

APPENDIX I.
WVDEP / OSM OVERSIGHT WORK PLAN

APP-I

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF SURFACE MINING
OVERSIGHT WORK PLAN
EVALUATION YEAR 1998

TOPIC: Approximate Original Contour (AOC), Post-Mining Land Use (PMLU) and Excess Spoil Disposal

EVALUATION TEAM LEADERS:

West Virginia Division of Environmental Protection (WVDEP) - Ed Griffith and a Bond Release Specialist
Office of Surface Mining (OSM) - Dennis Boyles, Mike Superfesky, Jack Nelson, and Ted Sentz

OTHER PARTICIPANTS: To be determined as needed.

DEFINITIONS: To more easily understand the scope of this evaluation, certain terms used throughout this document require a definition. These terms, for purposes of this document only, are defined below.

- Approximate Original Contour: As defined by section 22-3-3(e) of the West Virginia Surface Coal Mining and Reclamation Act (WVSCMRA), i.e., the surface configuration achieved by backfilling and grading so that the reclaimed areas closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain.
- Area Mining: A mining operation where all disturbed areas are restored to AOC and to a condition capable of supporting the uses which existed prior to mining or a higher or better use, unless the operation is located in steep slope areas and a steep slope AOC variance has been approved. Those areas of the mine classified as steep slope mining may obtain an AOC variance based on a higher/better post-mining land use and compliance with the other steep slope AOC variance requirements in the approved WV program.

An area mining operation may remove multiple seams of coal in the upper reaches of a mountain, just like a mountaintop removal operation described below. However, this mine is not classified as a mountaintop removal mine for one or more of following reasons.

First, the site may be restored to AOC or the site may receive a steep slope AOC variance. Second, the entire coal seam may not be removed. Third, the final contour may not be graded so that water will drain inward. Fourth, any one of the other requirements applying to mountaintop removal operations may not be applicable.

- Mountaintop Removal Mining: A mine with a mountaintop removal AOC variance. It mines an entire coal seam running through the upper fraction of a mountain, ridge or hill by removing all of the overburden and creating a level or gently rolling contour with no highwalls. The approved PMLU must be industrial, commercial, woodland, agricultural, residential, or public use, and the final contour must be graded so that water will drain inward, except at constructed channels where water will be released over the outslopes. In addition, all other mountaintop removal provisions of the approved West Virginia program must be followed.
- Contour Mining: Mining which typically makes a cut into a hillside, creating a level bench with a highwall. The mined area must be restored to AOC unless the mining is conducted on steep slopes and a steep slope AOC variance has been approved.
- Ridgetop Mining: A generic term used to describe mines located on the tops of mountains or hills. The mines use a variety of mining techniques and restore the disturbed areas to AOC.

PURPOSE OF THE REVIEW: To determine if the approved program requirements related to AOC and the PMLU for mountaintop removal mining and other mining operations are being implemented, and to determine how excess spoil volumes are calculated and if the amount considered to be excess is consistent with the PMLU.

BACKGROUND: Much of the surface coal production in West Virginia is recovered at large operations conducted at or near the ridgetop. These operations are generally conducted in multiple-seam, steep slope terrain and are commonly permitted by the West Virginia Division of Environmental Protection (WVDEP) under one, or a combination of PMLU/AOC standards approved in the State program. Under these standards the operations may: 1) return all disturbed areas to AOC and restore the affected land to a condition capable of supporting the uses which it was capable of supporting prior to mining, or a higher or better uses as required by section 22-3-13(b)(1) of the WVSCMRA; 2) request approval for a mountaintop removal AOC variance where the approved PMLU will be industrial, commercial, woodland, agricultural, residential or public use, and the other requirements of Section 22-3-13(c)(3) of the WVSCMRA and section 38-2-14.10 of the Code of State Regulations (CSR) are met; or, 3) request a general steep slope AOC variance as provided in CSR section 38-2-14.12.

For those operations requesting the mountaintop removal AOC variance, section 22-3-13(c)(3) of the WVSCMRA requires the permit applicant to show that the proposed PMLU is an equal or better use of the affected land. The applicant must also present specific plans for the proposed PMLU and appropriate assurances that the use will be: 1) compatible with adjacent land uses and existing state and local land use plans and programs; 2) practicable with respect to achieving the proposed use; 3) supported by commitments from public agencies where appropriate; 4) practicable with respect to private financial

capability for completion of the proposed use; 5) planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the PMLU; and, 6) designed by a person approved by the Director of the West Virginia Division of Environmental Protection (WVDEP) to assure the stability, drainage and configuration necessary for the intended use of the site. The County Commission of the county in which the operation is located and any other appropriate State or Federal agencies are provided sixty days to review and comment on the PMLU.

The Reclamation Plan for these operations must provide that spoil will be placed on the mountaintop bench as necessary to achieve the PMLU and that all excess spoil material not retained on the mountaintop will be placed in accordance the excess spoil provisions of section 22-3-13(b)(22) of WVSCMRA. All reclaimed areas must be stable and the resulting plateau or rolling contour must drain inward from the outslopes except at specific points.

It is important to note that a single permit may contain separate areas where different types of mining/reclamation activities will occur at various times throughout the life of the operation. For this reason, it is difficult to categorize a particular permit as being only one type of mining, subject only to the performance standards applicable to that type of mining operation. At one point in time an operation may be conducting contour mining where the disturbed area will be returned to AOC, at another it may conduct steep slope contour mining where an AOC variance has been approved, at still another it may be conducting area mining removing all the overburden from the ridgetop and returning the mined area to AOC, while at another time the area being mined may have received a mountaintop removal AOC variance and the mined area is not required to be returned to AOC. A mine could also be conducting a combination of any of these types of mining in different locations at any given point in time.

AUTHORITY FOR THE REVIEW: Reg-8

POPULATION SIZE: The State has provided listings of active mountaintop removal permits and active area mining permits with an AOC variance. The lists contain 16 and 15 permits, respectively. The lists also contain 65 ridgetop and 210 area mine permits that provide for return to AOC following mining. In addition, all mountaintop removal permits that have received a Phase III bond release will be included in the sample selection.

SAMPLE SIZE: Samples will be selected as follows:

Four randomly selected permits determined to be at a stage of reclamation where final contours and the PMLU can be evaluated in the field will be selected from the State's list of active mountaintop removal mining permits and 5 permits will be randomly selected from the list of active area mining permits with an AOC variance.

Four randomly selected large (over 500 acres) permits will be selected from the State lists of active ridgetop and active area mining permits providing for return to AOC. Two sites at a stage of reclamation where the final contours can be evaluated in the field will be selected from each list.

Three ridgetop mining permits identified in recent news (May 1998) articles as not receiving an AOC variance but not providing for the return to AOC following mining will be included.

Three randomly selected mountain top removal sites that have received a Phase III bond release. The more recently released sites will be given preference over older sites.

A total of 19 permits will be evaluated.

REVIEW METHODOLOGY:

This study will determine if the approved State provisions relating to AOC and PMLU are being implemented. It will also review total overburden volumes and earthwork calculations to determine how excess spoil volumes are determined and if the amount determined to be excess is consistent with the PMLU.

For permits receiving an AOC variance, permit documents for the operations will be reviewed to determine if all requirements related to approval of an AOC variance and changing of the PMLU (see *Background*, above) have been met. For permits not receiving an AOC variance, permit documents will be reviewed to determine if the approved mining maps and plans indicate compliance with AOC provisions.

Field reviews will be conducted on all permits. For those receiving an AOC variance, the review will determine if the final surface configuration is consistent with the approved permit and whether the alternative PMLU is being developed, or has been achieved on the final bond released sites, in accordance with the plans and schedule required by the WVSCMRA. For those permits not receiving an AOC variance, the field review will determine if AOC has been achieved on the reclaimed surface configuration and whether a distinction exists between the final configuration of the sites with an AOC variance and those without an AOC variance.

The following activities will occur to complete this evaluation:

1. Create a joint WVDEP-OSM team.
 - a. Name team leaders.
 - b. Select team members.
 - c. Apportion assignments.
2. Select permits.
 - a. Select nineteen permits as described in *Sample Size* above.

3. Conduct review of variance and earthwork for each permit (Use Permit Review Form, to be developed).
 - a. Locate variance within specific permit.
 - b. Identify type of variance and conditions.
 - c. Determine if variance was issued in accordance with approved program.
 - d. Tabulate bank (in situ) spoil volume for permit.
 - e. Tabulate bulked or loose volume for permit.
 - f. Calculate swell or bulking factor for permit.
 - g. From permit cross-sections determine maximum elevation change.

4. Conduct field review of the same permits (Use Site Review Form, to be developed).
 - a. Conduct a "plan-in-hand" site visit with State personnel.
 - b. Note latest revisions and amendments to earthwork.
 - c. Compare on-the-ground conditions with final cross-sections and latest revisions.
 - d. Make horizontal and vertical measurements as required to verify plan and "as built" data.
 - e. Photograph land forms as required.

5. Coordinate with other agencies, as necessary.
 - a. If variance involves local or regional planning agency contact agency to verify variance purpose and data.
 - b. Contact other state and federal agency concerning variance conditions as need arises.

6. Compile final report.
 - a. Use the Permit Review and Site Review Forms that are to be developed.
 - b. Results will be grouped in tabular form based on type of variance, type of mining, and post mining land use.

OTHER ASSISTANCE NEEDED: None anticipated.

EVALUATION FORMS: Under development.

DATA PROVIDED BY THE WVDEP: WVDEP will provide the permit files for the selected permits.

ESTIMATED HOURS:	WVDEP	OSM
Work Plan Development	16	125
Review	300	400
Report	60	160

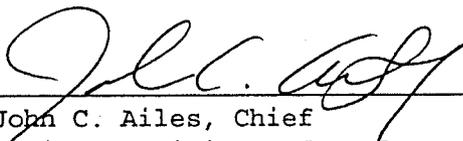
DETAILED TIME FRAMES AND MILESTONES OF THE REVIEW:

Work plan approved in February 1998
Initial samples selected by March 1, 1998
Permits identified in the revised Work Plan selected by May 29, 1998
Conduct office and field reviews by June 30, 1998
Compile and analyze findings by July 8, 1998
Draft report by July 15, 1998

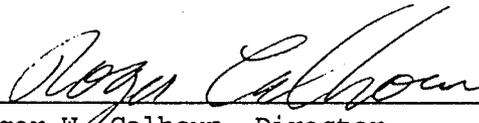
PROJECTED COMPLETION DATE: August 15, 1998

REFERENCES: None

SIGNATURES: Approved February 1998. Revised May 29, 1998.



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