	1	1	3	223.88	96.00
JOSHUA ENTERPRISES, INC	1	1	1	1	161.20	120.00
KYZ ENERGY, LLC	1	1	1	1	534.53	8.25
LABCO LLC	1	1	1	1	173.36	80.00
LONG FORK COAL COMPANY	1	1	1	4	3,063.42	260.94
MAJESTIC COLLIERIES COMPANY	1	1	1	5	1,265.91	88.98
NATIONAL COAL CORPORATION	1	1	1	2	9,037.25	160.00
NEW TRUCKERS COAL MARKET INC	1	1	1	1	4.44	4.40
PBP ENERGY, LLC	1	1	1	1	218.60	161.00
PIA COMPANY, INC	1	1	1	3	384.95	80.00
POND CREEK COAL CO INC	1	1	1	1	324.70	104.00
RICHARD COLLINS	1	1	1	1	32.70	3.00
ROBINSON COAL COMPANY, INC	1	1	1	2	26.08	9.90
T & R COAL COMPANY	1	1	1	1	30.13	10.00
T & T COAL INC	1	1	1	6	637.16	196.84
TORCHLIGHT ENERGY, INC	1	1	1	1	122.29	11.00
W & F CONTRACT AUGERING INC	1	1	1	1	37.31	24.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
WHYMORE COAL COMPANY INC	1	1	1	5	719.91	388.00

APPENDIX E

Permittees Issued Non-Compliances by KYDNR

(Alphabetical Listing)

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
A & G COAL CORPORATION	1	1	1	1	684.42	150.00
ACME RESOURCES LLC	2	4	1	2	722.40	55.00
ADDINGTON INC	2	2	1	4	3,200.44	2,635.81
ADVANCE ENERGY II, LLC	7	22	1	1	236.40	85.00
AEP KENTUCKY COAL LLC	1	1	1	13	9,351.13	4,081.48
ALDEN RESOURCES LLC	7	7	5	16	9,706.66	911.00
ALMA ENERGY, LLC	5	10	2	2	2,841.87	23.00
AM&E COAL, INCORPORATED	4	11	1	1	28.50	26.00
ANDALEX RESOURCES INC	3	5	1	1	187.14	17.00
APEX ENERGY INC	20	45	9	20	12,196.80	4,091.00
APPALACHIAN FUELS LLC	20	66	6	11	7,937.46	3,867.26
APPOLO FUELS INC	11	19	6	25	12,271.85	1,451.46
ARMSTRONG COAL COMPANY INC	5	7	4	14	13,324.78	2,569.20
ARMSTRONG LOGISTICS SERVICES LLC	1	1	1	2	65.30	23.00
AUXIER ENERGY, LLC	1	1	1	1	23.31	1.00
B & C ENERGY INC	3	9	1	1	135.62	60.00
B & W RESOURCES INC	5	10	4	9	3,986.47	1,459.10
B R C COAL COMPANY INCORPORATED	1	2	1	1	479.74	325.96
B Y INC	1	1	1	1	28.50	28.50
BDCC HOLDING COMPANY INC	7	10	4	23	43,283.97	1,187.33
BEAR BRANCH COAL COMPANY	1	2	1	3	13,343.97	71.72
BEECH FORK PROCESSING INC	3	8	1	18	16,928.71	1,703.41
BELL COUNTY COAL CORPORATION	6	10	3	15	25,792.73	636.70
BETHEL COAL COMPANY, INC	1	1	1	1	85.90	28.00
BIG VALLEY COAL, LLC	2	5	1	1	200.90	25.00
BLACK FIRE COAL COMPANY LLC	5	11	1	1	181.39	16.00
BLACK HILLS COAL INC	9	15	4	4	1,269.60	925.00
BLACKFOREST COAL, LLC	3	7	1	2	170.84	55.00
BLACKSTONE COAL CO LLC	2	3	1	1	234.60	104.09
BLED SOE COAL CORPORATION	4	14	3	23	33,660.56	2,099.77
BLUE DIAMOND COAL COMPANY	2	4	2	4	6,850.76	323.09
BMM INC	1	1	1			
BOTNER ENTERPRISES LLC	1	1	1	2	21.53	14.30
BURIED SUNSHINE TRANSPORT INC	1	1	1			
C & C MINING INC	1	1	1	1	13.90	9.00
C & R COAL COMPANY INC	4	10	3	3	797.90	475.00
C & R HOLDING OF EASTERN KENTUCKY LLC	3	17	1	1	176.75	177.00
C T & L COAL COMPANY	3	5	1	1	127.76	70.00
CAM MINING LLC	32	64	18	41	46,938.94	5,908.12
CAMBRIAN COAL CORPORATION	6	9	3	14	5,560.12	3,516.50
CANDLE RIDGE MINING INC	4	16	3	4	918.14	394.50
CENTENNIAL RESOURCES INC	3	4	2	2	986.50	211.00
CHAROLAIS MINING COMPANY, LLC	2	4	1	2	656.20	475.00
CHAS COAL LLC	36	90	19	33	18,982.79	3,200.19
CHEYENNE RESOURCES INC	10	21	4	10	4,152.16	3,183.63

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
CLINTWOOD ELKHORN MINING COMPANY	13	16	12	54	50,313.60	1,649.51
CLOVERFORK MINING & EXCAVATING INC	4	11	4	8	3,574.92	1,620.59
CNS MINING INC	1	1	1	1	2,670.16	7.40
COMBINED ENTERPRISES, LLC	10	34	2	2	162.28	60.00
CONSOL OF KENTUCKY INC	9	24	7	29	48,185.25	2,098.59
COOK AND SONS MINING INC	4	14	3	6	4,857.88	613.55
CORBIN MINING LLC	1	8	1	2	601.91	370.00
COVOL FUELS NO 2 LLC	1	3	1	1	3,333.26	41.00
CRABTREE MINING ENTERPRISES INC	1	5	1			
CUMBERLAND RIVER COAL COMPANY	5	8	5	9	16,331.34	3,160.70
CZAR COAL CORPORATION	15	33	10	22	25,521.40	3,310.66
D & C MINING CORPORATION	6	11	2	3	1,158.24	55.75
D & H COAL COMPANY OF LAUREL COUNTY INC	1	2	1	1	58.40	57.00
D BEST MINING, INC	1	2	1	1	33.30	5.00
DAVENPORT COAL COMPANY, LLC	3	3	2	1	24.30	16.00
DAVIS ENERGY, LLC	3	7	2	4	612.77	73.00
DCM RESOURCE ENERGIES INC	1	4	1	1	30.70	10.00
DEANE MINING LLC	31	54	17	36	39,826.67	2,709.93
DEKALB RECOVERY INC	2	2	2	2	225.32	5.50
DELAWARE RESOURCES, LLC	1	1	1	1	4,526.00	12.00
DIAMOND ENERGY, INCORPORATED	3	6	1	1	114.80	50.00
DIXIE FUEL COMPANY LLC	3	4	1	5	3,548.46	386.32
DOUBLE D ENERGY INC	1	5	1			
DUSTY DIAMOND COMPANY INC	7	17	2	2	2,209.18	305.00
EAST KY EXCAVATION INC	1	5	1	1	119.56	29.00
EBW ENTERPRISES, INC	1	1	1	1	87.51	16.00
EMLYN COAL PROCESSING, LLC	2	5	2	3	86.18	51.20
ENGLE HOLLOW MINING, LLC	7	15	2	2	107.83	66.67
ENTERPRISE MINING COMPANY LLC	9	15	6	33	44,929.40	4,621.95
EVANS COAL CORP	14	43	6	8	2,461.69	415.00
EXECUTIVE COAL LLC	1	1	1	2	91.31	42.00
FCDC COAL INC	4	6	3	27	20,801.26	479.22
FLEENOR, INC	2	2	1	1	476.60	50.00
FOUR STAR RESOURCES LLC	9	23	2	4	805.47	147.22
FRASURE CREEK MINING LLC	61	155	21	41	30,271.34	13,427.78
FRONTIER MINING COMPANY INC	3	5	2	2	1,719.90	338.00
G & S COAL INC	1	1	1	3	1,324.88	55.58
GATLIFF COAL COMPANY	5	10	4	6	2,294.31	734.76
GIVENS COAL COMPANY INC	1	1	1	1	329.53	21.00
GLOBAL ENERGY GROUP LLC	3	14	1	1	82.36	16.00
GOOSE CREEK ENERGY, INC.	2	4	2	4	2,312.91	59.48
GOOSE CREEK MINING LLC	1	3	1	1	162.80	8.00
GREEN COAL COMPANY INC	1	1	1	1	364.00	50.00
H & D COAL COMPANY INC	2	4	2	3	684.80	490.00
HANSCO ENERGY CORPORATION	4	10	2	6	1,880.68	1,582.46

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
HARLAN RECLAMATION SERVICES LLC	2	2	2	19	64,250.88	1,201.13
HARLAN-CUMBERLAND COAL COMPANY LLC	3	6	1	5	13,905.88	457.79
HEARTLAND ESTATES INC	2	4	1	1	6.48	4.00
HENDRICKSON EQUIPMENT INC	2	5	2	3	279.30	65.00
HOPKINS COAL COMPANY	1	3	1	1	170.50	48.82
HOPKINS COUNTY COAL LLC	8	16	7	21	21,529.45	6,754.95
HWP LLC	2	5	1	1	246.10	2.00
HYLTON & WILLIAMS COAL COMPANY INC	1	1	1	1	64.00	8.50
ICG EAST KENTUCKY LLC	1	2	1	5	3,348.16	2,245.80
ICG HAZARD LLC	12	30	11	42	32,703.88	13,134.80
ICG KNOTT COUNTY LLC	1	1	1	17	27,048.92	738.00
IKERD MINING, LLC	3	7	2	5	1,139.49	332.97
INDEVA CORP ENERGY, INC	2	2	1	1	747.98	6.00
INFINITY ENERGY, INC	7	12	2	2	645.40	450.00
IRON EAGLE ENTERPRISES LLC	3	16	2	1	111.83	25.00
ISLAND FORK CONSTRUCTION LTD	6	9	3	3	1,082.40	545.00
J & L DRILLING INC	1	4	1	1	212.83	26.00
J & M EQUIPMENT AND CONSTRUCTION CO INC	1	4	1	1	97.17	97.00
J R MINING INC	1	1	1	3	223.88	96.00
JAMIESON CONSTRUCTION COMPANY	4	7	3	10	1,983.30	743.70
JERICOL MINING INC	8	15	5	15	17,747.55	1,049.98
JOHNS CREEK PROCESSING COMPANY	1	2	1	2	494.47	142.00
JOHNSON-FLOYD COAL COMPANY LLC	19	58	5	7	1,325.55	532.00
JOSHUA ENTERPRISES, INC	1	1	1	1	161.20	120.00
K & T ENERGY AND MINING CORPORATION	1	3	1	1	462.00	39.00
KANNAN MINING COMPANY	2	2	2	2	231.36	115.52
KENAMERICAN RESOURCES INC	5	6	4	4	19,994.00	224.00
KENTUCKY CHESTNUT COALS INC	1	3	1	1	145.35	55.00
KENTUCKY SOUTHERN COAL CORPORATION	3	6	1	1	259.00	43.00
KINCAID ENTERPRISES INC	3	4	2	2	186.40	83.00
KING BROTHERS COAL INC	1	2	1	2	1,596.51	20.47
KYZ ENERGY, LLC	1	1	1	1	534.53	8.25
L & R COALS	1	3	1	1	41.50	4.00
LABCO LLC	1	1	1	1	173.36	80.00
LANDFALL MINING INCORPORATED	5	10	2	4	101.40	42.30
LANDMARK MINING COMPANY INC	4	6	2	11	5,819.50	172.02
LAUREL HILLS INVESTMENTS, INC.	1	5	1	1	22.10	22.00
LAUREL MOUNTAIN RESOURCES LLC	4	6	4	33	26,957.95	7,714.37
LCC KENTUCKY LLC	10	16	6	60	34,448.16	18,754.93
LEECO INC	16	28	9	16	21,638.09	2,144.28
LEFT FORK MINING COMPANY INC	7	16	3	3	4,434.67	104.05
LESLIE MOUNTAIN COAL COMPANY INC	2	8	1	1	268.00	30.00
LICKING RIVER RESOURCES INC	9	21	7	9	4,721.41	1,753.00
LOCUST GROVE INC	11	22	8	11	5,629.76	2,230.44

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
LOGAN GAP DEVELOPMENT CO., INC.	2	5	1	1	62.35	15.00
LONG CANYON COAL, LLC	3	4	1	1	32.90	14.00
LONG FORK COAL COMPANY	1	1	1	4	3,063.42	260.94
M & T LOGGING INC	1	2	1	1	94.00	15.00
MAJESTIC COLLIERIES COMPANY	1	1	1	5	1,265.91	88.98
MANALAPAN MINING COMPANY INC	9	13	7	13	17,215.24	945.82
MARTIN COAL PROCESSING CORPORATION	1	2	1	1	12.00	10.00
MARTIN COUNTY COAL CORPORATION	11	20	6	38	30,062.00	9,659.20
MASON COAL INC	3	4	1	2	1,925.23	3.50
MASSIVE MINING INC	3	5	1	1	167.10	17.00
MATT/CO INC	13	24	8	19	10,952.12	340.58
MC MINING LLC	2	2	2	4	9,648.22	193.00
MCCOY ELKHORN COAL CORPORATION	11	22	11	31	47,863.32	876.58
MIDSOUTH ENERGY INC	3	6	1	1	28.94	25.00
MILL CREEK MINING INC	1	7	1	1	3,006.00	7.00
MILLER BROS COAL, LLC	31	67	21	16	9,374.23	4,111.70
MINE RITE COAL CO INC	2	4	2	16	2,939.04	550.66
MONTIES RESOURCES LLC	3	9	2	2	219.27	55.00
MORGAN COUNTY LEASING INC	1	3	1	1	61.00	29.80
MOUNTAIN FURY, LLC.	3	7	2	1	51.51	22.00
MOUNTAINSIDE COAL CO INC	3	9	2	3	709.10	128.00
NALLY & HAMILTON ENTERPRISES INC	65	136	22	62	37,830.69	17,361.74
NATIONAL COAL CORPORATION	1	1	1	2	9,037.25	160.00
NEW HARLAN BLOCK COAL INC	2	6	1	1	113.95	3.95
NEW RIDGE MINING COMPANY	6	14	5	22	12,967.27	1,563.68
NEW TRUCKERS COAL MARKET INC	1	1	1	1	4.44	4.40
NFC MINING INC	4	7	1	3	71.07	27.35
NORTH FORK COLLIERIES, LLC	3	15	1	2	555.30	176.00
OSCAR HATTEN COAL CO LLC	2	11	1	1	23.59	15.59
OXFORD MINING COMPANY KENTUCKY LLC	4	6	1	5	5,124.00	1,710.00
P & C MINING CO, INC	3	7	3	3	150.19	41.77
P C & H CONSTRUCTION INC	1	3	1	2	1,936.75	500.00
PATRICK PROCESSING LLC	3	7	3	5	3,318.33	42.36
PATRIOT COAL COMPANY, LP	3	5	2	13	21,002.64	4,617.00
PBP ENERGY, LLC	1	1	1	1	218.60	161.00
PENNYRILE COAL CO INC	1	2	1	1	514.90	71.80
PHOENIX COAL CORPORATION	3	3	1			
PIA COMPANY, INC	1	1	1	3	384.95	80.00
PICK & SHOVEL MINING	2	4	1	1	281.58	30.00
PIGMY COAL COMPANY	1	5	1	1	1,768.00	22.00
POMPEY COAL CORPORATION	3	7	1	5	2,031.18	1,470.00
POND CREEK COAL CO INC	1	1	1	1	324.70	104.00
PONTIKI COAL LLC	2	2	2	7	31,817.20	195.00
POWELL BRANCH ENERGY LLC	3	8	1	1	240.64	3.74
PRATER CREEK COAL CORPORATION	2	2	1	3	79.35	45.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
PREMIER ELKHORN COAL COMPANY	30	71	12	44	50,588.68	7,442.61
R & L WINN INC	4	8	1			
R & T COAL CO INC	1	8	1	1	7.08	4.50
RED BUSH COAL, LLC	1	6	1	1	61.17	18.00
RED OAK LAND DEVELOPMENT, LLC	1	2	1	1	16.16	0.00
REDBIRD RESOURCES LLC	2	5	1			
REED CONSTRUCTION, INC.	9	15	2	2	42.12	19.00
REID & SONS CONSTRUCTION	4	10	2	2	85.20	25.00
RENFRO EQUIPMENT INC	2	4	1			
REVELATION ENERGY LLC	4	5	1	7	3,396.22	2,069.90
REX COAL COMPANY INC	9	14	4	6	6,343.35	196.06
RICHARD COLLINS	1	1	1	1	32.70	3.00
RICHARDSON FUEL INC	3	8	2	2	2,977.94	10.00
ROAD FORK DEVELOPMENT COMPANY INC	3	4	3	10	21,130.54	816.68
ROBINSON COAL COMPANY, INC	1	1	1	2	26.08	9.90
SABER MINING COMPANY, INC	1	5	1			
SAND HILL COAL PROCESSING CO	3	3	3	2	135.01	76.00
SAND HILL COAL PROCESSING, LLC	1	3	1	6	814.25	239.00
SANDLICK COAL COMPANY LLC	8	9	5	13	13,260.18	1,172.44
SAPPHIRE COAL COMPANY	12	20	5	14	19,495.73	714.96
SAYCO INC	1	3	1	1	426.00	4.91
SCHOATE MINING CO LLC	3	3	1			
SEQUOIA ENERGY LLC	19	37	8	17	18,195.20	941.50
SHAMROCK COAL COMPANY INCORPORATED	4	6	2	8	22,362.81	503.05
SIDNEY COAL COMPANY INC	9	14	7	47	87,695.16	1,952.02
SKYLINE EXCAVATION INC	1	2	1	1	205.60	100.00
STEVEN D SINGLETON	2	3	1	1	91.00	18.00
STRATA MINING INC	2	9	2	5	2,686.20	1,515.00
STRONG BROTHERS MINING	3	7	1	1	161.95	110.00
STURGEON MINING COMPANY INC	7	15	5	13	2,287.95	629.60
T & R COAL COMPANY	1	1	1	1	30.13	10.00
T & T COAL INC	1	1	1	6	637.16	196.84
T & T ENERGY, LLC	5	9	2	2	187.92	72.50
THE RAVEN CO INC	6	29	1	1	636.95	85.00
TORCHLIGHT ENERGY, INC	1	1	1	1	122.29	11.00
TWIN ENERGY LLC	3	13	1	1	232.86	59.00
VERNON SPURLOCK	4	13	1	2	173.50	25.40
VIKING MINING, LLC	5	11	1	2	598.77	15.00
W & F CONTRACT AUGERING INC	1	1	1	1	37.31	24.00
WARRIOR COAL LLC	4	8	2	7	26,545.35	630.00
WEBSTER COUNTY COAL LLC	3	5	3	9	51,896.11	569.50
WELLMORE COAL CORPORATION	3	3	2	9	11,337.52	246.40
WENDELL ROBERTS	1	2	1	1	7.42	2.00
WESTERN KENTUCKY MINERALS, INC	4	5	2	2	668.00	225.00
WHITAKER COAL CORPORATION	3	8	3	14	25,661.26	1,571.14

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
WHYMORE COAL COMPANY INC	1	1	1	5	719.91	388.00
XINERGY CORP	12	28	8	19	12,588.89	4,232.95

APPENDIX F

CY 2009 Fill Information

2009 Fill Information

A comprehensive effort was completed by LFO and Natural Resources KYDNR to collect fill information on all new permits, amendments, and major revisions issued in Eastern Kentucky by KYDNR during CY 2009. This effort has three purposes: (1) to identify those permitting actions involving excess spoil fills (fills) on either surface, underground, or other mining operations; (2) to collect pertinent fill and watershed information on each of the proposed fills; and, (3) to collect measurements from the sediment pond to the mine area and fill. KYDNR issued 206 permitting actions (62 new permits, 92 amendments, and 52 major revisions) in CY 2009 involving surface, underground, or other mining operations. LFO and KYDNR found 50 permitting actions that contained information on 104 proposed fills. The other 156 permitting actions did not involve fills. Table 1 breaks out the permitting actions with proposed fills.

Table 1

Mining Type	New Permits/ Number of Fills	Amendments/ Number of Fills	Major Revisions/ Number of Fills	Totals
Surface Mining	18/50	17/32	2/2	37/84
Underground Mining	7/9	6/11	na	13/20
Other Mining	na	na	na	na

An analysis was completed on each of the 104 fills. Table 2 provides the averages for some of the important features relating to the fills.

Table 2

Feature	Surface Mines	Underground Mines	Other Mines
Acres (Ave.)	21.02 acres	46.08 acres	na
Volume (Ave.)	2,076,022 yd ³	203,645 yd ³	na
Length (Ave.)	1,174 feet	659 feet	na
Watershed Acres Ave.)	61.11 acres	23.01 acres	na

Table 3 breaks out the number of fills by watershed acreage.

Table 3

Watershed Acreage	Number of Fills
Less than 50 Acres	66 (63.4%)
50 Acres to 100 Acres	22 (21.2.0%)
100 Acres to 150 Acres	8 (7.7%)
150 Acres to 200 Acres	2 (1.9%)
200 Acres to 250 Acres	1 (1%)
Greater than 250 Acres	5 (4.8%)

Table 4 breaks out the number of fills by fill acreage.

Table 4

Fill Acreage	Number of Fills
Less than 5 Acres	37 (35.6%)
5 Acres to 10 Acres	30 (28.8%)
10 Acres to 20 Acres	19 (18.2%)
20 Acres to 30 Acres	9 (8.6%)
30 Acres to 50 Acres	1 (1%)
50 Acres to 100 Acres	4 (3.8%)
100 Acres to 200 Acres	2 (1.9%)
Greater than 200 Acres	2 (1.9%)

Table 5 breaks out the number of fills proposed, average watershed acres, and average fill acres in each of the U.S. Army Corps of Engineers Districts in Kentucky.

Table 5

Corps of Engineers Districts	Number of Fills	Average Watershed Acres	Average Fill Acres
Huntington District	46	63.61 acres	13.45 acres
Louisville District	49	45.60 acres	39.74 acres
Nashville District	9	55.50 acres	17.52 acres

As noted in Table 3, LFO and KYDNR found two fills on two different permits that affect watershed areas greater than 250 acres. Table 6 identifies those permits and fills.

Table 6

Surface Mines					
Company	Permit	Fill ID	Fill Acres	Fill Volume	Watershed Acres
Wolverine Resources, Inc	8360348	A	24.00 acres	3,430,855 yd ³	580.62 acres
CAM Mining, LLC	8360355	HF # 1	104.20 acres	13,139,348 yd ³	351.10 acres

A second effort was conducted by LFO and KYDNR that collected permit-specific information on each of the 62 (44 surface, 18 underground) new coal mining permits issued in CY 2009. This effort focused on several different sections of the permit application, including permitted acreage, mine type, total volume of spoil generated, swell factor, spoil placed in excess spoil storage areas compared to spoil used for reclamation and remining.

Table 7 provides a comparison by mine type of the information collected on new surface coal permits issued in CY 2009.

Table 7

		Surface	Underground	Other
New Permits with an AOC Variance Approved		0	0	0
Average Percent of Overburden Returned to Bench		na	na	na
Range of Overburden Returned to Bench		na	na	na
New Permits with Remining Variances		na	na	na
	Average Returned	na	na	na
	Range Returned	na	na	na
Average Number of Fills Proposed		na	na	na
Range of Fills Proposed		na	na	na
New Permits Without an AOC Variance Approved		21	7	na
Average Percent of Overburden Returned to Bench		81%	98%	na
Range of Overburden Returned to Bench		37% - 100%	80% - 100%	na
New Permits with Remining Variances		na	na	na
	Average Returned	na	na	na
	Range Returned	na	na	na
Average Number of Fills Proposed		3	1	na
Range of Fills Proposed		1-8	1-2	na

A third effort was conducted by LFO to collect information on the distance from the fills to the ponds and the distance from the mining areas to the ponds. Measurements were taken at the pond located below the fill.

Table 8 provides a comparison by new and existing ponds collected on new permits, amendments, and major amendments.

Table 8

Features Measured	Average Distance
Existing Ponds to Fills	786.13
New Ponds to Fills	284.57 feet

On the following pages, Tables 9 summarizes the information collected on all new permits issued in CY 2009 for surface, underground, and other mining operations. Table 10 shows the information collected on all 104 permitted excess spoil fills.

Table 9

PERMITTEE_NAME	PERMIT NUMBER	FILL NUMBER	POND #	POND STATUS	POND	POND	SEGMENTED PERMIT
					TO MINE FT	TO FILL FT	
CHAS COAL LLC	8070352	HF#1	SS#1	N	0	10	No
CHAS COAL LLC	8070352	HF#2	SS#2	N	0	30	No
CHAS COAL LLC	8070352	HF#3	SS#3	N	0	0	No
CHAS COAL LLC	8070352	HF#4	SS#4	N	0	209	No
CHAS COAL LLC	8070352	HF#5	SS#5	N	0	191	No
CHAS COAL LLC	8070352	HF#6	SS#6	N	0	735	No
XINERGY CORP	8070363	8			0	0	Yes
XINERGY CORP	8070363	9			0	0	Yes
APPOLO FUELS INC	8070365	HOLLOW FILL #1	1	N	0	106	Yes
APPOLO FUELS INC	8070368	HOLLOW FILL #1	1	N	0	378	Yes
ICG HAZARD LLC	8130323	HF #2	2	N	0	25	No
IKERD MINING, LLC	8260588	HF #1	7	N	0	150	Yes
IKERD MINING, LLC	8260588	HF #2	6	N	0	60	Yes
ADVANCE COAL CO LLC	8320058	BS-1	D-10	N	0	0	Yes
ADVANCE COAL CO LLC	8320058	HF#1	P1	N	0	25	Yes
ADVANCE COAL CO LLC	8320058	HF#2	P2	N	0	25	Yes
ADVANCE COAL CO LLC	8320058	HF#3	P3		0	25	Yes
ADVANCE COAL CO LLC	8320058	HF#4	P4	N	0	55	Yes
MATT/CO INC	8360307	HF 6	34	N	0	50	Yes
MATT/CO INC	8360307	HF 7	35	N	0	185	Yes
WOLVERINE RESOURCES INC	8360348	A	1A	N	0	1274	No
WOLVERINE RESOURCES INC	8360348	B	#2	N	0	135	No
WOLVERINE RESOURCES INC	8360348	C	#1	E	0	165	No
MILLER BROS COAL, LLC	8360349	HF #3	D-20	N	0	160	Yes
CAM MINING LLC	8360355	HOLLOWFILL #1	1	N	0	315	Yes
WARRIOR COAL LLC	8545041	1	1	N	0	312	No
RED BUSH COAL, LLC	8580207	FILL 2	SS-13	N	0	125	Yes
JOHNSON-FLOYD COAL COMPANY LLC	8580218	1	SS-1	N	0	380	Yes
NALLY & HAMILTON ENTERPRISES INC	8600404	HF3	SS-13	N	0	25	Yes
NALLY & HAMILTON ENTERPRISES INC	8600404	HF4	SS-14	N	0	215	Yes
ENTERPRISE MINING COMPANY LLC	8600447	HF-2	SS-20	N	0	540	Yes
ENTERPRISE MINING COMPANY LLC	8600447	HF-4	SS-18	N	0	860	Yes
ENTERPRISE MINING COMPANY LLC	8600448	5	27	N	0	215	Yes
ICG HAZARD LLC	8600454	HF-10	10	N	0	205	Yes
ICG HAZARD LLC	8600454	HF-11	11	N	0	20	Yes
ICG HAZARD LLC	8600454	HF-7	7	N	0	20	Yes
ICG HAZARD LLC	8600454	HF-9	9	N	0	265	Yes
ICG HAZARD LLC	8600462	#4	SS 4	N	0	580	Yes
MASON COAL INC	8605265	TSS #1	1	N	0	1411	No
ICG KNOTT COUNTY LLC	8605312	FILL #1	SS 1	N	0	25	No
NALLY & HAMILTON ENTERPRISES INC	8660304	7	27	N	0	1078	Yes
CUMBERLAND RIVER COAL COMPANY	8675292	HF#1	#2	N	0	230	No
CUMBERLAND RIVER COAL COMPANY	8675292	S STOR #1	#2	N	0	401	No
SAPPHIRE COAL COMPANY	8675296	FILL 5	#5	E	0	946	No
CZAR COAL CORPORATION	8800157	T.S.#1	#1	E	0	877	Yes
LCC KENTUCKY LLC	8800172	HF-11A	SS-5	E	0	205	Yes
LCC KENTUCKY LLC	8800186	HF-3	SS#1	N	0	130	No
LCC KENTUCKY LLC	8800186	HF-6	SS#2	N	0	50	No
LCC KENTUCKY LLC	8800186	OBF1			0	0	No
CZAR COAL CORPORATION	8805139	FILL #3	#7	N	0	0	Yes
EBW ENTERPRISES, INC	8950180	HF-1	SS-1	N	0	90	No
EBW ENTERPRISES, INC	8950180	HF-2	SS-2	N	0	45	No

Table 9

PERMITTEE_NAME	PERMIT NUMBER	FILL NUMBER	POND #	POND STATUS	POND	POND	SEGMENTE
					TO MINE FT	TO FILL	
BDCC HOLDING COMPANY INC	8970445	2	1871	N	0	850	Yes
BDCC HOLDING COMPANY INC	8970445	3	1871	N	0	1365	Yes
BDCC HOLDING COMPANY INC	8970445	4	1870	N	0	345	Yes
BDCC HOLDING COMPANY INC	8970445	5	1871	N	0	25	Yes
ICG HAZARD LLC	8970446	HF-4	SS-4	N	0	125	Yes
ICG HAZARD LLC	8970456	HF 27	SS 059	N	0	170	Yes
ICG HAZARD LLC	8970456	HF 28	SS 060	N	0	95	Yes
ICG HAZARD LLC	8970456	HF 29			0	0	Yes
ICG HAZARD LLC	8970456	HF 31	SS 063	N	0	70	Yes
B & W RESOURCES INC	8970489	HF-1	2	E	0	80	Yes
B & W RESOURCES INC	8970489	HF-2	1	N	0	75	Yes
B & W RESOURCES INC	8970489	HF-3	#3	N	0	100	Yes
B & W RESOURCES INC	8970489	HF-4	#4	N	0	40	Yes
LEECO INC	8975106	HF-3	1955	N	0	285	No
LEECO INC	8975106	HF-4	1956	N	0	375	No
LEECO INC	8975106	HF-5	1956	N	0	790	No
APEX ENERGY INC	8980597	HF-18	P-8	N	0	780	Yes
APEX ENERGY INC	8980607	HF8	P-6	N	0	275	Yes
APEX ENERGY INC	8980646	HF-10	20	E	0	1216	Yes
APEX ENERGY INC	8980646	HF-10A	20	E	0	2275	Yes
APEX ENERGY INC	8980646	HF-11	20	E	0	1045	Yes
APEX ENERGY INC	8980646	HF-11A	20	E	0	1875	Yes
APEX ENERGY INC	8980814	HF-1	1	N	0	150	Yes
APEX ENERGY INC	8980814	HF-2	1	N	0	480	Yes
CLINTWOOD ELKHORN MINING COMPANY	8980815	HF1	P-1	E	0	300	No
CLINTWOOD ELKHORN MINING COMPANY	8980815	HF2	P-1	E	0	1245	No
CLINTWOOD ELKHORN MINING COMPANY	8980815	HF3	P-1	E	0	1260	No
CLINTWOOD ELKHORN MINING COMPANY	8980815	HF4	P-2	N	0	485	No
CLINTWOOD ELKHORN MINING COMPANY	8980815	HF5	P-4	N	0	40	No
VIKING MINING, LLC	8980829	HF#1	P1	E	0	712	No
LCC KENTUCKY LLC	8980844	1	1	E	0	920	Yes
LANDMARK MINING COMPANY INC	8984140	BACKFILL STOR/3		E	0	665	Yes
CLINTWOOD ELKHORN MINING COMPANY	8984150	FILL #4	3	E	0	1455	Yes
CLINTWOOD ELKHORN MINING COMPANY	8984150	FILL #5	3	E	0	555	Yes
LANDMARK MINING COMPANY INC	8984236	BF1	2	N	0	175	No
LANDMARK MINING COMPANY INC	8984236	HF-1	1	N	0	120	No
ROAD FORK DEVELOPMENT COMPANY INC	8984238	FILL 1	P-1	N	0	1382	No
ROAD FORK DEVELOPMENT COMPANY INC	8984238	FILL 2	P-1	N	0	2173	No
ROAD FORK DEVELOPMENT COMPANY INC	8984238	FILL 3	[-2	N	0	60	No
CLINTWOOD ELKHORN MINING COMPANY	8984335	HF1	2	N	0	40	No
CLINTWOOD ELKHORN MINING COMPANY	8985920	SHF-B	1A	E	0	2260	Yes
DAVENPORT COAL COMPANY, LLC	9180400	BF1	SS-1	N	0	200	No
DAVENPORT COAL COMPANY, LLC	9180400	HF1	SS-2 &	N	0	0	No
NALLY & HAMILTON ENTERPRISES INC	9180403	HF1A	SS-1A	N	0	30	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF1	P-1	N	0	130	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF2	P-2	N	0	40	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF3	P-3	N	0	100	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF4	P-4	N	0	65	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF5	P-5	N	0	75	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF6	P-6	N	0	95	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF7	P-7	N	0	75	Yes
NORTH FORK COLLIERIES, LLC	9190067	HF8	P-8	N	0	30	Yes

Table 10

MINING TYPE	COMPANY	PERMIT NUMBER	ACRES	MINE_TYPES	AOC VARIANCE	SWELLED OVERBURDEN	SWELL FACTOR	PROPOSED FILL	PROPOSED RECLAIM	NO FILLS
Surface	CHAS COAL LLC	8070352	556.1	CONTOUR, AUGER	No	5630853	0.25	562659	5068194	6
Surface	NALLY & HAMILTON ENTERPRISES INC	8070353	426.63	CONTOUR, UNDERGROUND, AUGER	No	19338031	0.18	227421	17110610	0
Surface	APPOLO FUELS INC	8070365	456.74	CONTOUR, AUGER	No	9742507	0.2	192665	9538404	1
Surface	APPOLO FUELS INC	8070368	847.36	CONTOUR, AUGER, AREA	No	45468289	0.2	10376033	35092256	1
Surface	ICG HAZARD LLC	8130323	95.6	AREA, CONTOUR, AUGER	No	3354637	0.25	1564086	1229958	1
Surface	IKERD MINING, LLC	8260588	102.6	CONTOUR	No	10969049	0.22	642948	10276613	2
Surface	ADVANCE COAL CO LLC	8320058	197.73	AREA, CONTOUR, AUGER	No	10309417	0.25	724480	9584937	5
Surface	WOLVERINE RESOURCES INC	8360348	407.45	AREA, CONTOUR, AUGER	No	79190791	0.25	22219511	53189642	3
Surface	CAM MINING LLC	8360355	647.6	AREA	No	1.48E+08	0.2	13139348	1.34E+08	1
Surface	XINERGY CORP	8480285	619.7	AREA, CONTOUR, AUGER	No	32094248	0.25	34626884	32094248	0
Surface	JOHNSON-FLOYD COAL COMPANY LLC	8580218	125.45	AREA	No	5407000	0.2	1187000	4220000	1
Surface	ICG HAZARD LLC	8600454	514.6	AREA, CONTOUR, AUGER	No	38704149	0.21	8149089	30158921	4
Surface	MARTIN COUNTY COAL CORPORATION	8800185	694.59	CONTOUR, AUGER	No	27366991	0.25	2019170	22963363	0
Surface	EBW ENTERPRISES, INC	8950180	87.51	CONTOUR, AUGER	No	3278131	0.25	806197	2679275	2
Surface	B & W RESOURCES INC	8970489	472.81	CONTOUR, AUGER, AREA	No	58436486	0.25	20110748	44343023	4
Surface	APEX ENERGY INC	8980814	281.1	CONTOUR, AUGER	No	5228882	0.25	2329251	3516771	2
Surface	CLINTWOOD ELKHORN MINING COMPANY	8980815	421.4	AREA, CONTOUR	No	42498405	0.2	17583901	30173789	5
Surface	VIKING MINING, LLC	8980829	393.19	CONTOUR, AUGER, AREA	No	5694363	0.3	946315	4700946	1
Surface	LCC KENTUCKY LLC	8980844	53.59	AREA	No	2070792	0.25	545388	1816843	1
Surface	DAVENPORT COAL COMPANY, LLC	9180400	24.9	CONTOUR, AREA	No	1056979	0.2	255472	801447	2
Surface	NORTH FORK COLLIERIES, LLC	9190067	188.7	AREA, CONTOUR	No	9472511	0.25	1826161	7696207	8
Underground	WARRIOR COAL LLC	8545041	13.4	AREA, UNDERGROUND	No	19535	0.25	19535	19535	1
Underground	MASON COAL INC	8605265	916.86	UNDERGROUND	No	1466	0.2	1470	1466	1
Underground	ICG KNOTT COUNTY LLC	8605312	1655.41	UNDERGROUND	No	31895	0.2	33288	32750	1
Underground	CUMBERLAND RIVER COAL COMPANY	8675292	1714.25	UNDERGROUND	No	233994	0.2	153681	187702	2
Underground	SAPPHIRE COAL COMPANY	8675296	872.36	UNDERGROUND	No	87376	0.35	81963	94361	1
Underground	LANDMARK MINING COMPANY INC	8984236	1015.99	UNDERGROUND	No	73059	0.15	68950	73059	2
Underground	CLINTWOOD ELKHORN MINING COMPANY	8984335	550.6	UNDERGROUND	No	1457904	0.25	55254	1402653	1