Office of Surface Mining

Twentieth Annual Evaluation Summary Report

for the

Regulatory and Abandoned Mine Land Reclamation Programs

Administered by the Commonwealth

of

Kentucky

for

Evaluation Year 2002

(October 1, 2001, to September 30, 2002)

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I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining (OSM) to oversee the implementation of and provide federal funding for state regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the approved Kentucky regulatory program and the effectiveness of the program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the period of October 1, 2001, to September 30, 2002. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSM Lexington Field Office (LFO).

This report follows the same format as in the past six years. The reporting format is a result of changes to OSM oversight policies implemented during 1996. Previously, OSM oversight procedures were very specific. The revised OSM Directive REG-8 oversight process enables OSM and 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.

The oversight process provides two national measurements of end results--the number and degree of off-site impacts resulting from mining and the number of acres meeting all reclamation requirements as documented by different phases of bond release. The revised process allows OSM to focus oversight on those aspects of the state program that both OSM and the state determine to be most important. This oversight report, in response to the Government Performance and Results Act, corresponds to the federal Fiscal Year (FY).

The following list of acronyms is 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
ARCC	Appalachian Regional Coordinating Center
BLEP	Blast Log Evaluation Program
CO	Cessation Order
COE	Corps of Engineers
DAML	Division of Abandoned Mine Lands
DMM	Department of Mines and Minerals
DSMRE	Department for Surface Mining Reclamation and Enforcement
EPA	Environmental Protection Agency
EY	Evaluation Year
FOD	Field Office Director
FY	Fiscal Year
GIS	Geographic Information System
HB	House Bill
LFO	Lexington Field Office
LTT	Long-Term Treatment
MCCC	Martin County Coal Corporation
MSHA	Mine Safety and Health Administration
NC	Notice of Non-Compliance
NOV	Notice of Violation
NWP	Nationwide Permit
OSM	Office of Surface Mining
RA	Regulatory Authority
RAM	Reclamation Advisory Memorandum
RD	Regional Director
SMCRA	Surface Mining Control and Reclamation Act of 1977
SOAP	Small Operator Assistance Program
TDN	Ten-Day Notice

II. Overview of the Kentucky Coal Mining Industry

The Regulatory Authority (RA) responsible for the regulation of coal mining on federal and non-federal lands in Kentucky is the Department for Surface Mining Reclamation and Enforcement (DSMRE) headed by Commissioner Carl Campbell. Allen Luttrell is DSMRE's Deputy Commissioner. The three divisions and chiefs in DSMRE are as follows: the Division of Field Services, Mark Thompson, Director; the Division of Permits, Larry Adams, Director; and the Division of Abandoned Mine Lands (DAML), Steve Hohmann, Director. DSMRE has five regional offices located in Madisonville, Middlesboro, Prestonsburg, Pikeville, and London.

The FY 2002 Administration and Enforcement (A&E) Grant was in the amount of $12,835,484 (federal funds) and supports 342.01 positions. OSM funds 83 positions in DAML with a grant of $16,759,600 for FY 2002. The Small Operator Assistance Program (SOAP) was awarded grant funds of $513,441 for FY 2002.

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 Small Coal Operators Advisory Council.

Kentucky has two citizen organizations that are very active in coal mining issues. They are Kentuckians for the Commonwealth, Lamar Keys, Chairperson; and the Kentucky Resources Council, Inc., Thomas FitzGerald, Director.

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 the end of this EY.

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. Two major coal provinces in Kentucky are separated by a large geologic uplift called the "Cincinnati Arch." 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. The Jackson Purchase Lignite Coalfield underlies the eight most western counties in Kentucky. This potential resource has not been assessed, and no current lignite mining is occurring.

Since 1979, coal produced from underground mines has steadily increased over coal produced from surface mines. Underground mines account for approximately two-thirds 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 (246,774 acres), only 26,140 acres (or approximately ten percent) are attributed to underground mines. A review of underground mines in Kentucky indicates the following increases in size during the last four EY's as follows:

Underground Mines Permitted Acreage	**EY 1999**	**EY 2000**	**EY 2001**	**EY 2002**
Less than 20 acres	2%	2%	1%	1%
20-99 acres	8%	7%	6%	6%
100 acres or more	90%	91%	93%	93%
Underground Mine Surface Disturbance Acreage	**EY 1999**	**EY 2000**	**EY 2001**	**EY 2002**
Less than 20 acres	72%	71%	70%	70%
20-99 acres	22%	23%	24%	24%
100 acres or more	6%	6%	6%	6%

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 steady increase in size.

Permitted Acreage	**EY 1999**	**EY 2000**	**EY 2001**	**EY 2002**
Less than 20 acres	14%	14%	13%	13%
20-99 acres	26%	25%	24%	23%
100 acres or more	60%	61%	63%	64%

The number of surface mines that are greater than 100 acres has increased significantly over the last ten 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 55 percent of the surface mines were larger than 100 acres. As of September 30, 2002, the data shows that 64 percent of the surface mines were larger than 100 acres. The following table further categorizes the number of surface mines by size.

Permitted Acreage	Number of Surface Mines		Percent of Total Surface Mines	
	EY 2001	EY 2002	EY 2001	EY 2002
100-250	255	253	19	19
250-500	262	266	20	20
500-1,000	199	203	15	15
>1,000	118	135	9	10

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

A team of LFO and DSMRE personnel was formed to develop oversight procedures and special studies for EY 2002. The EY 2002 Oversight Performance Agreement was finalized and signed by DSMRE on December 14, 2001.

During the EY, comments were received from the environmental community requesting additional oversight of blasting and flooding issues. DSMRE made blasting practices and the prevention of associated off-site impacts a top priority. OSM and DSMRE will conduct reviews dealing with both issues during EY 2003.

When SMCRA was enacted, it created many avenues for citizens' involvement. Thus, individual citizens have a statutory role in practically every phase of the surface mining program, from permit issuance to bond release and everything in between. Since SMCRA was enacted in 1977, coalfield citizens have used

those rights to help shape virtually all of the policies and programs that govern surface coal mining and reclamation in America.

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

DSMRE is maintaining an effective regulatory program for permitting, inspection, and enforcement of surface coal mining and reclamation operations.

The major accomplishments/innovations for the EY are as follows:

A. Regulatory

Kentucky continues to provide regulatory jurisdiction over coal mining and reclamation operations on federal lands within the state. A cooperative agreement approved on November 2, 1998, designates the Natural Resources and Environmental Protection Cabinet as the authority to administer the program, including permit processing and reviews, enforcement, bonding, and inspections. OSM retains authority for National Environmental Policy Act compliance, determining valid existing rights, mine plan (resources recovery) approval, and compatibility determinations within national forests.

DSMRE maintains an inventory of known Long-Term Treatment (LTT) permits with related coal bed and watershed information. The LTT policy revised the terminology of the original Acid Mine Drainage (AMD) policy requiring an expanded inventory of sites, including treatment of effluent for any chemical parameter. The inventory is updated as new information becomes available. The inventory is made available to both the Division of Permits' review staff and the Division of Field Services' inspection staff. LFO, working jointly with DSMRE, has developed and maintains a basic Geographic Information System (GIS) map of the inventory.

The Kentucky Remining Team is continuing its efforts of promoting remining by: (1) evaluating potential remining sites, (2) reducing or eliminating impediments to remining, and (3) creating new incentives.

DSMRE continues to take an active role in national OSM initiatives. DSMRE has a member on the National Blasting Work Group. Its membership provides important technical information on the mining practices and conditions in Kentucky. DSMRE and LFO have also been active participants with the Interstate Mining Compact Commission on the national remining and AMD initiatives. In addition, DSMRE is a cooperating agency on the Environmental Impact Statement on mountaintop mining and valleyfills.

The DSMRE Commissioner serves as a member of the steering committee for OSM's Technical Innovation and Professional Services program. He is also a member of the steering committee for OSM's Technical Training program. DSMRE continues to actively promote reforestation as a post-mining land use. DSMRE is a partner in the National Reforestation Initiative.

The Appalachian Clean Streams Initiative (ACSI) was developed to encourage the cleanup of streams in Appalachia polluted by AMD. Kentucky continues to support this initiative.

A major project is to mitigate AMD problems and restore the fishery potential in the lower four miles of Rock Creek, a tributary to the Big South Fork of the Cumberland River in McCreary County, Kentucky. The initial phase of a project was begun during EY 2000 and was completed at the beginning of EY 2002. This phase involved treatment of selected sections of AMD-impacted streams with limestone sand. This phase was funded by regular and ACSI Abandoned Mine Land (AML) funds, as well as funds from the federal Personal Responsibility in a Desirable Environment program and a Clean Water Action Section 319(h) non-point source management program grant from the Kentucky Division of Water. Phase II of this project began in November 2002. Phase II will include no regular or ACSI AML funding. State administration costs and construction costs will be funded from another 319(h) grant.

One other ACSI project was ongoing in western Kentucky during the EY. East Diamond Tipple is being reclaimed as a joint ACSI, AML, and remining project. The state started two new ACSI projects at the end of EY 2002. The Jacks Creek project will address AMD in the Daniel Boone National Forest. The Spewing Camp project will reclaim an 86-acre side hill coal refuse and spoil dump. Funding is provided from state AML funds, ACSI AML

funds, state forfeiture of the reclamation bond on the site, and Kentucky's supplemental reclamation fund.

On September 25, 2002, DSMRE, the Department of Mines and Minerals (DMM), and LFO conducted an off-site meeting to discuss blasting problems and strategies. Flyrock and blasting complaints had been the issue of previous meetings and was again discussed at this meeting. Kentucky will be adding dedicated blasting inspection personnel in the regional offices to improve compliance monitoring and reduce the likelihood of off-site blasting impacts.

Eight flyrock events were reported during the EY. The flyrock events include rock thrown through the air and rock that is forced off the blast site and rolls down the hillside. Three of these occurred on the same permit. For the damage caused by the flyrock, refer to the Off-Site Impacts section of this report on page 18. DSMRE has aggressively investigated the events and taken enforcement and permitting actions to minimize the potential for reoccurrences.

DSMRE has been active in enhancing its inspection and enforcement of blasting.

- During 2001, OSM provided blasting training to the DSMRE inspection staff.

- On March 27, 2002, DSMRE issued *Inspection Procedures for Blasting Issues* to the regional offices.

- On September 10, 2002, DSMRE provided *Blasting Advisory for Industry* to coal industry representatives.

- DSMRE has taken an active role in working with DMM to enhance and refine the current blasting certification training and testing program in Kentucky.

- DSMRE is participating, along with OSM, in a multi-state review of blaster certification training, reciprocity, and testing.

- DSMRE, OSM, and DMM continue to conduct joint inspections of flyrock events.

- DSMRE has, in most instances, imposed the maximum allowed civil penalties for violations involving off-site impacts related to blast events.

- DSMRE is in the process of establishing a blasting team, which will include its regional personnel. Blasting inspections will be the primary duty of the regional office personnel.

- DSMRE is providing advanced blasting training for its regional office blasting team members.

- DSMRE filed a "Show Cause" action with the Office of Administrative Hearings to revoke the permit for a permit that had three off-site impact events.

During the 2002 session, the Kentucky General Assembly passed KRS 352.480, with provisions that copies of any final or abandoned underground mine map on file with DMM could be made available to any interested party. Prior to that, Kentucky law restricted access to the maps to only affected landowners and mine operators. Although anyone could look at the maps, no one was allowed to make a copy. An interagency group of state and federal agencies, including DSMRE, DMM, and the Kentucky Revenue Cabinet, are (1) working together to identify all mine maps that can now be made available to the public, (2) compiling these maps into a data base, and (3) making this GIS system available to any interested party through an internet-based system. LFO has been working with the state on both technical and legal issues involved in this process.

DSMRE's Information Support Branch has developed a GIS data base, which can be accessed via the Internet. The GIS has over 2,000 historical mylar overlays now available as geo-referenced digital images showing the extent of permit boundaries by topographic quadrangle. The system also has over 1,200 mine and reclamation plan maps available as digital images, with over 700 geo-referenced. Other GIS data available include water-sampling data, permit locations, permit boundaries, water monitoring wells, and mine shafts.

DSMRE continues its efforts on the electronic permitting initiative. Electronic workflow processing has been implemented

throughout the Technical Review Sections and is being utilized to monitor both electronic and hard copy submittals.

DSMRE has implemented its initiative for improved technological enhancements in enforcement procedures. Field inspectors have portable computers and are using the electronic mine inspection report. The inspectors have also been supplied with digital cameras. Efforts continue to complete an electronic (paperless) document management system for inspection and enforcement. The implementation of the system will begin early in 2003.

During the EY, OSM published six final rules on the Kentucky approved program. The final rules approved five program amendments and removed four required amendments found in 30 CFR 917.16.

A summary of the program amendments is as follows:

- On December 26, 2001, OSM approved Kentucky's amendments to the bonding regulations and bond forms to incorporate language for state-held bonds for mining on federal lands.

- On February 5, 2002, OSM approved Kentucky's regulations for reclamation in lieu of civil penalties.

- On April 30, 2002, OSM approved Kentucky's statute that reaffirms, with some modifications, the circumstances under which the RA may not issue a permit, based upon ownership and control of an operation with an unabated violation.

- On May 7, 2002, OSM approved Kentucky's amended subsidence control regulations to be consistent with a federal court decision by the U.S. Court of Appeals for the District of Columbia Circuit.

- On June 17, 2002, OSM approved amendments to Kentucky's steep slope regulations. The amendment establishes special performance standards and limits the approximate original contour variance procedures for operations conducted on steep slopes.

The summary of the removal of four required amendments is as follows:

- On February 5, 2002, OSM removed a required amendment because Kentucky promulgated regulations for reclamation in lieu of civil penalties.

- On June 7, 2002, OSM removed a required amendment because Kentucky had previously modified its civil penalty regulations that are consistent with the federal program.

- On June 7, 2002, OSM removed another required amendment because on December 11, 2002, OSM deleted a requirement that states must submit ownership and control information on forms approved by OSM. Kentucky's required amendment was no longer necessary and the instruction should have been removed.

- On June 19, 2002, OSM removed a required amendment because Kentucky promulgated steep slope regulations consistent with the federal program.

Following the October 11, 2000, slurry impoundment failure at Martin County Coal Corporation (MCCC), OSM and DSMRE began a joint review of all Mine Safety and Health Administration-Class (MSHA) impoundments in Kentucky.

In EY 2002, DSMRE completed the review and field inspection of the entire inventory of coal refuse slurry impoundments and other MSHA-class impoundments. There is a total of 118 (90 coal slurry and 28 freshwater ponds) MSHA-class impoundments in Kentucky. The inspections, referred to as Phase I inspections, were led by DSMRE with assistance from OSM. The inspections included a site visit, a comprehensive review of the mine maps for any nearby underground mines, and the construction and design plans for the impoundments. Additionally, the MSHA files were reviewed to determine whether the approved MSHA designs matched the approved SMCRA permit. The approved MSHA and DSMRE design plans did not match at 15 of the impoundments. DSMRE issued enforcement actions at 12 of these impoundments, citing the company for failure to construct in accordance with the DSMRE-approved plan. The remaining three impoundments were not

cited because the actual construction had not exceeded the plan approved by DSMRE.

The Phase I inspections identified 48 impoundments with underground mining within 100 feet of the approved pool levels. DSMRE and OSM agreed that these impoundments should undergo a more intense review. These reviews, referred to as Phase II, are aimed at identifying deficiencies in design or construction and are conducted jointly by DSMRE and OSM. They consist of an examination of data gathered during Phase I and any subsequent permitting or construction activity that has occurred at the site since the initial inspection. The goal of Phase II is to identify high priority sites that may need additional action by DSMRE. At the end of EY 2002, 12 Phase II impoundment reviews were completed.

As part of what is referred to as Phase III, OSM selects seven of the Phase II sites for a detailed technical review by the OSM Regional Impoundment Technical Team. During EY 2002, the team reviewed two Kentucky impoundments as part of a pilot effort to develop review criteria that could be used to reevaluate existing high-risk impoundments. This type of technical review will be conducted on these seven selected sites during EY 2003.

Issues outstanding at the end of the EY are as follows:

- Disposal of Underground Development Waste

  It was discovered during a random oversight inspection that specific design requirements were not being required for permits involving disposal of underground development waste. The issue was determined to be programmatic. In a letter dated December 16, 1993, DSMRE advised LFO of its willingness to adopt changes to the regulation. The planned changes would be similar to those promulgated by Virginia. Kentucky projected that draft regulations would be available around April 1, 1994. During the past year, DSMRE noted that it might develop policy guidelines with respect to existing regulations relative to the disposal of underground mine waste in backfill areas in lieu of promulgating new regulations. However, no official correspondence has been received.

- Probable Hydrologic Consequences

  LFO and DSMRE have been discussing outstanding hydrology issues concerning the prediction of AMD for surface and underground mines and ground and surface water monitoring. Joint special studies were initiated during EY 2000 and are ongoing. The study should be completed during EY 2003. DSMRE is making progress in identifying and solving the hydrology issues during the permit review.

- Roads

  The permitting of public roads continues to be a difficult issue in Kentucky. The federal permitting requirements are set forth in the definition of "affected area" insofar as it excludes roads, which are included within the definition of "surface coal mining operations." To apply these definitions, judgments must be made with regard to whether roads are maintained with public funds and whether there is substantial public use. LFO and DSMRE continue to discuss the issues related to permitting of public roads.

- Surety and Bonding

  SMCRA requires that reclamation performance bonds be posted by operators prior to undertaking a surface coal mining operation. These performance bonds must be adequate enough to allow completion of reclamation by the state RA, should the mining company default. SMCRA allows mining companies to self-bond, obtain bonds from insurance carriers, or pay fees to alternative bonding systems, such as state bond pools. Insurance companies providing reclamation bonds are subject to regulation by state insurance commissioners and the U.S. Treasury Department. If these companies become insolvent, the mining companies must replace the bonds. On August 27, 2001, Kentucky's Department of Insurance suspended Frontier Insurance Company's (Frontier) Certificate of Authority to transact business in the state. At that time, there were 41 coal companies involving 468 surface coal mining permits in Kentucky with Frontier performance bonds. Total bond liability for those permits was $296,442,949. This represented approximately 35

percent of the total outstanding bond liability in Kentucky at that time.

At the beginning of the EY, Kentucky reported that the total outstanding bond liability with Frontier bonds was $270,000,000, involving 36 companies with 425 permits. During the EY, a number of companies were able to replace their Frontier bonds or receive Phase III bond releases on the majority of the permits with Frontier bonds. At the end of the EY, Kentucky reports that the total outstanding bond liability with Frontier bonds is $45,286,948, involving five companies with 84 permits. Three of the five remaining companies are in bankruptcy proceedings. On one of these companies, Kentucky was enjoined by the U.S. Bankruptcy Court for taking any action on the company to enforce the bonding requirements with regard to the Frontier bond. The total outstanding Frontier bond liability for this company is $25,726,749 and involves 57 permits. On the remaining two companies, Kentucky reports that one company is in the process of replacing its Frontier bonds. Kentucky has issued a Cessation Order (CO) to the other company for failing to replace its Frontier bonds.

Bond availability and increased costs to obtain bonds are major issues for the coal mining interests in Kentucky. The tightening of criteria for issuance of surety bonds to mining companies and the perceived reduction in the number of insurance companies willing to write reclamation bond coverage to mining companies are two of the causes.

- Kentuckians for the Commonwealth Lawsuit

  Although DSMRE and OSM are not listed as parties in this lawsuit, it does have the potential to affect the approved state program in Kentucky.

  On August 21, 2001, the Kentuckians for the Commonwealth filed a lawsuit against the U.S. Army Corps of Engineers (COE) challenging the issuance of a permit to the MCCC under Nationwide Permit (NWP) 21. Under Section 404 of the Clean Water Act, 33 U.S.C. Section 1344, the COE has issued various nationwide permits, of which NWP 21 has been issued to cover various coal mining activities that individually

and cumulatively do not cause more than minimal impacts to the waters of the U.S. The lawsuit challenges an authorization by the COE's Huntington District Office under NWP 21 for MCCC to construct excess spoil fills in various streams. DSMRE has issued permit number 880-0135 to MCCC under the approved state program in Kentucky. This state permitting action is not the subject of this litigation, but the mining authorized under this permit could be impacted by the decision on the lawsuit. On September 27, 2001, DSMRE approved the transfer of the permit to Beech Fork Processing, Inc., as the operator.

Even though the mine is in eastern Kentucky, the lawsuit was filed in the U.S. District Court in Charleston, West Virginia, because the COE office is in Huntington, West Virginia.

On May 8, 2002, U.S. District Judge Charles H. Haden II ruled to limit valleyfills. The ruling applied to all valleyfills within the jurisdiction of the COE's Huntington District. On May 13, 2002, the government asked for a stay. On June 17, 2002, the stay was denied.

On August 14, 2002, the government appealed to the 4th Circuit Court of Appeals in Richmond, Virginia. Legal briefs were filed from August through October 2002. Oral arguments were pending as of the end of the EY.

- 2000 State Legislation Lawsuit

  The Kentucky legislature passed House Bill (HB) 599 that would terminate mining violations due to the lack of site access.

  OSM did not approve sections of Kentucky HB 599 because SMCRA and the implementing regulations do not allow termination of enforcement actions due to landowner denial of access. SMCRA permits termination of an enforcement action *only* if abatement has occurred. OSM disapproved the state program amendment containing HB 599 in June 2001. A detailed background on the findings and OSM's decision can be found at 55 Federal Register 33020. In disagreement with OSM's decision, the Kentucky Coal Association filed a Complaint for Declaratory and Injunctive Relief in a

Kentucky District federal court (Case Number 01-59) based on this decision. (August 16, 2002, KCA v. Owens, Norton). On May 8, 2002, the plaintiffs filed and were granted a motion dismissing the case. The plaintiffs were satisfied by the promulgation of HB 809 during the 2002 Legislative session. HB 809 replaced HB 599. Kentucky has submitted, and OSM is evaluating, HB 809 as a program amendment.

- Fill Construction Practices

  Following several meetings to build consensus with the coal industry and the environmental community, DSMRE developed Reclamation Advisory Memorandum (RAM) Number 135, issued September 10, 2002. The purpose of the RAM was to implement revised standards for the design and construction of durable rock fills. In addition, the Division of Field Services is drafting a revised inspection and enforcement policy for durable rock fills. When completed, these policy revisions will satisfactorily address OSM's concerns with the "wing-dumping" issue. OSM and DSMRE will continue discussions on the approximate original contour policy.

- Unauthorized Fills

  On September 20, 2002, the Huntington District COE ordered Horizon Natural Resources (Horizon), formerly AEI Resources, Inc., to cease placement of fill material into waters of the U.S. on four minesites located in Pike and Martin Counties, Kentucky. Horizon had not obtained prior authorization from the COE to place the fill into the waters of the U.S. and is now unable to do so in light of the *Rivenburgh* decision. The minesites are active and 12 valleyfills are under construction. The COE determined that 11 of the valleyfills are in waters of the U.S. On September 25 and 26, 2002, DSMRE and OSM conducted joint inspections on the four minesites that the COE had cited. On September 27, DSMRE issued Non-Compliances (NC's) to the four minesites that ceased any disposal activities in those fills until approval is granted from the COE. Both the COE and DSMRE actions could cause Horizon to lay off 200 workers in both counties.

B. Abandoned Mine Land Reclamation (AMLR)

The Kentucky AMLR program is successful in achieving lasting and effective reclamation of mined lands. Construction grants continue to include high priority projects. Kentucky continues to consider high priority project selection criteria for AML emergency complaints referred to them by OSM. During the EY, Kentucky completed 26 AML projects (priorities one and two) and submitted 56 new projects for authorization to proceed. Ten of the projects will provide safe domestic water supplies for 591 residences at an estimated cost of $5.6 million.

The management of DAML continues to implement significant improvements in its program. DAML's continued support of the procedures implemented in EY 1996 and EY 1997 improved the internal control and support for change orders, as recommended in the previous audit of the state AMLR program. Kentucky fully supports the direct access to the AML Inventory System (AMLIS) that allows DAML to electronically input AML problem data. DAML has been directly updating the AMLIS since the fall of 1995.

DAML also administers the reclamation of Title V permits in bond forfeitures using forfeited reclamation bonds. DAML continues to improve its effort in reclaiming forfeited permits. During EY 2002, DAML issued 14 new group contracts containing 53 permits with a total of 461 acres. In addition, DAML continued reclamation activities on six group contracts containing 18 permits with 115 acres from the previous EY. DAML completed reclamation on 12 group contracts containing 45 permits with 429 acres and nine small purchase contracts consisting of ten permits with 22.23 acres. At the end of EY 2002, eight group contracts containing 26 permits with 145 acres were ongoing. Information in Table 7 shows that DAML reclaimed a total of 146.29 acres on permanent program sites during the EY.

During this EY, OSM investigated 224 emergency complaints. OSM referred 107 complaints to the state when the site conditions did not meet federal emergency criteria during the preliminary investigation. OSM evaluated 117 complaints for declaration as federal emergency projects. Sixty-four of these complaints were declared federal emergency projects. Eleven complaints are still under OSM review as of the writing of this report. The remaining 42 did not meet federal emergency criteria and were

referred to the state for consideration under its non-emergency AML program.

Overall, the Kentucky program is effectively administered. DSMRE maintains a strong commitment to protect the environment and citizens of the coalfields while regulating and encouraging a viable coal industry. OSM expects to maintain an excellent working relationship with DSMRE and looks forward to a continued joint commitment to improve the Kentucky program.

V. Success in Achieving the Purposes of SMCRA as Measured by the Number of Observed Off-Site Impacts and the Number of Acres Meeting the Performance Standards at the Time of Bond Release

A. Off-Site Impacts

During the EY, DSMRE issued 889 NC's. These NC's cited 1,348 performance standards. The most frequently cited violation type was general permit provisions, followed by bond replacement for Frontier bonds. A breakdown by type of performance standards based on the 50 state category types presented as a percentage is as follows:

Percentage of Total Performance Standards Cited in EY 2002

General Provision/ Other	Sediment Control	Backfilling & Grading and Contemporaneous Reclamation	Water Quality	Effluent Limits	Water Moni-toring	Remaining 43 Categories
22.2	19.2	10.8	9.4	6.1	4.7	27.6

A total of 118 CO's was issued by DSMRE (98 Failure-to-Abate CO's and 20 Imminent Harm CO's).

For this EY, Kentucky issued 132 NC's and 17 CO's that contained off-site impacts. The 149 enforcement actions resulted in 236 performance standard violations with 269 measurable off-site impacts. The determination of off-site impacts was based on DSMRE's documentation and LFO's review of all inspection reports associated with state enforcement actions. The review of the Inspector's Violation Statement prepared for the penalty

assessment was the primary resource document. Out of the 236 violations with off-site impacts, 269 different impacts were identified, as shown on Table 4.

The 149 enforcement actions involved 100 permits with off-site impacts. This represents approximately five percent of the minesites in Kentucky. The three most common types of off-site impacts are hydrology (45 percent), encroachment into prohibited areas (15 percent), and blasting (10 percent). From the data collected, the total impacts assessed from coal mining operations for the EY included 47.3 miles of streams, 334.7 acres of land, 15 wells, and five homes. The majority of impacts were minor. However, as indicated, the largest impacts were associated with only a few permits.

The findings for off-site impacts indicate that approximately 60 percent of the measured incidents involved land and 33 percent involved water. Also, 72 percent of the incidents were minor, 18 percent were moderate, and 10 percent were major.

Flyrock, which includes rock thrown through the air and rock that is forced off the blast site and rolls down the hill, is a major off-site concern in Kentucky. During the EY, eight flyrock incidents occurred. Four of these cases highlight the potential impact to the public. In one case, the material from the blast knocked down a utility pole causing approximately 50 homes to be without electricity for eight hours. In another serious case, flyrock landed in the front yard of a home while a father and his 18-month old child were sitting on the porch. In the third case, rock from a blast rolled through a mobile home and came to rest in a road ditch. Eight families were evacuated from their homes, and the public road was blocked until the minesite was properly stabilized. In the last flyrock case of this EY, three homes and a state highway were hit with flyrock. In the other four cases, rocks hit adjacent to the permit. However, there were no known impacts to the public.

B. Bond Release

The goal of reclamation is to reclaim land disturbed by a surface coal mining operation to a stable condition, 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, topsoiled, 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 that the reclaimed area must successfully meet all surface coal mining and reclamation standards in accordance with the approved reclamation plan, that the reclaimed land must be capable of supporting the approved post-mining land use requirements, and that the applicable liability period must have expired.

In Table 5, Annual State Mining and Reclamation Results, OSM reports that DSMRE granted bond releases on 12,977.30 acres for Phase I reclamation, 4,207.30 acres for Phase II reclamation, and 14,464.70 acres for Phase III reclamation. OSM's review of these minesites through 75 joint inspections on Phase I and Phase III bond releases found that the state is meeting the requirements of its bond release program on permanent program permits.

VI. OSM Assistance

Table 9, Funds Granted to Kentucky by OSM, identified federal funds awarded during FY 2002. The AML program received $16,759,600, which is 100 percent of the total program cost. SOAP, which is also 100 percent federally funded, received $513,441. The A&E grant, which funds the regulatory program, was for $12,835,484. The regulatory program is 50 percent federally funded, except for the $856,113 that Kentucky receives to administer the Federal Lands program. The Federal Lands program is 100 percent federally funded and is included in the A&E grant.

OSM is committed to provide adequate funding and technical assistance to the Kentucky program. Technical training courses are available to DSMRE upon request. Regional and LFO technical staff are also available to provide support to the Kentucky program.

VII. General Oversight Topic Reviews

During EY 2002, LFO completed 455 oversight-related inspections and nine permit reviews. Of this total, 193 were random sample inspections, and 38 were Phase III bond release inspections conducted jointly with DSMRE personnel. A total of 58 field inspections and 56 permit reviews resulted from special studies outlined in the EY 2002 Performance Agreement. The remaining 110 inspections were follow-up inspections completed by LFO resulting from the issuance of Ten-Day Notices (TDN), citizen complaints, and federal enforcement actions.

LFO issued 57 TDN's during the EY. These 57 TDN's contained 132 alleged violations. All TDN's were the result of citizen complaints. At the close of the EY, 40 TDN's were pending the Field Office Director's (FOD) decision on the appropriateness of DSMRE's response. Ten of these pending TDN's were from previous EY's.

During the EY, three citizens requested that the Appalachian Regional Coordinating Center's (ARCC) Regional Director (RD) informally review an FOD decision on their citizen complaint. One involved failure to repair subsidence damage and one involved blasting. The other case involved a citizen's allegation that an imminent danger/harm CO should have been issued instead of a TDN. The RD upheld the FOD's decision in all three cases.

During the EY, the FOD judged two of DSMRE's TDN responses inappropriate. One of these TDN's concerned a citizen's allegation that seepage from an underground mine caused a landslide on their property. DSMRE determined that they had no regulatory jurisdiction since they had released the reclamation performance bond. LFO determined that jurisdiction had not been terminated since the condition causing the violation existed at the time of bond release. DSMRE appealed this determination to ARCC's RD. The RD upheld the FOD's determination. A federal Notice of Violation (NOV) was issued for the violation. As a result, the landslide was reclaimed and the violation was terminated.

The other DSMRE TDN inappropriate response concerned a citizen's allegation that a company had exceeded the DSMRE approved permitted pool elevation in a slurry impoundment. DSMRE had

taken enforcement action for this violation, but was enjoined by the local circuit court from requiring the company to reduce the slurry elevation to the permitted level. The FOD determined that the circuit court action did not constitute good cause for failure to take action. A federal NOV was issued requiring the company to decrease the pool elevation to the DSMRE approved level. The company filed for administrative review and requested temporary relief from LFO remedial measures. The case was ultimately settled. The company provided additional technical information that allowed DSMRE to issue a permit revision increasing the slurry elevation. The NOV was terminated upon issuance of the DSMRE permitting action.

LFO conducted 80 oversight inspections on state AMLR projects in accordance with the EY 2001 Oversight Performance Agreement as follows:

14 pre-authorization inspections
10 pre-construction inspections
31 active construction inspections
17 final construction inspections
8 post-construction inspections
0 citizen complaint inspections concerning a state AML project

OSM identified two concerns during inspections of two projects. Both of the concerns were satisfactorily resolved with the state. Both were site-specific and construction-oriented in nature, with no programmatic concerns identified.

Several special oversight studies were initiated this EY, but were not completed due to the complex nature of the studies and/or the workload of the staff involved. The studies include:

- LTT (Long-Term Treatment Sites - Low Flow)
- Contemporaneous Reclamation
- Topsoil Substitution
- Slurry Impoundments - Phase II - moderate/high breakthrough potential
- Longwall Mining
- Slurry Impoundment - Phase III - Stone Mining and Rob Fork Impoundments

- Probable Hydrologic Consequences/Cumulative Hydrologic Impact Assessment--Post-Mortem of Nine Underground Mines

The following oversight studies were completed during the EY.

A. Phase I Bond Release Inspections

This study includes 37 Phase I bond-released minesites that were inspected as part of OSM's random oversight inspection program. OSM inspections on these minesites were to determine if all applicable bond release standards were met at the time the Phase I bond release was granted by Kentucky. OSM found that Kentucky is meeting its requirements for Phase I bond release on permanent program permits.

B. Phase III Bond Release Inspections

This study reviewed 38 Phase III bond release applications. OSM inspections on these Phase III bond release applications were conducted jointly with the Kentucky inspector and the bond release specialist. OSM found that Kentucky is meeting its requirements for Phase III bond release on permanent program permits.

C. Fill Inventory

OSM conducted 256 file reviews on permitting actions issued by Kentucky for calendar year 2001. The file review collected pertinent fill and watershed information on 289 proposed excess spoil fills. See Appendix E for the review findings.

D. Acid Mine Drainage

On June 5, 2002, Kentucky issued a revised LTT policy that superseded its original AMD policy issued December 11, 1997. The revised LTT policy included new definitions and terminology. The revised policy includes improved procedures on inspection, permitting, bonding, and other program areas. Since the issuance of its original AMD policy, Kentucky has made significant progress in addressing AMD issues.

Prior to implementing the 1997 AMD policy, Kentucky began efforts to develop an inventory of all known minesites that historically or currently have an AMD discharge. From that

effort, Kentucky now maintains two inventories of LTT minesites. The first inventory is known as the Historical Inventory. It includes all minesites that have or have had some sort of LTT discharge since primacy. This inventory presently includes 195 permits varying in status from active to bond-forfeited. From the Historical Inventory, Kentucky developed a second inventory known as the Active Inventory. This inventory includes minesites that have or have had an active AMD discharge during the past 12 months. Minesites remain on this list until 12 months of water sampling show that there is no longer an LTT discharge. At present, there are 74 minesites on the Active Inventory. Both inventories are updated as new information becomes available.

As part of the policy requirements, Kentucky required permit revisions on minesites with active LTT discharges. At present, performance bonds have been increased by Kentucky on 14 minesites identified on the active LTT inventory as long-term treatment sites.

During the EY, LFO conducted inspections on the 14 minesites identified as long-term treatment sites. The purpose of these inspections was to take water samples of the LTT discharge during high flow periods. LFO will also take water samples during low flow periods later this year. The results of the sampling efforts will be incorporated into the ARCC AMD data base.

During the EY, LFO conducted four follow-up inspections on LTT sites removed from Kentucky's Active Inventory. The purpose of these inspections was to verify that the sites no longer produce LTT. In addition, a Geographic Positioning System unit was used to locate each site. OSM found that each minesite was properly removed from the Active Inventory.

E. Bond Forfeiture

During the EY, LFO conducted a review on the number of bond forfeitures awaiting reclamation by DAML. This review was a follow-up to a 1997 review that identified several issues with forfeited minesites. The review found that DAML has made progress in addressing these issues and reducing the number of bond forfeitures awaiting reclamation.

F. Random Sample

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 193 random complete inspections for a general assessment of Kentucky's program. The random sample was based on active and Phase I bond release 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.

OSM found that 148 of the 193 (77 percent) minesites in Kentucky were in full compliance with all performance standard categories. On the other 45 sites, 83 violations were observed. The performance standards most often in non-compliance were hydrologic balance, backfilling and grading, and permit administration. OSM inspectors evaluated the seriousness of violations on random complete inspections. The data for the 83 violations shows that 74 percent of all the violations did not have an off-site impact, and 26 percent extend outside the permit area. In addition, 36 percent of the violations are minor and 64 percent had a moderate degree of impact. For all 83 violations identified during complete inspections, the state took appropriate action in all cases.

During the EY, OSM's analysis identified that DSMRE had an increase in written violations. An analysis of the enforcement actions identified two major causes for the increased enforcement actions. First, in December 2001, DSMRE wrote 255 violations to correct bonding problems related to Frontier's surety failure. The second major increase was in backfilling and grading/contemporaneous reclamation violations.

G. Blast Log Evaluation Program (BLEP)

This review covered all the surface coal mine blasts in western Kentucky from January 1 through March 30, 2001. The data for 618 blasts at ten mines was entered into the BLEP and analyzed.

The review identified numerous problems with the quality and completeness of the blasting records. DSMRE took enforcement action to correct most of these problems. With regard to ground

and airblast vibration compliance, the review found that only eight blasts exceeded the ground vibration compliance limit. These occurred at one mine, which used the scaled distance method. DSMRE issued a notice of noncompliance to address the violation. The review also identified potential problems with seismograph monitoring conducted by the permittee. The monitoring problems, if continued, could make it difficult to detect ground vibration violations.

H. AML Change Orders

This study consisted of a review of change orders that resulted in increased project costs involving contracts on AML problems. The study determined that DAML's procedures are sufficient to satisfy future state AML program audits and provide adequate internal.

I. Temporary Cessation

The temporary cessation study focused on underground operations that had been in temporary cessation status (02) for extended periods of time. Kentucky's Surface Mining Information System identifies sites in temporary cessation with an 02 status code. The study was conducted in two phases. Phase I evaluated 399 permits that were in 02 status as of March 31, 1999. Phase II re-evaluated 444 permits that were in 02 status during the 1995 Temporary Cessation special oversight study (1995 study). A total of 24 permit reviews and joint field inspections was completed by OSM and DSMRE.

DSMRE expends a significant amount of personnel resources conducting quarterly inspections of minesites in 02 status. Procedures for determining and maintaining adequate bond are working. Performance bonds were adequate to complete the required reclamation. DSMRE reclamation inspectors are doing a good job maintaining site compliance. Violations observed during the joint inspections were properly cited.

DSMRE's efforts since the 1995 study have resulted in a substantial number of complete and partial bond releases. However, 117 sites have remained in 02 status since the 1995 study. No progress has been made to either re-activate or reclaim these sites. The approved state and federal regulations

do not limit the length of time a permit may remain in a temporary cessation status.

Subsequent to the joint OSM/DSMRE study and informal discussions with DMM, DSMRE implemented a new a Temporary Cessation review procedure for the evaluation of requests by permittees. This procedure is being utilized for the evaluation of Temporary Cessation requests and has already resulted in the initiation of reclamation activities on a number of permits previously in Temporary Cessation status. Following completion of the study, five underground permits were refused temporary cessation status and subsequently cited for non-contemporaneous reclamation and ordered to begin backfilling and grading of portal highwalls.

J. Preparation Plants

This study was to locate the coal preparation plants in Kentucky. The preparation plants were then associated with the 117 MSHA-class impoundments under review by OSM. The status of the 100 plants includes: 70 active, 20 inactive, 2 intermittent, 6 abandoned, and 2 removed. The method of slurry disposal other than impoundment includes: 7 slurry cells, 2 filter presses, and 2 underground injections.

K. Slurry Impoundments - Phase I

This study involved the inspection of 118 (90 coal slurry and 28 fresh water ponds) MSHA-class impoundments in Kentucky. The inspections involved an in-depth review of impoundments rated as "high-breakthrough potential" by MSHA. A number of enforcement and permitting actions were taken by DSMRE as a result of these inspections. DSMRE cited six slurry impoundment permits that had been inactive for a long period of time. The enforcement actions will require reclamation of these impoundments.

L. Report on October 2000 Breakthrough at the Big Branch Slurry Impoundment

On March 4, 2002, LFO released its report on the breakthrough at MCCC's coal slurry impoundment. LFO, with the assistance of ARCC, conducted the review in accordance with its oversight responsibility. An estimated 306 million gallons of coal slurry drained into the adjacent underground mine. LFO estimated that 80 percent of that slurry discharged to the surface and impacted

over 75 miles of stream and public water supplies. The review found that MCCC did not fully assess the breakthrough potential in its 1994 plan, did not fully comply with the requirements of the plan, and did not analyze and report an increase of mine drainage that forewarned the breakthrough. The review was not able to determine whether the 1994 plan, had it been followed, would have prevented the breakthrough.

M. Inspection Frequency

DSMRE 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 minesites, except Phase I or Phase II bond release sites. Those sites in the bond release process or in temporary cessation require the state to conduct one complete inspection per quarter. DSMRE reported the following number of inspections.

Coal Mines and Facilities	Number of Complete Inspections	Number of Partial Inspections
Active	8,882	16,503
Inactive	401	280
Abandoned	63	32
TOTAL	9,346	16,815

Inspectable Unit Information

Total Number of Permits Requiring Inspections 2,069

Total Number of Permits Meeting Frequency 2,000

Percentage of Permits Meeting Frequency 96.7

From the information provided, Kentucky's inspectors conducted 26,161 inspections and met inspection frequency on 96.7 percent of the inspectable units.

This indicates DSMRE's continued high commitment to meet the inspection frequency.

Copies of individual topic reviews may be requested in writing to the following address:

Office of Surface Mining
Lexington Field Office
2675 Regency Road
Lexington, Kentucky 40503-2922