

APPENDIX 1

**OFFICE OF SURFACE MINING
PRESS RELEASE AND ACTION PLAN
AND
APPALACHIAN REGIONAL COORDINATING CENTER IMPLEMENTATION PLAN**

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OSM NEWS

U. S. Department of the Interior

Office of Surface Mining

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OSM ANNOUNCES OVERSIGHT INITIATIVE ON COAL MINE IMPOUNDMENT CONCERNS

Kathrine L. Henry, Acting Director of the Interior Department's Office of Surface Mining Reclamation and Enforcement (OSM), today announced an initiative to address coal mine impoundment concerns throughout the Appalachian region.

Based in part on the recent coal slurry breakthrough into underground mine works at the Martin County Coal operation near Inez, Kentucky, the effort will include an assessment of the potential for impounded water, slurry, or other materials to drain in an uncontrolled manner into adjacent underground mines across the region.

According to Henry, personnel from OSM's Lexington Field Office and other OSM engineers and technical staff from around the country are providing technical assistance to the investigation of the Martin County Mine breakthrough, and are working with state and federal agencies to monitor the situation and the remedial actions being taken in response to the incident.

In addition to the efforts on-going in Kentucky, OSM will take actions in all states to prevent further impoundment breakthroughs. "OSM will work with the states to evaluate appropriate actions for assuring that impoundment breakthroughs into underground mines do not occur in the future," Henry said. "The experience and data that the states and OSM possess provide a basis for a thorough and consistent approach to re-evaluate the safety of all impoundments near underlying or adjacent mine workings," she added. "OSM will coordinate with the Mine Safety and Health Administration (MSHA) and the states to determine priorities for technical review and minimize duplication of effort."

Henry said that OSM and the states will begin the evaluation immediately and will address the full extent of impoundment issues, including:

--assuring that state program requirements for impoundments over underground mine works are being effectively implemented;

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--assuring maintenance of an inventory of existing permitted impoundments, and the identification of those known to be within 500 feet of underground mines;

--assessment of the potential threat and impact on downstream life, property, and environment of an impoundment breakthrough that would result in an underground mine discharge to the surface;

--and assessment of technical procedures used to approve surface mining activities within 500 feet of underground mine works.

As planned reviews are concluded, OSM, working with the states and MSHA, will consider whether existing regulations and engineering practices may need revision to ensure protection of public health, safety, and the environment.

For more information please contact Allen D. Klein, Director, Appalachian Region at 412-937-2828, or George Miller, Director, Knoxville Field Office at 865-545-4103 extension 186.

Editor's Note:

Attachment: "OSM Action Plan to Prevent Impoundment Leaks into Underground Mines"

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Office of Surface Mining (OSM) Action Plan to Prevent Impoundment Leaks into Underground Mines

As a result of four major occurrences since 1996, three in Virginia, and the latest in Martin County, Kentucky, OSM is initiating an oversight effort to assure that impoundment breakthroughs into underground mine works do not occur in the future. This initiative will assess and mitigate the potential for impounded water, slurry, water treatment sludge, coal combustion byproducts or other materials to drain in an uncontrolled manner into subjacent or adjacent underground mines.

Background: OSM, working with the State of Virginia during 1997, developed draft guidelines to provide a basic framework for RAs to use for independent and timely reviews of structures. The Virginia Division of Mined Land Reclamation (VADMLR) developed a checklist incorporating elements of the guidelines and evaluated 24 impoundments. Permit revisions and remedial work were required where high potential for leaks was evident. OSM also provided technical assistance to VADMLR in the review of these remedial plans. OSM provided the guidelines used in Virginia to Appalachian Region states. Moreover, OSM provided to all states the December 1, 1997, MSHA Procedure Instruction Letter (PIL) for classification of leak potential and subsequent impacts which was issued as a result MSHA's initiative to classify the breakthrough potential of impoundments since the 1996 incidents in Virginia. Other RAs may have initiated various other types of reviews for which procedures may be available for consideration. This accumulated data and experience will be used for re-evaluating the safety of all impoundments associated with underlying or adjacent mine workings.

Planned Actions

OSM will take the following actions in Federal program states as well as primacy states. In primacy states, OSM will work through oversight and technical assistance to address the following topics:

- 1) OSM will coordinate with MSHA and the RAs to determine priorities for technical review and minimize duplication of effort.
- 2) OSM will assure the maintenance of an inventory of existing permitted impoundments containing 20 acre-feet or more of storage, and the identification of those known to be within 500 feet of underground mines. OSM will issue basic guidelines to assist RAs in completing this initiative, i.e., reviewing existing and proposed impoundments for breakthrough potential and catastrophic discharge potential.
- 3) OSM will evaluate the implementation of State program requirements for design, construction, and operation of impoundments to ensure the approved state program is no less effective than the Federal regulations.
- 4) OSM will assess the procedures used by RAs for the requisite approval of surface mining activities within 500 feet of underground mine works (per state analogs to 30 CFR 816.79) and for the evaluation of the foundation of disposal facilities (per state analogs to

30 CFR 816.81(d)). OSM will also assess the potential threat and impact on the downstream life, property, and environment that exist from an impoundment breakthrough. The oversight of RA review and approval of impoundments will determine whether independent technical reviews were completed to fulfill SMCRA responsibilities, and the degree to which the RA relied on MSHA evaluations and approvals of the impoundment. A collaborative effort will be conducted to review the various guidelines, PILs, checklists, and to expand them as necessary to provide more-detailed information on what should be included/considered in assessing breakthrough potential as well as remedial measures which may be taken to prevent breakthroughs. In cases where the potential for failure exists, the RA may require permit revisions and remedial actions. Examples of technical reviews include: evaluating methods to verify the extent of mine workings through drilling, geophysical, mapping or other techniques; evaluating the types of analyses that are useful in assessing the permeability and effectiveness of seals and barriers; evaluating methods to determine mine roof, floor, pillar, and outcrop stability; evaluating the effectiveness of using Surface Deformation Prediction System (SDPS) analyses; and evaluating the benefit of considering hydrostatic pressure on subsidence or natural fractures connecting the mine and surface.

5) OSM will establish the adequacy of information used by the RA in making engineering judgments on the impoundment foundation (e.g., existence and accuracy of maps of underground works, etc.). If disposal facility foundation characterization and breakthrough potential reviews have not been routinely conducted as a part of the permitting process, RAs should undertake review initiatives as soon as possible. The RAs should draw on the expertise of other states, MSHA, and OSM to ensure that impoundments do not present a hazard to the health and safety of the general public and the environment, as well as to the coal miners.

This approach will ensure the development of specific permit information requirements and evaluation procedures that companies must address for all states where underground workings are near proposed impoundments.

Rulemaking Review Actions

An OSM committee has been working to develop revised regulations for impoundments which would ensure advance planning and notification of the public and proper response authorities in the event of an incident involving the impoundment. The regulations under development will be evaluated to ensure that impoundment breakthroughs into underground works are adequately addressed.

Based on the findings of the planned reviews described above, OSM, working with the states and MSHA, will consider whether the existing regulatory framework and best engineering practices may need revision to ensure protection of public health and safety and the environment. This effort may include the development of rules for additional sealing and plugging of areas where underground works may exist, for impermeable liners along coal seams and other strata to be inundated by the impoundment to prevent possible infiltration, and other new practices to minimize the potential for impoundment breakthroughs into underground works.

PREVENTION OF IMPOUNDMENT LEAKS INTO UNDERGROUND MINES ARCC IMPLEMENTATION PLAN

As a result of four major occurrences since 1996, three in Virginia, and the latest in Martin County, Kentucky, OSM developed an action plan for initiating an effort to assure that impoundment breakthroughs into underground mine works do not occur in the future. To accomplish the objectives spelled out in the OSM action plan the Appalachian Region has established specific tasks focused on identification of high risk impoundments, technical re-evaluation of these structures, correction of identified problems, and oversight of the state programs to ensure that SMCRA requirements related to impoundments are being fully met. These tasks will be accomplished with a maximum level of coordination among the Region's Field Offices, states, and MSHA, in order to ensure consistency and to minimize duplication of effort to the extent possible.

TASK 1. Establish a Regional impoundment technical committee to determine the factors contributing to the Martin County impoundment breakthrough.

TASK 2. Expand the technical committee to include state and MSHA technical representatives. The expanded committee, using their combined expertise along with information gained from the Kentucky and Virginia experiences will:

- Develop criteria that should be considered in reevaluating existing high-risk impoundments over or adjacent to underground mine works.

TASK 3. Develop and implement individual Field Office work plans designed to minimize the potential for future impoundment leaks or breakthroughs into underground mine workings. Each work plan will address the following:

- *Oversight*
 - Evaluate the state program to determine if state requirements for regulating impoundments are as stringent as those in the Federal regulations at 30 CFR.
 - Evaluate the state's implementation of its program requirements for reviewing and approving coal related impoundments meeting the inventory criteria, including MSHA coordination.
 - Implement corrective action to resolve any deficiencies that are identified in the state program or its implementation.

- ***Evaluation of Existing Impoundments***
 - Ensure the completion of a state inventory that, at a minimum, includes those coal related impoundments that are 20 acre feet in size and within 500 feet of any underground mine workings.
 - Work with the state to prioritize those sites from the inventory in order to ensure the earliest possible review of those impoundments that pose the highest risk.
 - Ensure effective state RA technical reviews of the approved permits for those impoundments identified in the inventory that may pose a threat to health, safety, or environment. Technical reviews should consider the criteria developed by the technical committee in Task 2. The Field Offices will coordinate any requests for technical assistance received from the states.
 - Ensure that appropriate corrective actions are taken where 1/19/01 deficiencies in specific permits are identified during the technical review.

General Schedule: Task 1 was initiated on October 16, 2000, and the committee is continuing its efforts to identify factors contributing to the Martin County failure. The committee will now add Task 2 to their objective. All field offices have drafted their work plans and are initiating discussions with their respective states. Work has also begun on inventories in each state. Oversight efforts associated with Task 3 will begin as soon as discussions with states are concluded and work plans are finalized. Technical reviews of high-risk impoundments should begin once the technical committee develops criteria that should be considered in those reviews. A more specific timetable for all implementation activities will be developed as state specific work plans are finalized.