

CHAPTER THREE

Governor's Task Force on Mountaintop Mining

Environmental Committee Report

I. Introduction

A. *Environmental Committee Purpose and Process*

As part of Governor Underwood's original charge to the Task Force on Mountaintop Mining, he asked that the task force address environmental, economic and social impacts of current mountaintop mining practices. Consequently, the environmental committee of the task force has spent the last several months examining environmental and engineering issues associated with mountaintop mining and valley fill practices.

The process implemented by the environmental committee has involved the compilation and review of existing information regarding environmental impacts of mountaintop mining and valley fills from a variety of sources, including input from government agencies, companies, groups and individuals. This information was obtained as a result of committee meetings, public hearings, symposiums, and submissions of written materials to the environmental committee and the task force as a whole.

Written materials reviewed by the committee included scholarly papers, agency reports and guidance documents, site-specific reports, letter reports and magazine articles. In addition at the beginning of the process all identifiable interest groups were asked to submit written "white papers," or position papers to the task force. To date, the task force has received several such submissions as identified in Attachment A.

In both performing its assigned task and developing the following report, the environmental committee has endeavored, with the time and resources available, to examine as many relevant environmental issues as possible. However, due to the complexity of the issues involved and logistical constraints, this committee effort does not purport to be, nor was it intended to be, an exhaustive analysis and assessment of all environmental issues and impacts resulting from mountaintop mining practices. Rather, the following discussion is intended to be a presentation of information submitted as part of the task force process, as well as associated factual findings and appropriate recommendations.

B. Description of mountaintop removal/valley fill mining methods

Mountaintop mining methods have been utilized in West Virginia for approximately 30 years. The practice was originated near Montgomery, West Virginia, in 1967 when Cannelton Coal Company and a contract miner removed several coal seams running entirely through a finger ridge, creating a plateau in the final reclamation process. Since that time, the coal industry has seen the passage of major federal and state legislation, and associated regulatory programs which control environmental and other related aspects of surface coal mining. These regulatory programs are discussed in more detail in Section I.C., below.

Mountaintop mining, commonly referred to as mountaintop removal/valley fill mining, is a mining operation that proceeds entirely through the mountain, ridge or hill with overburden removal following the coal seam elevation from one outcrop to another. The technique provides for virtually complete recovery of the seam. Often, multiple coal seams are removed sequentially to the maximum economic limit of overburden removal. The relationship between overburden volume and recoverable coal tonnage is expressed as mining overburden ratio.

With the passage of the Clear Air Act amendments of 1990, mountaintop mining has gained favor within the coal industry. With the use of large, efficient and mobile construction equipment, the method provides for recovery of extremely thin seams previously not considered mineable due to economic as well as health and safety considerations.

Associated with removal of overburden is the practice known as head-of-the-hollow or valley fill. Unlike historic practices utilized in contour, or strip mining, mountaintop mining practices involve the placement of removed overburden in head-of-hollow or valley fills. Because overburden, prior to its removal, is heavily compacted, removal of the overburden results in "swell" of the material. This occurs due to the loosening of the rock and soil and the incorporation of air, which results in a decrease in the density of the material and a corresponding increase in volume, normally around 25%. The ability to place loosened overburden materials back on bench or slope is further lessened due to the fact that naturally-occurring slopes in most mined areas are 60% or steeper, and reclaimed areas, due to operational and regulatory constraints, must not have slopes greater than 50%. Finally, drainage and sediment control structures required to be placed at the toe of the slope result in additional loss in ability to place material back on bench because of a decrease in the width of the base. All of these factors result in the placement of removed overburden material in valley fills.

According to federal surface mining regulations, a valley fill is defined as

“ . . . a fill structure consisting of any material, other than organic material, that is placed in a valley where side slopes of the existing valley, measured at the steepest point, are greater than 20 degrees, or where the average slope of the profile of the valley from the toe of the fill to the top of the fill is greater than 10 degrees.” 30 CFR 701.10. The design and construction of valley fills involves extensive pre-mining planning and engineering, as well as the use of various types of construction equipment. The extensive planning and engineering process is necessary to ensure adequate cost recovery and efficiency and to comply with various applicable environmental and surface mining regulations. In order to determine the type of material to be placed in the fill, core drillings are done on the area to be mined to determine whether or not any acid or toxic material is present. If so, this material cannot be placed in a valley fill or come into contact with water, because of its potential to degrade water quality. In addition, potential fill material must be tested for durability, and cannot be placed in a valley fill if durability standards are not met.

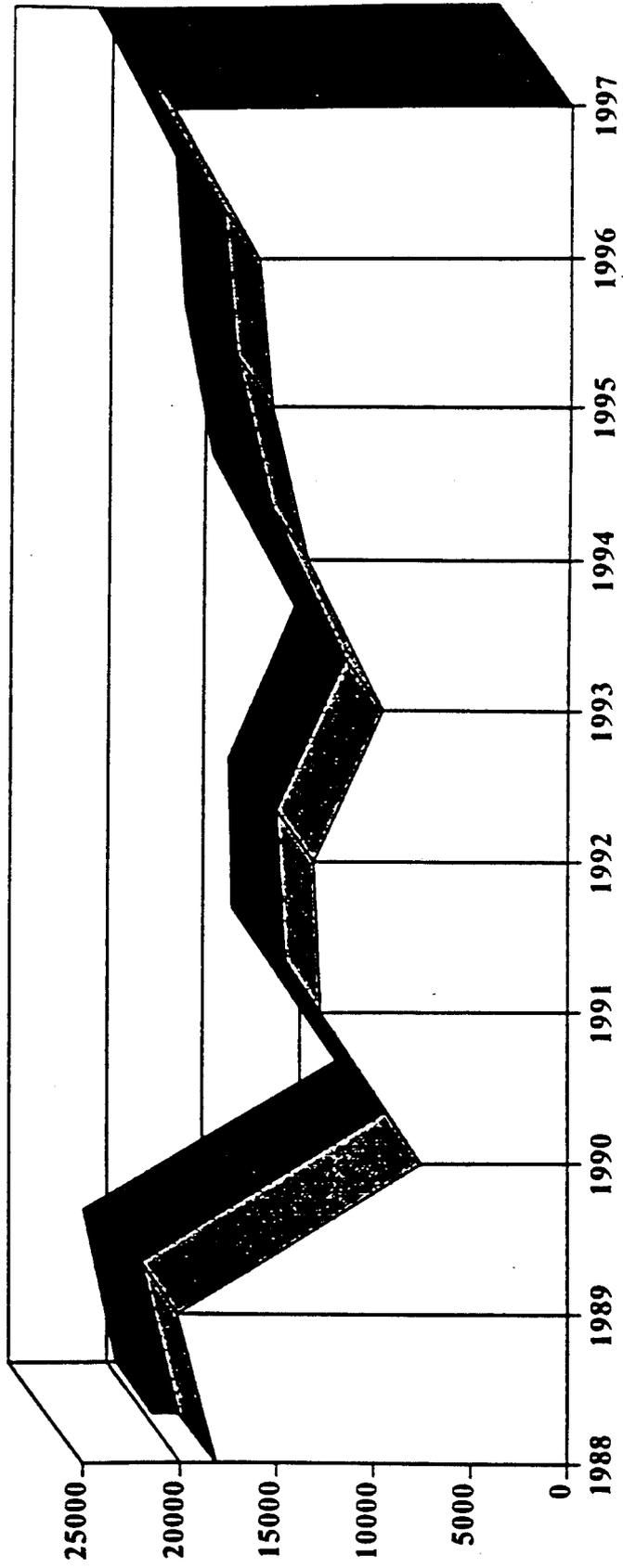
The engineering and operational aspects of overburden removal and valley fills comprise some of the most significant costs associated with coal seam removal. Under existing regulations, these structures must be composed of durable rock fill, and the slope, or grade, must comply with both operational and regulatory constraints. Based on information from the mining industry, at a typical mountaintop mining site, much of the overburden material is placed in fills by utilizing haul trucks or other equipment. In an attempt to provide pathways for water flow, the placement is done from an elevation, which results in a gradation of fill material based on sizes and densities, creating an underdrain effect.

For information on the relationship between extent of surface and deep mining in the state, see Exhibits 1 and 2. Exhibit 3 shows the extent of mountaintop mining in the region as compared to other regional and nationwide mining practices.

C. Current environmental permitting process

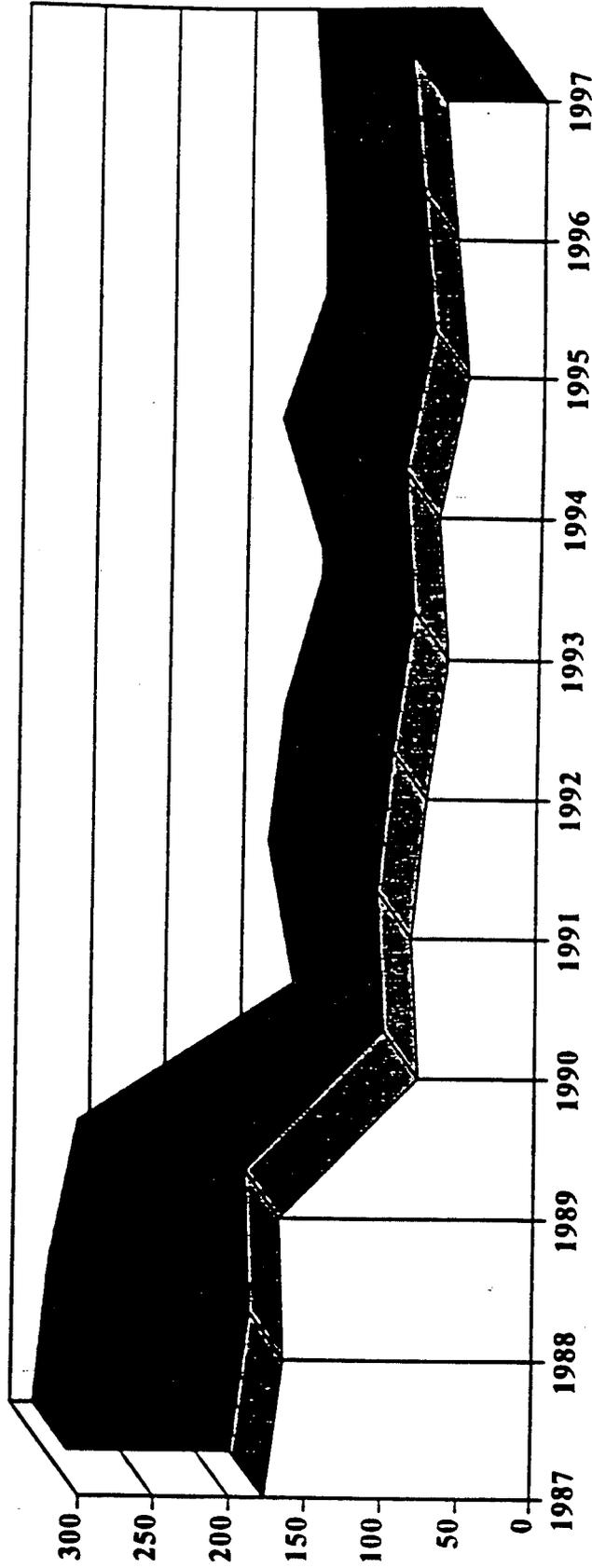
Mountaintop mining operations, along with associated valley fill activities, are currently regulated under several federal and state statutory programs. Under the federal Surface Mining Control and Reclamation Act (SMCRA), 30 U.S.C. 1201 *et seq.*, the Office of Surface Mining has authority over all surface coal mining activities including mountaintop mining practices. The federal performance standards detailed in SMCRA, shown in more detail below, are supplemented by OSM regulations that further clarify the standards and how they are to be implemented. West Virginia has adopted standards in its laws and regulations which have been found to be no less effective than the federal requirements. Therefore, the West Virginia Division of Environmental Protection (WVDEP) has been granted primary authority to

TOTAL AND SURFACE MINE ACRES 1987 TO 1997



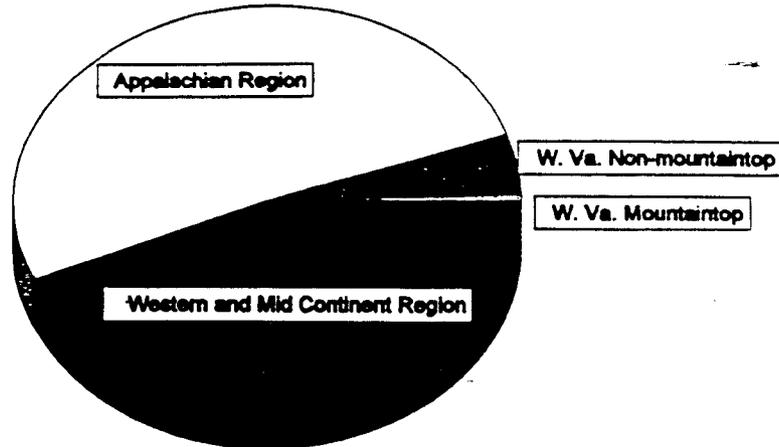
□ Surface Acres Permitted ■ Total Acres Permitted

TOTAL PERMITS & SURFACE PERMITS ISSUED 1987 TO 1997



□ Surface Permits Issued ■ Total Permits Issued

W. Va. Mountaintop Acres as Percent of National Acres



- W. Va. Mountaintop
- W. Va. Non-mountaintop
- Appalachian Region
- Western and Mid Continent Region

This chart represents the acres of mountaintop mining in West Virginia expressed as a percent of the total active surface mining acres in the country. The chart is cumulative. The West Virginia mountaintop segment when combined with the West Virginia non-mountaintop equals all of the West Virginia surface mine acres. Also, the Appalachian Region segment represents the total active surface mine acres excluding West Virginia. This chart was created from statistics in OSM's 1997 annual report, and data provided from the West Virginia Division of Environmental Protection.

administer the surface mining regulatory program in this state. OSM's role is now limited to oversight of state activities. OSM retains authority to issue enforcement actions in certain situations and can require corrections to the program, but does not have veto authority over state permitting actions.

Mountaintop mining operations also are regulated under several key provisions of the federal Clean Water Act, 33 U.S.C. 1251 *et seq.*, as well as its state counterpart, the West Virginia Clean Water Act, W. Va. Code 22-11-1 *et seq.* The placement of valley fills historically has been regulated by the U.S. Army Corps of Engineers, with participation by the U.S. Environmental Protection Agency. Although the CWA delegates primary implementation authority to EPA, Section 404 of the statute carves out special authority for the Corps for the permitting of discharges of dredge or fill material to waters of the United States. 33 U.S.C. 1344. Consequently, valley fills historically have been subject to permitting requirements by the Corps. More specifically, mining-related fills typically are permitted under one of two nationwide permits issued by the Corps. (See Nationwide Permit Number 21, *Surface Coal Mining Activities*, and Nationwide Permit Number 26, *Headwaters and Isolated Waters Discharges*.) Although EPA has veto authority over all permits issued by the Corps under Section 404, recent federal caselaw recognized EPA's general authority under other provisions of the CWA as a mechanism for additional EPA oversight of section 404 permits for valley fills. *West Virginia Coal Association v. Reilly*, 728 F. supp. 1276 (S.D. W. Va. 1989).

As part of the Section 404 permitting process, both individual and general permits from the Corps require certification from the state that issuance of the federal permit will not result in a violation of the state's water quality standards. See 33 U.S.C. 1341. Section 401 of the CWA provides this mandate, which is carried out by the WVDEP. Therefore, a company seeking to conduct valley fill operations under the relevant nationwide permit would also have to seek certification from WVDEP. In the past, the state's certification guidelines have provided the basis for stream mitigation requirements, which are now addressed by S.B. 145, adopted during the last legislative session. Both previous and existing stream mitigation programs are discussed in greater detail in Section III, below.

In addition to SMCRA and Section 404 of the CWA, mountaintop mining activities also are regulated under Section 402 of the CWA. 33 U.S.C. 1342. This provision of the act prohibits the discharge of pollutants into the waters of the United States without a permit from EPA issued under the National Pollutant Discharge Elimination System (NPDES). Sediment control ponds and other drainage structures are subject to this permitting requirement, which is implemented by WVDEP as part of the federally delegated program. As is normally the case with delegated permitting programs, EPA retains the right

to deny final issuance of NPDES permits, which do not meet federal requirements or do not adequately address EPA concerns.

As a result of the application of two major federal/state regulatory programs and the involvement of three government agencies, the permitting process for a mountaintop mining process is relatively extensive. Applicants must obtain both surface mining and NPDES permits, in addition to Corps Section 404 permits and associated water quality certification. The process includes several opportunities for public notice and comment, as well as submission of technical and engineering information including cumulative hydrologic impact analysis. The time frame involved can range from 6 months to 24 months, depending upon the issues raised and other site-specific factors. A schematic of the permitting process, as developed by WVDEP, is attached as Exhibit 4.

It is worth noting that the regulatory process described above is the subject of a current court action in the United States District Court for the Southern District of West Virginia. In addition, the Corps of Engineers currently is in the process of reassessing its position on the issuance of permits for valley fills. Any decision on these matters, either by the court or the Corps, could affect or change the regulatory process as described above.

D. Environmental performance standards

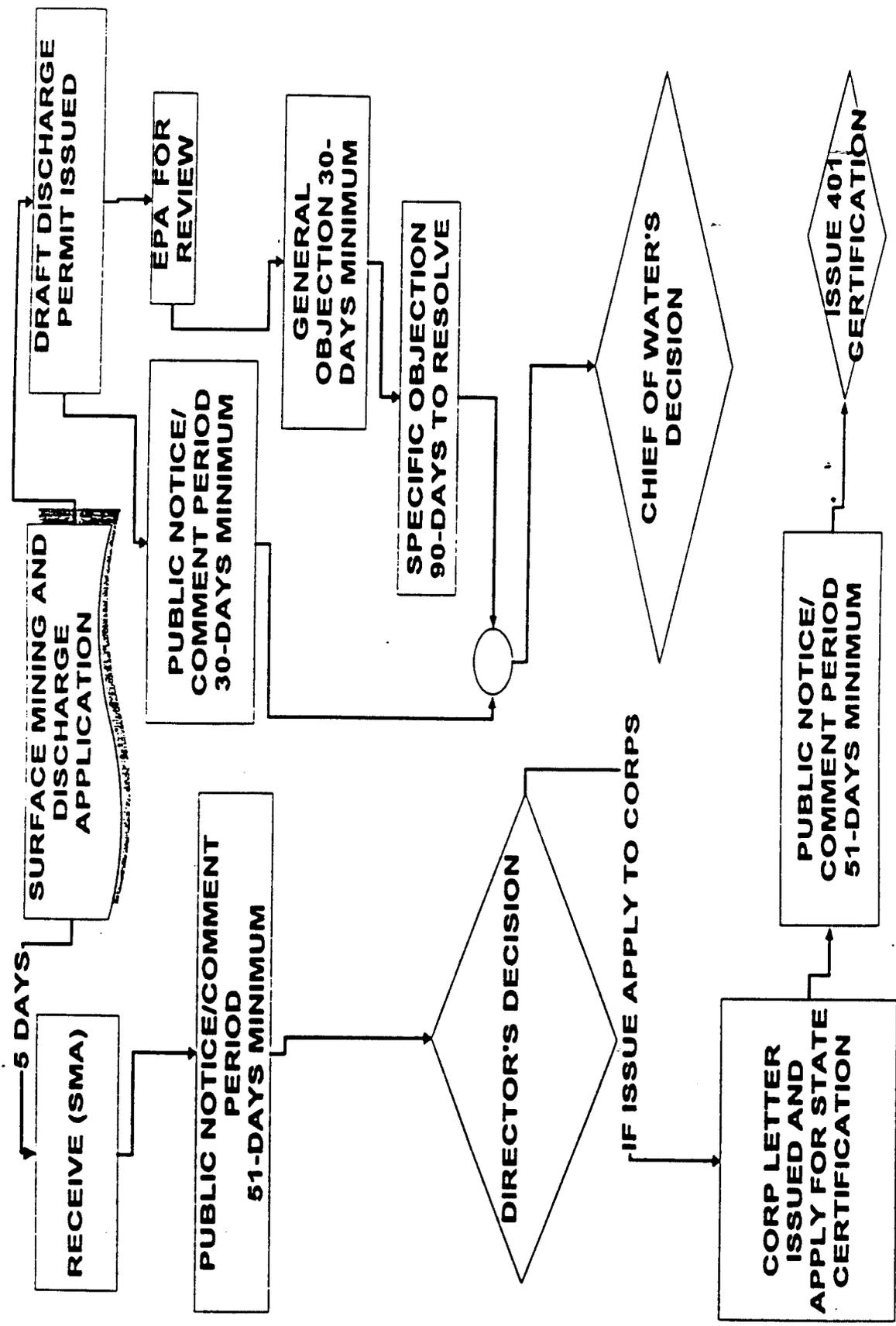
Many, though not all, of the responsibilities and requirements associated with environmental consequences of mountaintop mining are addressed by SMCRA's environmental performance standards. These standards are presented in tabular form in Exhibit 5.

II. Identification of relevant environmental issues

A. Issues raised during public hearing process

In order to determine the issues of primary importance to individuals and groups impacted by mountaintop mining practices, the task force conducted an initial public hearing. During this hearing, a large number of issues were raised, including several environmental concerns. In addition, committee members attended various other public hearings and symposiums at which numerous stakeholder and interest groups were represented and identified environmental concerns. As mentioned above, the task force also requested the submission of written materials from interest groups.

The environmental issues raised as a result of public input included, in a general sense, water quality, fish and wildlife, and related impacts. However, very few specifics were addressed, and the primary environmental issue raised by both citizens and organized environmental groups related was the concern



515(b)(1)	Federal Provisions. SMCRA's broad performance measures in Section 515 require the mining operator to:	All Surface Mining Operations.	Mountaintop Removal AOC Variance.	Steep Slope AOC Variance
515(b)(2)	Maximize coal utilization. Try to extract as much coal to minimize or eliminate future mining disturbance. Restore the postmining land use to a use equivalent to the premining use, or to a higher and better land use.	Standard Applies Universally	Standard Applies Universally. It is particularly relevant to Mountaintop Removal Operations.	Standard Applies Universally
515(b)(3)	Restore the postmining land use to a use equivalent to the premining use, or to a higher and better land use.	Premining or higher or better uses (uses with higher economic value or nonmonetary benefit to landowner or community)	Industrial, commercial, agricultural, residential, or public facility (including recreational facilities) use is proposed and approved for the affected land.	After reclamation, the land affected by the variance must be suitable for an industrial, commercial, residential, or public postmining land use (including recreational facilities).
515(b)(4)	Restore the land affected by the mining to the approximate original contour of the surrounding land.	The postmining land must closely the pre mining land configuration.	Level or gently rolling inward-plateau draining	No specific requirements (dependent upon land use and terrain)
515(b)(5)	Stabilize all mining areas to prevent soil erosion and the resulting air and water pollution.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(6)	Store and protect the existing topsoil unless a better substitute is found on the mining operation.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(7)	Replace the topsoil, or the better substitute to the area after mining is completed.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(8)	Take special measures to replace the A, B, and C horizons of the topsoil of the area is prime farmland.	Standard Applies. Prime farmland soils are not usually found in areas where steep slope and mountaintop removal operations are conducted.		
515(b)(9)	Leave impoundments of water on the completed site only when they can provide safe, stable impoundments of water that meet water quality standards and do not interfere with surrounding water use.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		

515(b)(9)	Conducting auguring operations to maximize recoverability of mineral reserves remaining after the operation and reclamation are complete. Seal all auger holes unless this will create a future water impoundment.	Standard Applies Universally.		
515(b)(10)	Minimize the disturbances to the hydrologic balance at the mine-site and in associated offsite areas.	Standard Applies	Must not damage natural watercourses	Must demonstrate that watershed will be improved
515(b)(11)	Grade all mine wastes disposed of away from the mining area to a condition compatible with the surrounding terrain. Compact these piles, and seal them with an impervious surface layer.	Limited to excess spoil and spoil required for blending with surrounding terrain	No restrictions apart from requirement to retain enough on bench to achieve postmining land use	Limited to amount necessary to achieve postmining land use and ensure stability
515(b)(12)	Refrain from mining within five hundred feet of active or abandoned underground mines.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(13)	Construct, operate and remove any waste pile that temporarily or permanently impounds water according to the standards referenced in Section 515(f) of SMCRA.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(14)	Dispose of any toxic material in a way to prevent damage to ground or surface water.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(15)	Give advance notice of blasting to residents living within a half mile of the blasting activities. Use only trained blasters and provide a pre-blast survey to anyone in the half mile radius. Limit explosives to prevent injury to persons, damage to public and private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of ground or surface water outside the permit area	Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(16)	Reclaim the area around the active mining as soon as possible. Conduct reclamation activities concurrent with the mining.	This is also known as the contemporaneous reclamation requirement. Standard Applies Universally. It also applies to disposal areas away from mining activity.		
515(b)(17)	Construct and maintain roads that will not create off site sediment problems for adjacent property owners.	Standard Applies Universally. It also applies to disposal areas away from mining activity.		

that the long-term impacts of mountaintop removal and valley fills are unknown. In fact, both industry and citizen groups appeared to agree on the value of further analysis of environmental impacts – their differences relate to the approach to be taken in the interim.

B. Issues identified by task force members

After the initial public hearing, task force members submitted to the Chair lists of issues that they would like to see addressed. As a result, the environmental committee was presented with the following list of issues:

- Water quality, including immediate and long-term effects, relevant regulatory standards, and status of existing information
- Fish and wildlife, including existing information on short- and long-term effects
- Reclamation of abandoned sites
- Stream mitigation, including history of and recent changes to state program and use of program funds
- Dust from blasting
- Approximate original contour issues

The committee attempted to address each of these issues, based upon the available data, time, and resources.

C. State agency data

1. Records on past valley fill activities

As part of an effort to obtain information on the extent of past valley fill activities, the environmental committee requested data from WVDEP. Representatives from the Office of Mining and Reclamation attended a committee meeting and presented a preliminary valley fill inventory. Apparently, information on affected stream flows and lengths is not currently available without, at a minimum, an intensive review of all individual permits files. Consequently, the inventory, which is organized by county, provides information not on stream miles covered, but on the linear feet from the top of the ridge to the toe of the fill at each site. WVDEP representatives stated that this figure, a total of 4,150,366 linear feet (786 miles), is obviously a larger number than actual stream miles covered, but it is difficult to estimate how much larger due to the manner in which records have historically been kept. Current records show approximately 32,000 stream miles in West Virginia. The WVDEP inventory is available for review and listed in Attachment A.

Written materials from the U.S. Fish and Wildlife Service also address the issue of stream miles covered. Once again, specific data was not

available. However, by utilizing blue-line measurements from USGS maps, the agency estimated approximately 470 stream miles covered. This estimate would take into account all types of streams and stream drainage lengths.

With respect to future permitting records, WVDEP is working with OSM and others to develop a computerized geographic information system (GIS) database that should provide easier access to this type of data.

2. Past and current stream mitigation program

Although still in the process of analyzing the effects of S.B. 145, WVDEP provided detailed information to the committee on past stream mitigation practices. This included information on past mitigation agreements, with reference to specific project expenditures, as well as compensation collections. This information is available for review and listed in Attachment A.

Prior to the passage of S.B. 145, mitigation guidelines required that permittees first try to avoid or minimize impacts, then determine the acreage of water resource lost or impacted, and, finally, select the method of compensation subject to DEP approval. Acceptable methods of compensation included lake development, stream habitat improvement, and monetary or in-kind payment. From October 1, 1992 to July 31, 1998, \$4,180,351 was collected from permittees for mitigation purposes. In addition, \$1,147,496.24 has been expended so far from 1994 to 1998. Roughly one-sixth of affected permittees chose in-kind mitigation as a compensation method.

D. Federal agency concerns

In view of the current pending NPDES applications and the federal litigation, committee members invited representatives from EPA Region III to a meeting to discuss and further define EPA concerns related to mountaintop mining practices. At the meeting, Tom Maslany, Director of Water Programs for the region, presented EPA's response to a request from the Task Force Chair regarding a position paper. In addition, the committee also reviewed copies of EPA letters to WVDEP regarding its concerns associated with several permit applications.

According to the written correspondence and the subsequent EPA discussion with committee members, EPA's primary concerns can be categorized as follows:

- Lack of sufficient information on direct, indirect, and cumulative biological impacts from valley fills. Examples of cumulative impacts include potential effects on habitat of black bear and migratory birds.
- Need for systematic identification of past and projected future valley fills with respect to size, location, etc. EPA would like more comprehensive land use information in order to better assess cumulative impacts.
- Concern regarding adequacy of mitigation under S.B. 145. In addition, EPA expressed a preference for in-kind mitigation projects.

EPA personnel also expressed that the permitting program changes that may be necessary due to the current Corps of Engineers position and/or the outcome of federal litigation most likely will trigger the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et seq.* This federal statute requires that federal agencies prepare environmental impact statements for any major federal action with significant environmental impacts. In addition to potential programmatic environmental impact statements, EPA noted that its review of individual permit applications could also trigger NEPA, depending on the outcome of current litigation.

A letter report from the U.S. Fish and Wildlife Service to EPA notes that certain stream segments proposed to be filled under a pending permit application can support aquatic life. This is applicable to EPA's concern regarding anti-degradation standards.

In addition to EPA, the Office of Surface Mining provided continuous input throughout the process through representation on the environmental committee in an advisory role.

E. Environmental impact statements associated with highway fills

In an effort to share expertise gained in assessing environmental impacts of fills and other construction activities, representatives from the West Virginia Division of Highways (DOH) attended a meeting of the committee. Committee members also had the opportunity to review the environmental impact statement prepared for the Corridor H highway project.

Because of the Federal Highway Administration funding associated with highway projects, most DOH projects are subject to the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et seq.* Under NEPA, environmental impact statements (EIS) are required for any project that involves major federal action and that will significantly affect the environment. In preparing an EIS such as the one prepared for Corridor H, the DOH is required to analyze several alternatives (which must include a no-build option) with respect to direct and indirect environmental, social, and economic impacts.

The types of fills used for highway work are smaller in scale and somewhat different in construction than mining fills, but many of the same principles apply to assessment of environmental impacts. DOH has worked closely with EPA over the last several years to develop an acceptable process that adequately addresses the relevant issues, which tend to be very site-specific. With respect to highway projects, the most common issues of concern appear to be impacts on species habitat and historical/cultural resources. In addition, secondary or indirect impacts often are important.

F. Relevant studies and reports on environmental impacts of valley fills

Due to the time and staffing requirements necessary for any type of environmental impact assessment, the committee attempted to obtain pre-existing studies and reports on environmental impacts of mountaintop mining. As discussed below, most of this information was relatively focused with respect to particular sites, wildlife species, and other criteria. None of the studies and reports available to the committee addresses the issue in a comprehensive manner.

Attachment A provides a list of the information made available to the committee.

III. Committee findings

A. Impacts on water quality

1. For purposes of this report, water quality is defined to mean the chemical water quality, or water purity downstream from a valley fill operation. The issue of covering streams with valley fills is addressed under stream mitigation, below.
2. The issue of whether or not valley fills violate state and federal anti-degradation standards is currently the subject of federal litigation.
3. Throughout the permitting process, described in Section I.C., above, numerous regulatory programs are in place to assure protection of state water quality. These include state water quality standards, EPA effluent guidelines and requirements, and the NPDES permitting system itself, which requires the filing of monthly discharge monitoring reports. In addition, prior to the issuance of a surface mine permit; applicants are required to determine the probable hydrologic consequences of the mining operation, which includes preparation of cumulative hydrologic impact assessment. The permit process also includes the opportunity for public comment.

4. Assuming that these regulatory standards are being enforced, there is a mechanism in place for protection of water quality downstream from mining operations.
5. The environmental committee found no significant evidence of widespread or routine violations of state and federal water quality standards and other protections, and no evidence that state/federal regulatory agencies have not done an adequate job in enforcing regulatory programs controlling water pollution.

B. Impacts on fish and wildlife

1. Due to the change in landscape and vegetation patterns as a result of mountaintop mining operations, there is, obviously, an associated change in wildlife succession, at least on an interim basis.
2. Although various claims have been made regarding the impact of mountaintop mining and valley fills on wildlife, few specific issues were raised as part of the task force process.
3. Existing data and reports made available to the committee tend to be species or site specific. Little or no information is available on comprehensive impacts on wildlife in the region.
4. Because very little usable information is available on the types of streams filled (ephemeral, intermittent, etc.); no information was made available to the committee regarding impact of valley fills on fishes.
5. Many studies performed by West Virginia University and others show benefits of reclamation activities on individual species.
6. In the early 1980's, the West Virginia Division of National Resources, in cooperation with WVDEP, developed a voluntary technical assistance program for the mining industry. The program, still in operation, provides technical staff, such as professional biologists to assist mining companies with issues such as endangered species, water quality, and habitat revegetation.

In order to reclaim lost habitat, DNR developed wildlife vegetation plans as part of the technical assistance program. These plans and assistance in implementing them are available and utilized by anyone engaged in mining reclamation. To date, over 150,000 acres have been successfully replanted, mostly on contour strip mining sites.

C. *Cumulative impacts*

1. More information is needed on the locations and size of coal seams currently and potentially available for mountaintop mining.
2. Cumulative environmental impacts are a key issue with respect to EPA's position on the subject of mountaintop mining and valley fills.
3. Information on cumulative impacts of mountaintop mining practices is scattered and depends on one's definition of the cumulative area, such as watershed, region, etc.

D. *Stream mitigation*

1. Ownership and Jurisdiction

The jurisdiction over and ownership of the state's waters (including headwater streams) is well established in both state and federal law. The CWA asserts jurisdiction over "... waters of the United States." The state's Water Pollution Control Act defines water resources as "any and all water on or beneath the surface of the ground. . . ." W. Va. Code 22-11-3. In addition, case law in West Virginia has established the state's ownership of streambeds.

2. Mitigation (compensation, replacement, "softening the effects of")

Mitigation has its origins in Section 401 of the CWA, which requires a certification from the state water pollution control agency that applicants for federally sanctioned permits meet applicable state water quality requirements. As part of the certification, states may attach "conditions" prior to its issuance. For approximately 25 years "mitigation" (compensation) has been required as a condition for Section 404 permits issued by the Corps of Engineers when losses of publicly-owned water resources resulted from the permitted activity. Over the years, mitigation became an acceptable practice where damage or loss of resources was unavoidable and where no practical alternative to the proposed activity was feasible on the part of the permit applicant.

The imposition of "mitigation" costs upon the permittee is justified on two general grounds: (1) that the state should be compensated for the loss of resources owned by the public (state); and (2) that from a resource management standpoint, lost resources should be replaced as a conservation measure.

Historically, (with the exception of Senate Bill 145) there have been no federal or state statutes or regulations governing mitigation requirements

in West Virginia. The process and requirements have been developed administratively by regulatory agencies, leaving flexibility for permit applicants and the agencies to develop appropriate mitigation plans on a case-by-case basis. Because of the repetitive nature of coal industry applications for valley fills, mitigation guidelines and policy papers have been published by WVDEP which dictated these requirements. Such requirements were in effect prior to the passage of Senate Bill 145.

3. The Growth of Large Surface Mines

Over the last few years, West Virginia, because of large deposits of high-quality, low-sulfur coal reserves, has seen the growth of large, western-type dragline operations. With the possible exception of some parts of eastern Kentucky, West Virginia is the only eastern state where this has occurred. Such operations, partly because of physical necessity and partly for cost considerations, have resulted in large valley fills adversely affecting and resulting in the loss of the state's water resources (headwater streams). Prior to the passage of Senate Bill 145 in March of 1998, the WVDEP had an established program firmly in place, which resulted in mitigation projects with significant public benefits. This previous program was acceptable to EPA and the Corps.

4. Senate Bill 145

West Virginia Senate Bill 145 contained a number of provisions adverse to the effective regulation of coal mining activities including the following:

- Increasing the watershed threshold requiring mitigation from 250 to 480 acres, effectively eliminating all mitigation requirements for the coal industry.
- By requiring legislative appropriations of all mitigation funds, assurances that such funds would be used for water-related projects related to the permitted mining activity were removed. In effect, the state legislature would be providing the conditions for water quality certifications with the ability to expend mitigation funds as it saw fit. Such a provision is in direct conflict with Section 401 of the Clean Water Act, which requires that certification be "conditioned" by the regulatory agency.
- Other provisions such as the authorization of heavy equipment in streams, the application of "best management practices" and other constraints placed on the director are in conflict with established regulatory practices for the coal industry.
- The measure singled out *only* the coal industry for the imposition of mitigation guidelines.

E. Dust

The environmental committee originally attempted to obtain information on this issue, as it relates to environmental impacts. However, based on discussions with regulatory agencies and testimony presented at various task force hearings, the environmental committee finds that dust is primarily a nuisance problem and is subsumed by the subject of blasting operations, in general. The blasting issue is being addressed by the Impact on the People Committee, and by a legislative committee.

F. Approximate original contour

1. SMCRA requires mine sites, with some exceptions, to be returned to approximate original contour (AOC) after mining. Section 701(2) of SMCRA defines approximate original contour to mean:

That surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain, with all highwalls and spoil piles eliminated. 30 U.S.C. 1291 (Z).

2. There is no specificity in these requirements that would prevent some reduction in elevation of a mountaintop or the creation of a valley fill. In fact, the House Report accompanying the passage of SMCRA states that "[I]n order to understand ... [the concept of AOC] ... it is necessary to distinguish between the two dimensions of elevation and configuration." H.R. No. 95-218 at 96, April 22, 1977. Since the passage of SMCRA, many mountaintop permits returning the area to AOC have been legally approved with full public participation afforded during the permitting process. Although OSM is currently working on a report that specifically addresses AOC determinations on mountaintop mines, officials have previously supported the concept that a mountaintop mine can be reclaimed to meet the statutory requirements for AOC even where there may be some changes in the terrain.
3. A waiver of the requirement to return a site to AOC may be granted to achieve certain postmining land uses. The federal SMCRA program recognizes five conditions associated with post-mining land uses for which an AOC variance is appropriate: industrial, commercial, agricultural, residential, and public facility. 30 U.S.C. 1265. West Virginia's program recognizes the same five categories, but allows for public use rather than public facility and allows for a very limited usage of "woodlands" to mean a commercial product where flat land is essential to the use of mechanical harvesting equipment. West Virginia has also

proposed to add a category for "fish and wildlife habitat and recreation lands", but that has not yet been approved by OSM. The pending report by OSM will also address West Virginia's use of AOC waiver provisions.

It is important to note that the environmental committee discussed only the issue of whether or not mountaintop sites can meet current AOC standards. Issues with respect to application and enforcement of variance provisions were addressed by the economic committee.

4. Most new applications for mountaintop mining are proposing to return the site to AOC, which makes careful attention to AOC important. Post-mining land use requirements are less restrictive where there is no requirement for a waiver from AOC. Further consideration of AOC and the adequacy of land use decisions may need to continue after the release of the OSM report.
5. With respect to various allegations and news reports about mountaintop mining, the committee finds no evidence that the permitting process has resulted in issuance of "illegal" mining permits. Mined lands generally are being returned to AOC as currently defined in state and federal law, or have obtained variances. In addition, each individual permit which has been issued for mountaintop mining is subjected to extensive public scrutiny in the public participation process, including advertising, public comment, and public hearings. Protests with respect to AOC requirements or variances can be voiced at that time.
6. The environmental committee made these findings on AOC based on information currently available, or not available, as the case may be. The committee expects OSM to identify specific concerns regarding application of the AOC definition and variance requirements. These issues may require attention by the state after publication of the OSM report.

G. Reclamation Activities

1. Most sites at which mountaintop mining methods are utilized have been mined in the past by other methods.
2. Many of these sites were mined prior to the passage of SMCRA ("pre-law" sites) and, consequently, were subject to far less rigorous environmental standards than those in force today.
3. Many of the pre-law sites are reclaimed in connection with mountaintop mining activities.

4. Reclamation of pre-law sites involves, among other things, elimination of highwalls, clean up of gob piles, extinguishing of coal seam fires, closure of mine openings, and elimination of slides from old spoil downslope of pre-law contour mines.

III. Recommendations

A. Record-keeping

1. That immediate steps be undertaken by appropriate regulatory agencies to compile permitting and inspection information in such a manner as to make information more accessible and understandable by the public.
2. That information be compiled, in database form, identifying stream volumes, types and lengths affected by valley fills.

B. Further study

1. That the Governor encourage DEP to work with EPA to evaluate the long-term environmental impacts of 32 sites identified in 1988 as part of an "in-stream pond" issue.
2. That the Governor work with the legislature to make a commitment to the assessment of the location and size of existing coal currently or potentially available for mountaintop mining, including a realistic projection of mountaintop acreage that is subject to removal and placement in valley fills.
3. That an existing research proposal by the Coal and Energy Research Bureau be reviewed for its suitability to the above purpose.
4. That the state makes a further commitment to studying the long-term and cumulative environmental impacts, including water quality, fish/wildlife, and biological impacts, of mountaintop mining, with assistance from appropriate experts.
5. That the Governor bring state and regulatory authorities together for a coordinated review and assessment of information and study needs, including the appropriate process to follow in the development of further studies.

C. Stream mitigation

1. That the governor recommend and the state legislature rescind Senate Bill 145.

2. After legislative rescission of SB 145, that the Governor by executive order direct that WVDEP implement the guidelines, standards, and procedures for mitigation which were in effect prior to the effective date of Senate Bill 145.
3. In order to satisfy legislative concerns regarding the expenditure of funds, that such executive order specify that mitigation projects and funds be expended on environmental or water quality related projects at, near, or in close proximity of the mine site.
4. That the Governor urge EPA and the Corps of Engineers to develop a comprehensive nationwide mitigation policy.

D. Further recommendations

1. That the task force process be used as a first, and not a final, step in the public debate concerning all issues related to mountaintop mining.
2. That all relevant government agencies involved in the activities recommended above, or involved in any other activities recommended by the task force, take all appropriate measures to assure adequate representation in the process by all affected groups.
3. That the Governor work with state agencies to assure continued rigorous and consistent enforcement of regulatory requirements.

Attachment A

Relevant Reports and Other Studies

1. Technical Report, The committee on West Virginia DNR Interagency Evaluation Tour,
Submitted by Alfred M. Hirsch, Chairman, John Bragg, Fred Moore, and Terry Sole, Winter 1980-'81 Green Lands.
2. Environmental Assessment of Surface Mining Methods, Head-Of-Hollow Fill and Mountaintop Removal: Evaluation of Long Term Slope Stability, EPA Interagency R & D Report, November 1981.
3. An Investigation Of High Extraction mining And Related Valley Fill Practices In South Western Pennsylvania, Sponsored by The Audubon Society of Western Pennsylvania, References: Maslany, Thomas J. 1998, Perry, Sue A. 1997.
4. An Evaluation of Mountaintop Mining and Valley Fill Construction Effects upon the Surface Hydrologic and Benthic Systems
5. Hydrogeology, Hydrogeochemistry, and Spoil Settlement at a Large Mine-Spoil Area in Eastern Kentucky: Star Fire Tract, David R. Wunsch, James S. Dinger, Page B. Taylor, Daniel I. Carey, C. Douglas R. Graham, Kentucky Geological Survey, Series X1, 1996
6. Summary of Technical Approach Meeting, EPA Contract No. 68-C4-0034, Work Assignment IM 3-28B, Daniel Sweeney, Science Applications International Corporation, February 1998.
7. Effects of Surface Mining on Aquatic Resources in North America, Lynn B. Starnes and Don C Gasper, AFS Position Statement, Fisheries, May 1995.

8. Environmental Assessment of Surface mining Methods: Head-Of Hollow Fill and Mountaintop Removal, Project Officer: John F. Martin, Volume 1, Industrial Environment Research And Development, U.S E. P. A., January 1984.
9. Environmental Assessment of Surface mining Methods: Head-Of Hollow Fill and Mountaintop Removal - Interagency Energy/ Environment R& D Program Report, EPA-600/7-79-062, July 1979.
10. Disposal of Excess Spoil from Coal Mining and the Surface Mining Control and Reclamation Act of 1977, Committee on Disposal of Excess Spoil Board on Mineral and Energy resources, Commission on Natural Resources, September 14, 1981.
11. Reclamation and Management of Surface Mined Areas For Game and Non-Game Birds in West Virginia, David E. Samuel, Robert C. Whitmore, Division Of Forestry West Virginia University, October, 1976.
12. American Woodcock Use Of Reclaimed Surface Mines In West Virginia, Ian D. Gregg, Thesis submitted to the Graduate School of WVU, 1997.
13. Literature review from Office of Surface Mining, Summer/ Fall 1998.
14. Highwall Elimination and Return to Approximate Original Contour as Required in the Surface Mining Control and Reclamation Act of 1977, A Report prepared by the Committee Highwalls and Approximate Original Contour Board on Mineral and Energy Resources Commission on Physical Sciences, Mathematics, and Resources National Research Council, 1984.
15. The Effects of Controlled Burning on Potential Bobwhite Quail Brood Habitat on Surface Mines, Sandra L. Brown, David F. Samuel, Division of Forestry West Virginia University.
16. Use of Reclaimed Surface Mines by Foxes in West Virginia.
17. Surface Mine Reclamation and Wildlife.
18. Letter from Stan Laskowski, U. S. EPA responding to request for white papers, September 22, 1998.
19. Shear Madness, U. S. news and World Report, Special Report, August 11, 1997, update on October 13, 1997.
20. Letter from David Densmore, U. S. Fish and Wildlife Service, Ko Tom Maslany, USEPA, Concerning proposed Hobet Spruce No. 1 Surface Mine, July 31, 1998.

21. Letter from Tom Maslany USEPA, to Barbara Taylor, WVDEP, concerning proposal Hobet Spruce No. 1 Surface Mine NPDES Permit, August 4, 1998.
22. "All Shaken Up: Blasting Damage Interviews", videotape prepared by West Virginia Organizing Project, 1998.
23. Senate Bill No. 145, passed March 14, 1998.
24. Preliminary Valley Fill Inventory, prepared by WVEP, September, 1998.
25. Mitigation/Compensation and West Virginia's Mining Industry, WVDEP guidelines.
26. Importance and Productivity of Headwater Streams Literature Review and Valley Fill Mitigation Strategies, Perry and golden, West Virginia University.
27. Statement of United Mine Workers of American on Mountaintop Removal, Cecil E. Roberts, October, 1998.
27. West Virginia Coal Association, assorted position papers, November, 1998.
28. West Virginia Mining and Reclamation Association Mountaintop Mining Overview and attachments, November, 1998.
29. Letter from Robert C. Byrd, John D. Rockefeller IV, Alan B. Mollohan, Nick J. Rahall, II, and Robert E. Wise, Jr. to Michael McCabe, USEPA, October 30, 1998.
30. Resolution of Methodist Church on Mountaintop Mining, September 12, 1998.

CHAPTER FOUR

FINAL REPORT OF THE ECONOMIC COMMITTEE¹

GOVERNOR'S TASK FORCE ON MOUNTAINTOP REMOVAL AND RELATED MINING METHODS

I. OVERVIEW

The Economic Committee of the Governor's Task Force on Mountaintop Mining and Related Mining Methods has focused on the economic aspects of such mining practices and the post-mining land use of surface mined lands. The Committee has found that the need for greater utility of surface mined lands, the applicable federal law and also public opinion, albeit divided, compels significant reforms in mountaintop removal (MTR) mining and other surface mining methods. The footprint and environmental impact of these mining methods should be reduced. A zealous commitment must be made to post-mining land uses which provide economic and social benefits to the citizens of the coalfields. Regulatory agencies, landowners, coal producers and economic development agencies must establish a new partnership to achieve these goals which will require unprecedented cooperation and regulatory innovation. A transition period may be necessary to fully implement this evolution in mining practices for the reasons discussed below.

Whether a surface mine is regraded to its "approximate original contour", when compared to the natural pre-mining landscape, is the legal threshold between MTR and other surface mining methods. Yet, the applicable federal and state law provides meager guidance in defining this threshold and the Task Force has been unable to develop either a quantitative or a meaningful qualitative definition. In order to ameliorate this definition problem, and to enhance the post-mining utility of all surface mined lands, the Economic Committee has made its recommendations applicable to all surface mined lands.

II. SUMMARY OF RECOMMENDATIONS

¹ The members of the MTR Task Force Economic Committee are *Mike Whitt, John McFerrin, Esq., Delegate Steve Kominar, Charles Jones, Ray George and Larry W. George, Esq., Chair*. Mr. McFerrin indicated that he will file an individual report.

- (1) Fish & Wildlife Habitat Should Be Discontinued As Post-Mining Land Use -- Fish & wildlife habitat was not contemplated by Congress as a variance from approximate original contour (AOC) for MTR mining and is not authorized by law. Further, it offers little economic or social benefits to the local communities unless integrated into a public recreational facility. The Economic Committee recommends that fish and wildlife habitat be discontinued as an MTR variance at the first opportunity without causing disruptions in on-going mining operations. The Committee further recommends that it be discontinued as a post-mining land use on non-MTR sites except where integrated with a public recreation facility as discussed below.
- (2) Commercial Forestry Should Be The Preferred Post-Mining Land Use On All Surface Mined Lands -- Reforestation be considered as the preferred post-mining land use in the absence of a viable and/or immediate commercial, industrial, public recreational facility or agricultural use. This recommendation applies to all surface mined lands. The forest cover can be removed in the event of subsequent industrial, or commercial or other appropriate opportunities. Significant revisions in mine planning, management and reclamation standards will be necessary.
- (3) Public Recreation Facilities As Post-Mining Use -- Public recreation facilities which incorporate fishing & hunting or other recreation are a valid AOC variance for MTR mining. The negotiated rulemaking process recommended below should be utilized to develop: (1) objective and quantitative criteria to evaluate the demand and potential economic and recreation value, (2) establish a professional evaluation team, (3) safe and appropriate public access, (4) appropriate legal agreements or property interests to be secured by state or local government to assure public use, and (5) provide a management plan for funding and operation. These criteria should be applied to the approval of such a recreational facility on all surface mined lands.
- (4) Agriculture As A Post-Mining Land Use Will Be Exceptional -- Although research is promising, only in the most exceptional situations can agriculture be relied upon as an acceptable post-mining land use. Livestock grazing is generally not an appropriate grounds for an AOC variance at MTR sites. The negotiated rulemaking process discussed below should be utilized to develop objective criteria to determine whether agriculture is a higher or better use of the mined lands when compared to commercial forestry.
- (5) Objective Criteria Should Be Applied To Proposed Industrial & Commercial Post Mining Uses -- A rule of reason must be applied in deciding whether a potential commercial/industrial post-mining land use complies with legal requirements for an AOC variance. The same is true for non-MTR mines in determining whether a commercial/industrial use should be substituted for commercial forestry. The site assessment

criteria adopted by the West Virginia Development Office are recommended for these purposes. Appropriate minimum site scores and maximum site preparation costs would determine whether a given site qualified for an AOC exemption and/or a variance from commercial forestry at non-MTR sites. A professional evaluation team would determine the subject site scores and preparation costs. Appropriate legal agreements or property interests must be secured by the State, local government or non-profit economic development organizations to assure availability of the site for such uses and the cooperation of landowners in marketing the property.

- (6) The Balance Between Preservation Of The Natural Landscape And Surface Mining Is An Inherently Political Decision Vested In The Legislative Branch -- The fundamental political, social and economic values manifested in any expansion or limitation of surface mining are properly and exclusively the province of the Legislative Branch. The West Virginia Legislature should consider whether these public values compel restrictions upon the degree of alteration in natural landscape and environment. The Governor should submit this request to the 1999 regular session of the West Virginia Legislature by executive message.
- (7) The Federal Agencies Should Be Encouraged To Cooperate In Resolving the MTR Issues -- The U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, the Office of Surface Mining of the U.S. Department of the Interior and U.S. Environmental Protection Agency all exercise significant regulatory authority over mining and the filling of ephemeral, intermittent and perennial streams. But these agencies have not cooperated with each other or the State in seeking a resolution to these difficult issues. The Committee recommends that Governor Underwood and the West Virginia Congressional delegation encourage these federal agencies to assume a leadership role in these issues and to work cooperatively with both the other regulatory agencies and the private sector.
- (8) An Alternative Dispute Resolution Process Would Provide A Framework To Implement The Task Force's Recommendations, Resolve Pending Litigation And Achieve Closure Of All MTR Issues -- The Committee recommends an alternative dispute resolution procedure based upon the *Federal Negotiated Rulemaking Act of 1990* ("FNRA") as a process both to resolve the MTR related litigation pending before the United States District Court and to develop the new regulations and administrative policies necessary to implement the recommendations of this Task Force. FNRA would provide a mediation process in which WVDEP, federal regulatory agencies and affected private interests could participate to develop the specific regulations and/or administrative guidelines necessary to achieve closure on all MTR related issues.
- (9) The Legislature Should Appropriate Adequate Funds to Accelerate the Coal Bed Mapping Project of the W.Va. Geological Survey -- The Coal Bed Mapping Project of the W.Va. Geological Survey can provide very valuable information for a wide variety of regulatory,

planning, engineering, marketing and other purposes related to surface and deep coal mining. Accordingly, the Committee recommends that the Legislature provide full funding to the W.Va. Geological Survey for completion of CBMP at the first practicable opportunity.

III. THE ECONOMIC ASPECTS OF COAL MINING IN WEST VIRGINIA REQUIRE A DELIBERATE APPROACH TO MTR REFORMS

A. ECONOMIC AND FINANCIAL CONSIDERATIONS

During the past decade, as MTR became an increasingly prevalent mining method, the pricing power and market share of West Virginia's coal has been eroded by competition from Wyoming's Powder River Basin and other sources. The lower production costs of MTR mining have contributed significantly to maintaining West Virginia as a competitive coal producer. The general public and the State's political institutions gave little attention to MTR mining. This lack of a political consensus concerning the relevant environmental and land use values contributed to lethargy on the part of state and federal regulatory agencies in addressing critical legal and public policy issues. These factors have caused our state's surface coal mining regulatory program to drift away from the intentions of the law applicable to these mining methods.

The Committee finds that several factors are relevant in determining the schedule by which to implement the Task Force's recommendations. First, at least in the near term, MTR mining methods are essential to maintain the State's present levels of coal production. West Virginia should make every reasonable effort to maintain its longstanding commitment to provide energy to the Nation and also to protect its reputation as a reliable supplier of competitive, high-quality coals. In the private sector, individual coal producers have legally binding contractual obligations to supply electric utility companies and other customers. The breach of such contractual commitments due to an interruption in coal supplies would have compelling and potentially permanent repercussions for these companies, their employees and the State as customers seek alternative coal supplies.

Secondly, the tax revenues generated by MTR mining are essential to the fiscal stability of local government and secondary education in those counties wherein such mining is prevalent. Significant state tax revenues are also derived from the corporate net income and coal severance tax receipts. Thirdly, thousands of high income jobs are directly or indirectly supported by MTR mining and manifest a critical component of southern West Virginia's economy. Fourthly, MTR mining generally produces high quality coals (e.g., lower sulphur and ash, frequently higher BTU) from the Kanawha geological formation found at the higher elevations in southern West Virginia. These MTR-produced coals are frequently blended with coals from smaller surface mines and deep mines producing from the lower quality coal seams to enhance their marketability. In many instances, these blended coals are necessary to achieve the fuel criteria of electric power stations and therefore are critical to the viability of non-MTR coal production. During the past decade, West Virginia's deep mines and non-MTR surface mines have developed a significant dependence upon MTR coal.

Finally, several of the state's major coal producers have made tremendous investments of capital in mining machinery, permitting, engineering and site preparation for MTR mining. These same firms have forgone the opportunity to apply these resources to other mining methods. As late as the Spring of 1998, these investments were made and MTR mines were permitted with the express consent of state and federal regulatory agencies and the acquiescence of the general public and the State's political institutions. These great investments of capital, time and other resources represent irretrievable commitments which are critical to the State's economy. Basic fairness and West Virginia's compelling interests in its reputation as an equitable and rationale business environment requires that any changes in MTR mining must be deliberate and evolutionary.

Note: A decision whether the Economic Committee recommends a specific period of transition for its recommendations has been held in abeyance pending discussion by the full Task Force.

B. PROJECTED EXTENT OF MTR MINING AND BENEFITS OF COAL BED MAPPING PROJECT OF W.VA. GEOLOGICAL SURVEY

The West Virginia Geological Survey initiated the Coal Bed Mapping Project (CBMP) in 1995 with monies appropriated by the Legislature. The CBMP utilizes geographic information system (GIS) technology to map and assess coal beds for purpose of ad valorem taxation and general geological information such as quality, thickness and old mine works. CBMP has completed only Fayette County with several other counties underway. However, CBMP provided very valuable information to this Committee. Preliminary CBMP results suggest that the primary region susceptible to MTR mining is an arc approximately twenty miles (20 mi.) wide reaching from the Big Sandy River in Mingo County northeast into Webster County.²

The Coal Bed Mapping Project can provide very valuable information for a wide variety of regulatory, planning, engineering, marketing and other purposes related to surface and deep coal mining. Accordingly, the Committee recommends that the Legislature provide full funding to the W.Va. Geological Survey for completion of CBMP at the first practicable opportunity.

² See attached map, Appendix A.

IV. THE 1977 FEDERAL SURFACE MINING ACT WAS A COMPROMISE BETWEEN CONSERVATION OF THE LANDSCAPE AND THE ECONOMICS OF MINING

A. CONGRESSIONAL INTENT

The work of the Task Force's Economic Committee, and the rationale for its recommendations, requires a brief review of the Federal Surface Mining & Reclamation Act of 1977 ("SMCRA")³. This legislation was enacted following six years of intense national debate and controversy about the proper methods of reclamation, exceptions to reclamation to enhance post-mining land use, the preservation of surface lands and water resources, the cost and efficiency of coal production and the implications for the Nation's energy supply. The 1977 Act manifested a classic political compromise between these different public policy goals and the constituencies which advocated them. We will not attempt to scrutinize the administrative regulations implementing SMCRA, but instead, will revisit the intentions of the Congress.

The requirement that surface mined lands be returned to "approximate original contour" (AOC) was described in the Report of the House Committee on Interior & Insular Affairs ("House Report") as one of SMCRA's principal environmental performance standards.⁴ Mountaintop removal and the associated valley fills were considered exceptions to the AOC requirement which the state regulatory agency could authorize in specific circumstances discussed below. The House Report indicates that the goals of AOC were public safety, environmental quality and conservation of the landscape:

³ 30 U.S.C. 1201 et seq. P.L. 95-87 (Aug. 3, 1977).

⁴ House Report (Interior and Insular Affairs Comm.) No. 95-218, pgs. 77, 80, to accompany H.R. 2 (Apr. 22, 1977).

In recent years, some mountaintop removal operations have caused serious environmental problems in the Appalachian area. The key cause of these problems have been the "valley" fill or "head-of-hollow" fill techniques utilized to dispose of excess spoil material. Valley fills require complex engineering to insure stability of the fill and sound drainage control. Mountaintop removal operations which maintain virtually all the spoil material on the mountaintop avoid such complexities.⁵

In the humid East, retention of overburden on the bench, avoiding all unnecessary placement of unconsolidated material on steep slopes, would contribute most significantly to the eliminations of slides, sedimentation, siltation and other offsite effects which threaten downstream areas. The basic concept embodying this principal is returning the mining site to its approximate original contour.....the concept also includes blending the site into the surrounding terrain to the greatest degree possible.⁶

But the Congress also recognized that very significant economic and social benefits could be derived from alterations in the natural landscape as a function of MTR and other surface mining methods. The House Report explains the intentions of Congress and the limitations imposed by SMCRA upon variances from AOC:

⁵ House Report at pg. 77.

⁶ House Report at pg. 80.

.....surface mining also presents possible land planning benefits as such mining involves the opportunity to reshape the land surface to a form and condition more suitable to man's uses. In such instances, the overburden and spoil become a resource to achieve desired configurations rather than waste material to be disposed of or handled by the most economic means. The performance standards recognize that return to approximate pre-mining conditions may not always be the most desirable goal of reclamation and thus appropriate exceptions to the general requirements are provided. As the realization of such alternative pre-mining land uses-as industrial, commercial or residential development will often depend on the commitments or assurances that necessary services will be available, evidence of such availability prior to mining is a necessary part of the permit approval process.⁷

B. SMCRA'S THREE PRONG TEST FOR AOC VARIANCES

The Congressional policies discussed above are implemented by SMCRA § 515(c)⁸ which provides a variance from AOC for mountaintop removal methods under certain conditions. The essential § 515(c) requirements for an MTR variance can be summarized as a *three prong test*:

(1) Type of Post-Mining Land Use:

“industrial, commercial, agricultural, residential or public facility (including recreational facilities)”;

(2) Objective Standard:

“equal or better economic or public use” of the affected land as compared with pre-mining use;

(3) Appropriate Assurance of Performance:

Mine operator must provide specific plans and “appropriate assurances” that a post-mining land use will be:

- (i) “compatible with adjacent land uses”;

⁷ House Report at pg. 94

⁸ 30 U.S.C. § 1265(c).

- (ii) “obtainable according to data regarding expected need and market”;
- (iii) “assured of investment in necessary public facilities”;
- (iv) “supported by commitments from public agencies where appropriate”; and
- (v) “practicable with respect to private financial capability for completion of the proposed use”

A fair reading of SMCRA and its historical compromise between mining and the conservation of the natural landscape requires a much more attenuated exception for MTR mining than has been recent practice in West Virginia. The SMCRA three prong test presents several fundamental and sometimes subjective questions. What is the value of the natural landscape and environment to which a proposed post-mining land use is to be compared? What are the objective criteria by which the “expected need and market” for any post-mining land use is to be evaluated? What are the nature of the “assured” investments in public facilities? The Committee attempts to answer some of these questions below. The Committee also proposes both a new negotiated rulemaking procedure to resolve certain technical issues and consideration by the Legislature regarding the preservation of the natural landscape.

C. SMCRA POST-MINING USE REQUIREMENTS AT NON-MTR SURFACE MINES

SMCRA provides more discretion in post-mining land uses for surface mines which are not defined as mountaintop removal by reason that comply with the AOC requirement. SMCRA § 515(b)(2) requires the mine operator to “restore the land affected to a condition capable of supporting the uses which it was capable of supporting prior to any mining, or higher or better uses of which there is reasonable likelihood”. For non-MTR mines, SMCRA provides the states with broader regulatory discretion in the approval of post-mining land uses than is the case for MTR sites. The House Report discussed SMCRA’s goals for non-MTR surface mines:

With few exceptions, surface coal mining operations should constitute a temporary use of the land. This concept is reflected in the permit approval process as well as the environmental protection standards established by [SMCRA]. Both are premised on the goals of the legislation that land affected by surface mining be returned to a form and productivity at least equal to that of its premining condition.....and is consistent with the surrounding landscape.....the permit process requires the submission and approval of postmining land use and thus is designed to elicit an evaluation of the operator’s plan and ability to return the land to a useful condition.⁹

⁹ House Report at pg. 93.

In West Virginia, forest cover is a ubiquitous pre-mining land use. SMCRA mandates that reclaimed land at least be capable of supporting reforestation use whether or not it is actually adopted by the mine operator required by the state regulatory agency. The Committee's recommendation set forth below for reforestation as the preferred post-mining land use is both compatible with SMCRA's reclamation requirements and within the regulatory discretion of the State to establish priorities for post-mining land uses.

V. EVALUATION AND RECOMMENDATIONS FOR POST-MINING LAND USES

A. FISH & WILDLIFE HABITAT

Fish and wildlife habitat and the associated rolling grasslands typically found at reclaimed mines has been the most prevalent post-mining land use for obvious reasons: it represents the lowest cost to implement and maintain, it requires minimal commitment by the landowners and the public sector and is easily integrated with existing reclamation standards for regrading and revegetation. But the enhancement of fish & wildlife habitat was not contemplated by Congress as an AOC variance and is not authorized by SMCRA. MTR surface mines which rely only upon fish & wildlife habitat as a post-mining land use are not in compliance with SMCRA. The relative economic advantages of such fish and wildlife uses, in comparison to the same on the premining natural landscape or reforested mine lands, are marginal unless integrated into a public recreational facility.

Accordingly, the Economic Committee recommends that fish and wildlife habitat be discontinued as an AOC variance for MTR post-mining land use at the first opportunity without causing disruptions in existing mining operations. Further, the Committee recommends that fish and wildlife habitat be discontinued as a post-mining land use on non-MTR sites except where integrated with a public recreation facility as discussed below.

B. PUBLIC RECREATIONAL FACILITIES FOR HUNTING, FISHING AND OTHER PURPOSES

Unlike fish and wildlife habitat, SMCRA does authorize "*public facility (including recreational facilities)*" as a lawful variance for MTR mining. In certain circumstances, a public hunting and fishing facility could be integrated with fish and wildlife habitat as a post-mining land use. Whether a post-mining public fishing and hunting facility at a proposed MTR mine meets the objective standard of the "*equal or better economic or public use*" and "*appropriate assurances*" requirements of SMCRA's three prong test will require both new objective criteria and professional evaluation on a site specific basis. As discussed above, the Committee has recommended the discontinuance of fish and wildlife habitat as a post-mining land use at both MTR and non-MTR mines except in conjunction with such a public facility.

Accordingly, the Committee recommends the following for such proposed public recreation facilities on any surface mined lands:

- (1) ***New Criteria*** -- That new objective and quantitative criteria be developed to evaluate the demand and potential economic and recreational value of the proposed public facility. These criteria can be developed by the negotiated rulemaking procedure recommend below.
- (2) ***Evaluation Team*** -- That the evaluation of public hunting, fishing and/or other recreational facility for purposes of an MTR variance be conducted by a team comprised of professional representatives of the following:
 - WVDNR Parks Section
 - WVDNR Wildlife Resources Section
 - Community Development Unit of the W.Va. Development Office
 - W.Va. Division of Tourism
 - County Commission(s) or another unit of local government designated by the Commission(s).
- (3) ***Public Access*** -- That the W.Va. Department of Transportation be consulted by the evaluation team to assure safe and appropriate surface access to the proposed public recreation facility.
- (4) ***Binding Legal Commitments and Management Plan*** -- That appropriate legal agreements or property interests be secured by state or local government to assure public use. Management plans should be developed and, to the extent reasonably possible, funding identified in advance of permitting for the long-term operation of the such facilities.

C. COMMERCIAL FOREST MANAGEMENT AND AGRICULTURE

Historically, commercial forestry has been neglected as a post-mining land use but it has very significant potential. The common, albeit unlawful, MTR variance for fish and wildlife habitat and the incompatibility of existing reclamation standards have frustrated commercial forestry as a post-mining land use. Regulatory agencies and the mining industry should place the highest priority on reforestation as the post-mining land use for MTR and other surface mine sites.

But the implementation of reforestation will require significant changes in mine planning and reclamation requirements. The most authoritative research on reforestation of surface mined lands has been conducted by the Department of Forestry at Virginia Polytechnic Institute & State University and is designated as the Powell River Project. This research has advanced to the commercial demonstration stage and indicates that commercial forestry is a proven and very desirable post-mining land use. The VPI & SU research presents several significant findings:

- Properly managed surface mine sites can produce both hardwoods and softwoods and can frequently be more productive than the natural landscapes which are typically subject to MTR and other surface mining.

- Mine site materials can be utilized to create appropriate soil mediums for commercial forestry.
- A minimum four foot (4.0 ft.) soil depth is required.
- The dense soil compaction typical found on reclaimed sites seriously impairs if not eliminates reforestation. Proper regrading and mine site management is essential to avoid excessive compaction.
- Reforestation requires that mine sites be reclaimed with a slower growing ground cover which does not compete with trees. This will require new flexibility and performance standards in the reclamation regulations which presently require rapid revegetation prior to bond release.
- A gentle, rolling relief which improves drainage is superior to flat land for reforestation (opposite result from that in natural terrain).

In contrast to reforestation, the research on agricultural uses is in its early stages and, although promising, much work remains. Only in exceptional situations can agriculture be relied upon as an acceptable post-mining land use at MTR sites. The use of reclaimed sites for livestock grazing has been episodic and has not been demonstrated as satisfying SMCRA's three prong test for an MTR variance from AOC. The Task Force finds that livestock grazing is generally not an appropriate grounds for an AOC variance at MTR sites. The negotiated rulemaking process discussed below should be utilized to develop objective criteria to determine whether agriculture is a higher or better use of the mined lands when compared to commercial forestry.

The Committee recommends that reforestation be considered as the preferred post-mining land use in the absence of truly viable and/or immediate plans for commercial, industrial, recreational or agricultural uses. This recommendation applies to both MTR and non-MTR surface mines. The forest cover can be removed in the event of subsequent industrial, commercial or other appropriate opportunities as a revision in the post-mining land use. Native hardwood species should be given preference absent compelling circumstances to the contrary.

D. COMMERCIAL AND INDUSTRIAL

Local governments in southern West Virginia counties place great hope in the creation of flat land by MTR and other surface mining methods for commercial and industrial development. The West Virginia Development Office (WVDO) has identified very few sites in these counties which are suitable for commercial or industrial development. The lack of adequate flat land, access and/or utility services to such sites has seriously inhibited economic development in those counties. WVDO views selected MTR sites as having significant potential for development but most are either isolated or the expense of necessary infrastructure so expensive as to render them untenable. The lack of environmental and/or archeological issues at MTR sites is a benefit in marketing such

properties. The diminishing start-up time for new commercial development, historically 2-3 years, now 9-12 months, has increased the value of existing sites with either the presence or capacity for installation of surface access and utilities.

MTR and other surface mines can provide a valuable inventory of "on-the-shelf" development sites in these counties. However, a rule of reason must be applied in determining whether a potential commercial/industrial post-mining land use complies with SMCRA's three prong test for the AOC variance and the extent of site preparation required for this purpose. The same is true for non-MTR mines in determining whether a commercial or industrial use should be substituted for commercial forestry. This goal will require a new partnership and unprecedented cooperation among local government, coal producers, landowners and WVDEP. Marginal sites should be reforested per the above discussion -- the forest cover can be removed in the event commercial/industrial opportunities come to fruition. Therefore, the Economic Committee makes the following recommendations concerning industrial and commercial post-mining land uses:

- (1) **Adopt Objective Site Evaluation Criteria** -- WVDO has developed the following criteria for evaluating potential industrial/commercial sites. The Committee finds that these criteria offer substantial guidance in determining whether proposed MTR sites qualify for an AOC variance under SMCRA's three prong test. These criteria follow:

<u>Proximity to Interstate Highway</u>		Yes	4
		No	0
Less than five miles	15		
5-10 miles	10		
10-15 miles	5		
		<u>Site Grade</u>	
<u>Railroad Service</u>		0-3%	8
		3-5%	4
5% and over	2		
		<u>Adjacent Land Uses</u>	
<u>Local Access</u>		Buffer 4 Sides	6
Good	6	Buffer 2 Sides	3
Adequate	3	No Buffer	0
Poor	0		
		<u>Commercial Air Service</u>	
<u>Site Configuration</u>		0-60 Miles	6
Square	6	60-90 Miles	4
Narrow	4	Over 90 Miles	2
Irregular	2		

Wetlands

None	6
Unknown	3
Yes	0

Archeological Issues

None	6
Unknown	3
Yes	0

Water Service

On site	6
Less than 1 Mile	3
One to Two Miles	1
More Than Two Miles	Negative Points

On-site Water Storage Capacity

0-25,000 gal.	2
25,000-50,000 gal.	4
Over 50,000 gal.	6

Sewer Service

Yes	6
Less than One Mile	3
One - Two Miles	1
More Than Two Miles	Negative Points

On-site Sewer Treatment Capacity

0-25,000 gal.	2
25,000-50,000 gal.	4
Over 50,000 gal.	6

Electric & Gas Utility Service

Yes	3
Less than One Mile	2
One to Two Miles	1
More Than Two Miles	Negative Points

Hazardous Waste Contamination

None	6
Unknown	3
Yes	0

- (2) ***Establish a Minimum Site Qualification Score and Maximum Site Preparation Cost Ceiling*** -- The Task Force finds that the above criteria offer a rationale basis and substantial guidance in evaluating proposed MTR post-mining land uses. However, WVDO uses the scoring system on a relative basis -- there is no minimum recommended threshold. WVDO also considers whether potential sites fall within a rationale limit for site preparation costs (e.g., \$50,000/ac. for rural areas). Accordingly, the Task Force recommends that these criteria (*site evaluation scores & site preparation costs*) be utilized in the negotiated rulemaking process proposed below to develop new state guidelines for approval of a proposed industrial and/or commercial post-mining land use. Appropriate minimum site scores and maximum site preparation costs would determine whether a given site qualified for an AOC exemption.

- (3) *Evaluation Team* -- That proposed industrial and commercial post-mining land uses be evaluated by a team comprised of professional representatives of the following:
- WVDO Community Development Unit
 - WVDO Business & Industrial Unit
 - W.Va. Infrastructure Council
 - W.Va. Department of Transportation
 - County Commission(s) or another unit of local government designated by the Commission(s).
- (4) *Variances from Objective Criteria* -- Upon request of the permit applicant and/or local government, the Evaluation Team should have the authority to review and determine whether an AOC variance for an MTR mine should be granted for sites which would not otherwise qualify under the objective criteria set forth above. For such non-qualifying sites, release of the reclamation bond should be conditioned upon: (1) actual implementation of the proposed industrial or commercial use, or (2) the improvement of the site so as to comply with the site scores and site preparation costs standards discussed above.
- (5) *Binding Legal Commitments for Commercial/Industrial Use* -- That appropriate legal agreements or property interests be secured by the State, local government or non-profit economic development organizations to assure availability of the site for such uses and the cooperation of landowners in marketing the property.
- (6) *Capacity to Install Infrastructure* -- The permit applicant and WVDEP should consult closely with the Evaluation Team and landowners to assure that appropriate infrastructure and/or site preparation is incorporated into the reclamation plan. However, this will be a site specific judgment and does not necessarily require the installation of utilities and other infrastructure during reclamation. Instead, the site evaluation criteria detailed above will determine the extent to which such facilities should be installed during reclamation.

VI. **THE VALUE AND PRESERVATION OF THE NATURAL LANDSCAPE AND ENVIRONMENT IS AN INHERENTLY POLITICAL DECISION VESTED EXCLUSIVELY IN THE LEGISLATIVE BRANCH**

The legislative history of SMCRA quoted above recognizes that the preservation of the natural landscape has significant value. Both SMCRA and the West Virginia Surface Coal Mining & Reclamation Act recognize that protection of aesthetics and the land as primary statutory purposes.¹⁰ But neither these statutes nor the administrative regulations adopted to implement them provide any guidance for determining the value of the natural landscape and environment for comparison with that proposed for MTR and other surface mining methods.

¹⁰ 30 U.S.C. § 1201(c). W.Va. Code § 22-3-2.

Vast expanses of landscape may be significantly modified by MTR and other surface mining methods provided they comply with the SMCRA requirements discussed above. Neither federal nor state mining law impose any limit upon the extent of the landscape modified by MTR and other surface mining. In enacting SMCRA two decades ago, Congress did not contemplate that engineering and operational improvements in surface mining and the increased competitiveness of the coal market would result in the contemporary expansion of MTR. *The law provides no guidance on the greatest source of the public's angst: How much modification of the natural landscape will West Virginia sustain for the very substantial economic benefits of MTR mining?*

Public opinion clearly demonstrates that the natural landscape has compelling aesthetic, natural heritage and even cultural values to our State. The evaluation of these values does not lend itself to either the professional judgments of this Task Force nor the ministerial regulatory decisions of technocrats in state and federal regulatory agencies. Indeed, it is both unfair and unreasonable to expect that such regulatory agencies can incorporate these compelling values into the permitting process without specific guidance from the Congress and/or the West Virginia Legislature. These questions engage fundamental political, social and economic values which are properly and exclusively the province of the Legislative Branch.

Accordingly, this Committee recommends that the West Virginia Legislature consider whether these public values compel restrictions upon the degree of alteration in the original topography (approximate original contour) and/or the spatial extent of alteration of the natural landscape resulting from MTR and other surface mining. The Governor should submit this request to the 1999 regular session of the West Virginia Legislature by executive message.

VII. THE FEDERAL AGENCIES SHOULD BE ENCOURAGED TO COOPERATE WITH WEST VIRGINIA IN RESOLVING THE MTR ISSUES

The four federal agencies involved in the MTR issues have historically been lethargic and disengaged in regard to their role in the regulation of mountaintop removal mining and the associated valley fills. The U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, the Office of Surface Mining of the U.S. Department of the Interior and U.S. Environmental Protection Agency all exercise significant regulatory authority over mining and the filling of ephemeral, intermittent and perennial streams. This authority gives these federal agencies a principal, even predominate, role in the proper regulation of MTR and the resolution of the problematic regulatory issues which now confront the State. Yet, each of these federal agencies have failed to cooperate with their sister federal agencies and WVDEP. They have failed to take a proactive role in assisting West Virginia resolve these difficult issues. This lethargy is the single greatest impediment to effective cooperation among the affected government agencies and the private sector and a final resolution of these issues.

Therefore, the Committee recommends that Governor Underwood and the West Virginia Congressional delegation encourage the senior policy makers at each of these federal agencies¹¹ to assume a leadership role in these issues and to cooperate with WVDEP and other affected interests in this regard.

VIII. RECOMMENDATION FOR NEGOTIATED RULEMAKING PROCESS

A. FEDERAL NEGOTIATED RULEMAKING ACT CAN PROVIDE A FRAMEWORK TO IMPLEMENT THE TASK FORCE'S RECOMMENDATIONS, RESOLVE PENDING LITIGATION AND ACHIEVE CLOSURE ON THE MTR ISSUES

The recommendations of this Task Force will require significant changes in the surface mining regulatory program and, most likely, new rulemaking by the West Virginia Division of Environmental Protection. New rulemaking and/or policy changes by the Army Corps of Engineers, Office of Surface Mining of the U.S. Department of the Interior and U.S. Environmental Protection Agency may also be required. Very significant and demanding work remains which should be consummated as a partnership between the affected regulatory agencies and private interests.

Earlier this year, a civil action was filed by environmental organizations and several individuals in the United States District Court for the Southern District of West Virginia which raises several significant issues related to MTR mining.¹² The issues pending before the Court have been considered and discussed by this Task Force. The adjudication or settlement of this litigation has potentially profound implications for MTR mining, valley fills and the recommendations of this Task Force. But the uncertainty and delay typically associated with such litigation, and the near certainty of an appeal, compels the State to seek a more effective forum in which to resolve these issues. Still further, many important interests are not even parties in this case, e.g, EPA, OSM, economic development agencies, local government, landowners. Both EPA and OSM exercise regulatory authority which is essential to achieving a comprehensive settlement but they are not parties to the lawsuit.

¹¹ The civilian head of the Army Corps of Engineers is the *Assistant Secretary (Civil Works) of the Department of the Army* -a political appointee of the President. A commissioned military officer, the *Chief of Engineers of the Army*, is the professional leader. Historically, the Deputy Assistant Secretary (Civil Works) has taken the lead for the Corps of Engineers in Congressional action and other major policy issues concerning the Corps' Section 404 program.

¹²Bragg, et al. v. Robertson, et al., Civil Action No. 2:98-636, U.S.D.C.

Therefore, it is recommended that an alternative dispute resolution procedure based upon the *Federal Negotiated Rulemaking Act of 1990*¹³ ("FNRA") be proposed by the Underwood Administration as a process to resolve the litigation and implement the recommendations of this Task Force. Such a process would include all the principal public and private interests, e.g., EPA, OSM, W.Va. Development Office and land companies. Further, the presence of a neutral facilitator (mediator) and a formal structure will provide the general public, parties in the case, interested non-party constituencies and the Court with assurances of fairness, efficiency, competent technical support and a timely conclusion. While FNRA is not the only option, it provides a good working model by which to evaluate other alternatives for structured negotiation.

A structured negotiation process would probably require two support technical support committees comprised of appropriate professionals: (1) environmental quality & regulation, and (2) mining engineering and coal market economics. The technical support committees would provide objective advice and could resolve technical and economic issues which might otherwise prove divisive and distracting to the negotiation process.

B. FNRA OVERVIEW

FNRA was enacted as a result of the growth and successes during the 1980's of alternative dispute resolution (ADR) techniques (e.g., mediation, conciliation) in resolving complex public policy issues on a state and local government level. West Virginia is among a minority of states which have not utilized ADR techniques in environmental rulemaking and/or public policy disputes. In enacting FNRA, the Committee on the Judiciary of the U.S. House of Representatives included these findings in its report:

¹³ 5 U.S.C. § 561 et seq.

Over the years, the rulemaking process has become increasingly subject to litigation and has become adversarial among the agencies and affected parties. The rulemaking records may in fact become distorted as parties take extreme positions to tilt the process in their favor and there is little opportunity for an exchange of ideas in such an environment.....In negotiated rulemaking, representatives of all affected parties, including the agency, come together in an effort to draft a proposed rule that takes into account the needs of the various interests, as well as the requirements of the underlying statute.¹⁴

C. FNRA PROCEDURE

The basic FNRA framework uses a committee comprised of representatives of affected interest groups, an agency representative and a neutral "facilitator" who chairs the committee and acts as a mediator. FNRA provides that any federal agency head can establish a negotiated rulemaking procedure.¹⁵ The agency may, but is not required, to use impartial "conveners" who recommend appropriate participants in the process and specific procedures.¹⁶ The establishment of a committee requires public notice and a minimum thirty (30) day period for affected interests to apply to participate on the committee.¹⁷ FNRA committees are subject to the Federal Advisory Committee Act¹⁸ which, although principally ministerial, provides further authority to include all interested parties. The federal agency is authorized to expend funds for administrative support and technical assistance.¹⁹

The federal agency proposes the neutral facilitator subject to approval by the committee. If the committee rejects the agency's nomination, it may select its own facilitator by consensus.²⁰ The committee operates on a consensus basis to complete and file a report with the agency which includes a proposed regulation and any other appropriate recommendations or materials.²¹ FNRA does not expressly refer to multiple agency participation or jurisdiction or to the participation of state government. However, FNRA § 561 encourages "innovation and experimentation with the negotiated rulemaking process" and this appears ample authority for our purposes.

¹⁴ U.S. House Report No. 101-461, pg. 8. (2nd sess., 1990).

¹⁵ 5 U.S.C. § 563(a).

¹⁶ 5 U.S.C. § 563(b).

¹⁷ 5 U.S.C. § 564

¹⁸ 5 U.S.C. App.

¹⁹ 5 U.S.C. § 565(c).

²⁰ 5 U.S.C. § 566.

²¹ 5 U.S.C. § 566(f).

**Members of the Governor's Task Force on
Mountaintop Mining and Related Practices**

J. Wade Gilley, Chair

Senator Leonard Anderson

Charles Jones

Delegate Greg Butcher

Delegate Steve Kominar

Dave Callaghan

Mike Mace

Betsy Ennis Dulin

John McFerrin

Larry George

Syd Peng

Ben Greene

Dave Samuel

Shelley Huffman

Fred Tucker

Senator Lloyd Jackson

Mike Whitt

Special Advisory Members of the Task Force:

Roger Calhoun, OSM

Ray George, EPA

Michael Miano, WVDEP