TO: All persons concerned with strip mining for coal and surface effects of underground coal mining in Kentucky

FROM: Gene Brandenburg, Commissioner
Bureau of Surface Mining Reclamation and Enforcement

DATE: May 19, 1978

SUBJECT: * Status report on federal and state regulations
* Status report on the surface effects of underground coal mining
* Advisory report on enforcement and permitting policies of this Bureau

The situation on the federal level is changing faster than we can get the word out. As a result, confusion and rumors abound as to exactly what federal and state regulatory procedures are in force. This memorandum is intended to set the record straight on several key questions.

Federal and state regulations in effect

Both the federal and state regulatory programs are now in force. Rulings of the United States District Court for the District of Columbia made some significant changes in the federal regulations, and delayed the beginning of enforcement by OSM from May 3, 1978 until 6:00 p.m., Friday, May 5, 1978. Governor Carroll ordered similar changes in Kentucky's regulations and a similar delay in enforcement by this Bureau until 6:00 p.m., May 5, 1978.

Effect of court rulings

As we now understand it, the court's ruling of May 3, 1978 changed the federal regulations in this manner:

(1) Sedimentation ponds, hollow fills, access and haul roads and other facilities existing on May 3, 1978 are not required to be reconstructed to meet the technical design and construction criteria (sediment pond capacities, grade restrictions on roads, rock drains in hollow fills, etc.) of the
federal regulations if the existing facilities meet the performance standards (pH, iron, manganese, suspended solids effluent limitations for sediment pond discharges; prohibition of excessive erosion from roads; prohibition against pollution of groundwater; etc.). However, existing facilities are required to meet the performance standards, and reconstruction of existing facilities may be required if it is the most feasible way to cause the facilities to meet the performance standards. This is the most significant change in the federal regulations, and addresses the problem which has given operators great concern.

(2) The water quality standards and effluent limitations in the federal regulations are made consistent with those of the NPDES program of the U.S. Environmental Protection Agency. If an operator meets the effluent limitations and the monitoring and reporting requirements of his NPDES permit, he will generally meet the OSM effluent limitations, monitoring and reporting requirements. However, OSM may apply these requirements over a greater period of time (throughout the revegetation period) or over a greater area (the entire permit area) than in the NPDES program. The result is that more monitoring may be required by OSM than by EPA, but the monitoring process would be the same.

(3) Sedimentation ponds are required by 30 CFR 715.17(a) and 717.17(a). However, the sedimentation pond design criteria in 30 CFR 715.17(e) and 717.17(e) will not be enforced by OSM until they are adopted as final regulations.

(4) The design standards on coal waste dams will apply only to dam embankments which are constructed of coal waste, and will not apply to earth, rock or concrete dams or embankments which merely impound waste behind them.

(5) Prime farmland requirements will in no way apply to permits issued prior to August 3, 1977.

State regulations consistent with federal regulations

Similar changes were made in our state regulations. Kentucky regulations, including all the environmental protection performance standards and design and construction requirements of the federal regulations as modified by the court's ruling, were made effective May 3, 1978 as emergency regulations by Executive Order of Governor Carroll pursuant to his emergency powers under KRS 13.085(2). As stated above, the Governor delayed enforcement of the new rules until 6:00 p.m., May 5, 1978. The emergency regulations will be in force for 120 days from May 3, 1978.

The water quality standards and monitoring requirements of 30 CFR 715.17(a) and (b) and 717.17(a) and (b) and the sediment control measures of 30 CFR 715.17(e) and 717.17(e) of the federal regulations were not included in our emergency regulations because of their uncertain legal status as a result of the court's ruling. Instead, we retained the water quality standards (402 KAR 1:055) and sediment pond standards (402 KAR 1:060) of our old regulations.
Also on May 3, 1978, the department filed with the Kentucky Legislative Research Commission, proposed regulations including all the performance standards and design requirements of the federal regulations, including intact those which were otherwise modified by the ruling of the court that same day. A public hearing on these proposed regulations will be held at 10:00 a.m., June 15-16, 1978, in the auditorium of the State Office Building (Department of Transportation Building) on Holmes Street in Frankfort, Kentucky. I encourage you to review the proposed regulations carefully and submit written comments to me so they can be properly placed in the official record. Your attendance and participation at the hearing are also encouraged. Depending upon comments received before, during, and within fifteen (15) days after the hearing, and depending upon any other court actions which may affect the federal regulations, our proposed regulations will be revised and adopted as final regulations (for the initial regulatory program) pending approval by the Kentucky Legislative Research Commission. We will be required to adopt still another, and much more complex set of regulations before we can apply for state primacy (exclusive jurisdiction) under the federal law. We cannot apply for primacy until at least mid-1979.

Enforcement and permitting by this Bureau

Surface operations of underground coal mining are now covered by the new regulations. All new underground mines after May 3, 1978, must obtain permits from this Bureau prior to beginning surface operations. The permitting procedures for surface operations of new underground mines are the same as for strip mines. (Permit and acreage fees for strip and underground mines are $150 plus $35/acre until June 17, 1978, when they increase to $250 plus $50/acre). Because of the time required for operators to assemble the necessary permit paperwork and bond coverage, underground mines existing on May 3, 1978 will be allowed until August 3, 1978 to apply for permits. Additionally, an abbreviated application form is being prepared for use by existing underground mines.

* Please take note. Even though existing underground mines will be allowed until August 3, 1978 to apply for permits, the regulations and performance standards apply now, as of May 3, 1978. Inspections will be made and appropriate enforcement actions will be taken for violations of the performance standards.

All strip mines are now covered by the new regulations. Inspections will be made and appropriate enforcement actions will be taken for violations of the performance standards. Qualified small operators are exempt from most of the performance standards, but must comply with the ban against placing spoil or other materials on the slope below the mining cut.
Sedimentation ponds and other structures which have not yet been built but for which permits were issued prior to May 3, 1978, are subject to the new performance standards and should be redesigned and built to meet the new design standards, unless the permittee makes a positive showing that the originally approved design or an alternate design is sufficient to reasonably insure that the structure will meet the performance standards (in particular, the water quality standards). Existing facilities which meet the performance standards need not be reconstructed to meet design and construction standards. Existing facilities which do not meet the performance standards must be reconstructed if reconstruction is the most feasible way to insure that the performance standards are met.

Blasting

Under an agreement between this department and the Department of Mines and Minerals, principal field inspection responsibility for the state blasting performance standards rests with that department's Division of Explosives and Blasting. When citations are issued for violations of the blasting regulations, DNREP will conduct the hearings or other formal enforcement procedures.

Joint federal and state inspections

While the OSM field program is gearing up, federal inspectors will sometimes make joint inspections with our personnel. This should help eliminate some of the confusion which can result from a dual inspection program. Federal and state inspectors should be able to agree on whether an operation is in compliance, since the federal and state regulations are essentially the same. If differences of opinion exist, we will do our best to settle them at the site rather than through written correspondence.

I hope this memorandum has helped clarify the current status of the federal and state regulatory program and our enforcement policies. When interpretations, rulings, policy decisions or other actions take place which may affect you, we will advise you as soon as possible by letter, memorandum or press release. We will make every attempt to keep you as well informed as possible. When you have questions, comments, or complaints, please do not hesitate to write, telephone or visit this office and our Area offices.

May 3, 1978 genuinely represents the beginning of a new period in the history of coal mining in the United States. The first few years will be frustrating to us all, but I believe it can be a period in which prosperity of the coal industry and protection of the environment can both be realized. If the industry, the regulatory agencies, and the concerned public will deal with each other in good faith and with reason, we will endure.
MEMORANDUM

TO: All persons concerned with strip mining for coal and surface effects of underground coal mining in Kentucky

FROM: Gene Brandenburg, Commissioner
Bureau of Surface Mining Reclamation and Enforcement

DATE: May 8, 1978

SUBJECT: Status of Kentucky regulations to implement KRS Chapter 350 as amended by the 1978 General Assembly

The 1978 Kentucky General Assembly revised KRS Chapter 350 to authorize and direct the department to implement and enforce a regulatory program consistent with the initial regulatory program of Public Law 95-87, the "Surface Mining Control and Reclamation Act of 1977." The new Kentucky statutes became effective May 3, 1978, and the department has filed regulations to implement the new law:

Proposed Regulations

On May 3, 1978, the department filed with the Kentucky Legislative Research Commission proposed regulations which would establish in Kentucky a regulatory program similar to the initial regulatory program set forth in federal regulations published December 13, 1977 and subsequently revised. A public hearing on these proposed regulations is scheduled for 10:00 a.m., June 15-16, 1978 in the auditorium of the State Office Building (Department of Transportation building), on Holmes Street in Frankfort, Kentucky.

An informational copy of the proposed regulations is attached. We invite your review and written comments for inclusion in the official record. Comments should be directed to me at the address shown above.

Emergency Regulations

May 3, 1978, the Governor issued an Executive Order under emergency powers pursuant to KRS 13.055(2) which made effective certain emergency regulations for strip mining and the surface effects of underground mining. These emergency regulations will remain in effect for 120 days. These emergency regulations are identical to the attached proposed regulations with the following exceptions:
(1) Regulations 405 KAR 1:020, Section 5(2) and 405 KAR 3:020, Section 5(2), relating to reconstruction of pre-existing nonconforming structures and facilities, are not contained in the emergency regulations;

(2) Regulations 405 KAR 1:170 and 405 KAR 3:140, relating to water quality standards and surface water monitoring, are not contained in the emergency regulations;

(3) Regulations 405 KAR 1:200 and 405 KAR 3:170, relating to sediment control measures, are not contained in the emergency regulations;

(4) Existing regulations 402 KAR 1:055 relating to water quality standards, and 402 KAR 1:060, relating to sediment control measures, which are to be repealed by the proposed regulations, are retained in the emergency regulations and made applicable to both strip mining and the surface effects of underground mining. In the permitting requirements of 405 KAR 1:050, Section 4(13)(b) and (c) and 405 KAR 3:050, Section 4(10)(b) and (c), appropriate references to 402 KAR 1:055 and 402 KAR 1:060 are provided in the emergency regulations;

(5) Regulations 405 KAR 1:210, Section 1 and 405 KAR 3:180, Section 1, relating to coal waste dams, are written such that in the emergency regulations, requirements for coal waste dams will apply only to new dams for which coal waste will be used in the construction of the embankment;

(6) Regulation 405 KAR 1:250, Section 1(2), relating to prime farmland is written such that prime farmland requirements will in no way apply to operations for which permits were issued prior to August 3, 1977.

(7) The repeal provisions of regulation 405 KAR 3:190, Section 3 are written such that existing regulations 402 KAR 1:055, relating to water quality standards and 402 KAR 1:060, relating to sediment control measures are retained. Those existing regulations would be repealed by the proposed regulations.

Pages from the emergency regulations which incorporate items (1) through (7) above are attached hereto. These pages reflect the only differences between the emergency regulations effective May 3, 1978 and the proposed regulations filed May 3, 1978.

The provisions described in items (1) through (7) above were necessitated by the May 3, 1978 and May 5, 1978 rulings by the United State District Court for the District of Columbia pursuant to litigation against the federal regulations by certain coal companies.

The Court enjoined and remanded to the Department of Interior for reconsideration, certain provisions of the federal regulations. To allow time for appeals, the Court then enjoined enforcement of all performance standards until 6:00 p.m., May 5, 1978.

In keeping with the action of the Court, Governor Carroll directed the department to delay enforcement of the new performance standards of the emergency regulations to the extent they exceed the existing state regulations.
May 5, 1978
Page 3

At 6:00 p.m., May 5, 1978, the stay against the Office of Surface Mining enforcement of the performance standards expired. As of that time, OSM is authorized to enforce all regulations and performance standards which were not enjoined by the Court in the initial order of May 3, 1978.

Concurrent with the action of the Court, the department is now authorized to enforce the provisions of the emergency regulations made effective by Order of the Governor on May 3, 1978. Again, the emergency regulations now in force are exactly the same as the attached proposed regulations, except for the seven (7) modifications described in this memorandum, and reflected in the revised pages attached.

It is possible that modifications to the emergency regulations will be made. If so, you will be advised in the manner of this memorandum.

Attachments
Section 6. Reporting Requirements. (1) Annual report of mining and reclamation. Any operator or person holding a valid strip mining permit pursuant to KRS 350.060 and regulations adopted pursuant thereto shall submit, in a form and manner prescribed by the department, a report of all mining and reclamation operations conducted pursuant to the permit in the preceding twelve (12) month period. Such report shall be submitted not later than thirty (30) days after the end of each anniversary date of the permit. However, when the operator requests renewal of the permit pursuant to Section 8 of 405 KAR 1:050, and such information as is required in this subsection has been provided in the request for renewal, the requirement for such report for the preceding twelve (12) month period shall be deemed satisfied. The report shall contain, but shall not be limited to the following information:
(9) Topsoil handling plan. The application shall include or be accompanied by a plan for the handling of topsoil which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of 405 KAR 1:100 with regard to topsoil handling.

(10) Backfilling and grading plan. The application shall include or be accompanied by a plan for backfilling and grading which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of 405 KAR 1:130 with regard to backfilling and grading.

(11) Spoil disposal plan. The application shall include or be accompanied by a plan for the disposal of spoil in excess of that required to meet the backfilling and grading requirements of 405 KAR 1:130 which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of 405 KAR 1:140 with regard to disposal of spoil.

(12) Plan for handling of waste materials and acid-forming and toxic-forming materials. The application shall include a plan for the handling of acid-forming or toxic-forming materials, waste materials or other unstable materials which shall demonstrate to the satisfaction of the department that the operation will comply with the requirements of 405 KAR 1:150 with regard to waste materials and acid and toxic materials.

(13) Surface water control and monitoring plan. The application shall contain or be accompanied by a plan for the control and monitoring of surface water, which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of:

(a) 405 KAR 1:160 with regard to protection of the hydrologic system;
(b) 402 KAR 1:055 with regard to water quality standards and surface water monitoring;
(c) 402 KAR 1:060 with regard to sediment control measures; and
(d) 405 KAR 1:090 with regard to diversions of surface flows.

(14) Ground water control and monitoring plan. The application shall include or be accompanied by a plan for the control and monitoring of ground water, which shall demonstrate to the satisfaction of the department that the operation will comply with the requirements of:

(a) 405 KAR 1:160 with regard to protection of the hydrologic system;
(b) 405 KAR 1:180 with regard to ground water; and
(c) 405 KAR 1:190 with regard to diversion of underground flows.
405 KAR 1:210 Coal waste dams.

RELATES TO: KRS 350.425
PURSUANT TO: KRS 13.082, 350.028
NECESSITY AND FUNCTION: KRS 350.028 requires the Department for Natural Resources and Environmental Protection to adopt rules and regulations for the strip mining of coal. This regulation sets forth requirements for the design, construction and reclamation of coal waste dams.

Section 1. General. No waste material shall be used in new dams without the approval of the department. The permittee shall design, locate, construct, operate, maintain, modify, and abandon or remove all dams (used either temporarily or permanently) constructed of waste materials, in accordance with the requirements of this regulation.

Section 2. Construction of Dams. (1) Waste shall not be used in the construction of dams unless demonstrated through appropriate engineering analysis, to have no adverse effect on stability.

(2) Plans for dams subject to this section, and also including those dams that do not meet the size or other criteria of 30 CFR 77.216(a) shall be approved by the department before construction and shall contain the minimum plan requirements established by the Mine Safety and Health Administration pursuant to 30 CFR 77.216-2.

(3) Construction requirements are as provided in this subsection.

(a) Design shall be based on the flood from the probable maximum precipitation event unless the permittee shows that the failure of the impounding structure would not cause loss of life or severely damage property or the environment, in which case, depending on site conditions, a design based on a precipitation event of no less than 100-year frequency may be approved by the department.

(b) The design freeboard distance between the lowest point on the embankment crest and the maximum water elevation shall be at least three (3) feet to avoid overtopping by wind and wave action.

(c) Dams shall have minimum safety factors as provided in the following table:
Section 1. Applicability. (1) Permittees of strip mining operations conducted on prime farmland shall comply with all applicable requirements of this chapter in addition to the special requirements of this regulation. Prime farmlands are those lands defined in Section 2 of this regulation that have been used for the production of cultivated crops, including nurseries, orchards, and other specialty crops, and small grains for at least five (5) years out of the twenty (20) years preceding the date of the permit application.

(2) The requirements of this regulation are applicable to any permit issued on or after August 3, 1977. Permits issued before that date and revisions or renewals of those permits need not conform to the provisions of this regulation. Permit renewals or revisions shall include only those areas that:

(a) Were in the original permit area approved prior to August 3, 1977; or

(b) Are contiguous and under KRS Chapter 350 and applicable regulations would have normally been considered as a revision of a previously approved permit.

Section 2. Definition. Prime farmland means those lands that meet the applicability requirements in Section 1 of this regulation and the specific technical criteria prescribed by the Secretary of the United States Department of Agriculture as published in the Federal Register on August 23, 1977. These criteria are included here for convenience. Terms used in this section are defined in U.S. Department of Agriculture publications: Soil Taxonomy, Agriculture Handbook 436; Soil Survey Manual, Agriculture Handbook 18; Rainfall-Erosion Losses from Cropland, Agriculture Handbook 282; and Saline and Alkali Soils, Agriculture Handbook 60. To be considered prime farmland, soils must meet all of the criteria of this section.
Section 6. Reporting Requirements. (1) Annual report of mining and reclamation. Any operator or person holding a valid permit for surface operations of underground coal mining pursuant to KRS 350.151 and this chapter shall submit, in a form and manner prescribed by the department, a report of all surface operations and reclamation operations conducted pursuant to the permit in the preceding twelve (12) month period. Such
(8) Plan for disposal of excess rock and earth materials. The application shall include or be accompanied by a plan for the disposal of rock and earth materials. In excess of that required to meet the backfilling and grading requirements of 405 KAR 3:100 which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of 405 KAR 3:110 with regard to disposal of excess rock and earth materials.

(9) Plan for handling of waste materials and acid-forming and toxic-forming materials. The application shall include a plan for the handling of acid-forming or toxic-forming materials, waste materials or other unstable materials which shall demonstrate to the satisfaction of the department that the operation will comply with the requirements of 405 KAR 3:120 with regard to waste materials and acid and toxic materials.

(10) Surface water control and monitoring plan. The application shall contain or be accompanied by a plan for the control and monitoring of surface water, which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of:

(a) 405 KAR 3:130 with regard to protection of the hydrologic system;
(b) 402 KAR 1:055 with regard to water quality standards and surface water monitoring;
(c) 402 KAR 1:060 with regard to sediment control measures; and
(d) 405 KAR 3:160 with regard to diversions of surface flows.

(11) Ground water control and monitoring plan. The application shall include or be accompanied by a plan for the control and monitoring of ground water, which shall demonstrate to the satisfaction of the department that the operation will comply with the requirements of:

(a) 405 KAR 3:130 with regard to protection of the hydrologic system;
(b) 405 KAR 3:150 with regard to ground water; and
(c) 405 KAR 3:160 with regard to diversion of underground flows.

(12) Revegetation plan. The application shall include or be accompanied by a revegetation plan which shall demonstrate to the satisfaction of the department that the proposed operation will comply with the requirements of 405 KAR 3:080 with regard to revegetation.

(13) In the required operational plans specified in subsections (5) through (12) of this section and in the other requirements of this section, the department may require all such supporting documentation as the department may deem necessary to insure that the provisions of this chapter will be met. Such documentation may include but not be limited to detailed engineering drawings, engineering calculations, and documentation prepared by qualified persons in other appropriate technical fields or sciences.
Relates to: KRS 350.151
Pursuant to: KRS 13.082, 350.151
Necessity and function: KRS 350.151 requires the Department for Natural Resources and Environmental Protection to adopt rules and regulations for the surface effects of underground coal mining. This regulation sets forth requirements for the design, construction, maintenance and reclamation of coal waste dams.

Section 1. General. No waste material shall be used in new dams without the approval of the department. The permittee shall design, locate, construct, operate, maintain, modify, and abandon or remove all dams (used either temporarily or permanently) constructed of waste materials, in accordance with the requirements of this regulation.

Section 2. Construction of Dams. (1) Waste shall not be used in the construction of dams unless demonstrated through appropriate engineering analysis, to have no adverse effect on stability.

(2) Plans for dams subject to this section, and also including those dams that do not meet the size or other criteria of 30 CFR 77.216(a) shall be approved by the department before construction and shall contain the minimum plan requirements established by the Mine Safety and Health Administration pursuant to 30 CFR 77.216-2.

(3) Construction requirements are as provided in this subsection.

(a) Design shall be based on the flood from the probable maximum precipitation event unless the permittee shows that the failure of the impounding structure would not cause loss of life or severely damage property or the environment, in which case, depending on site conditions, a design based on a precipitation event of no less than 100-year frequency may be approved by the department.

(b) The design freeboard distance between the lowest point on the embankment crest and the maximum water elevation shall be at least three (3) feet to avoid overtopping by wind and wave action.

(c) Dams shall have minimum safety factors as provided in the following table:
Section 1. General Requirements. The permittee may construct, if authorized by the department, permanent water impoundments on mining sites only when they are adequately demonstrated to be in compliance with the requirements of this chapter in addition to the following requirements:

(1) The size of the impoundment is adequate for its intended purposes.

(2) The impoundment dam construction is designed to achieve necessary stability with an adequate margin of safety compatible with that of structures constructed under Public Law 83-566 (16 U.S.C. 1006).

(3) The quality of the impounded water will be suitable on a permanent basis for its intended use and discharges from the impoundment will not degrade the quality of receiving waters below the water quality standards established pursuant to applicable federal and state law.

(4) The level of water will be reasonably stable.

(5) Final grading will comply with the provisions of the backfilling and grading requirements of 405 KAR 3:100 and will provide adequate safety and access for proposed water users.

(6) Water impoundments will not result in the diminution of the quality or quantity of water used by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic uses.

Section 2. Permanent impoundments shall be approved by the department, designed, constructed and maintained in accordance with the provisions of KRS 151.250 and regulations adopted pursuant thereto.