

HOUSE REPORT NO. 94-45
Legislative History
House Report No. 94-45

Following is the March 6, 1975, Report from the Committee on Interior and Insular Affairs on H.R.25. The text below is compiled from the Office of Surface Mining's COALEX data base, not an original printed document, and the reader is advised that coding or typographical errors could be present.

SURFACE MINING CONTROL AND RECLAMATION ACT OF 1975,
PROVIDING FOR THE COOPERATION BETWEEN THE SECRETARY OF THE INTERIOR AND THE STATES WITH RESPECT TO THE REGULATION OF SURFACE COAL MINING OPERATIONS, AND THE

ACQUISITION AND RECLAMATION OF ABANDONED MINES, AND FOR OTHER PURPOSES
Interior and Insular Affairs; United States House
HOUSE OF REPRESENTATIVES REPORT No. 94-45; 94TH CONGRESS 1st Session; H.R. 25.

MARCH 6, 1975. - Committed to the Committee of the Whole House on the State of the Union and ordered to be printed.

Preamble

Mr. HALEY, from the Committee on Interior and Insular Affairs, submitted the following

REPORT

[To accompany H.R. 25]

The Committee on Interior and Insular Affairs, to whom was referred the bill

(H.R. 25) to provide for the cooperation between the Secretary of the Interior and the States with respect to the regulation of surface coal mining operations, and the acquisition and reclamation of abandoned mines, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

INTRODUCTION

51 H.R. 25 would establish a national program for the regulation of surface mining of coal as well as the surface effects of underground coal mining. As is discussed below, the legislation is timely both in terms of adequate environmental protection - which has been too long delayed - and in view of the certain expansion of the Nation's coal industry. The rules which will govern the extraction of coal by surface methods need to be established so that industry can proceed to grow and develop in an orderly and environmentally acceptable fashion.

52 The purpose of H.R. 25 is to assure the establishment of a nationwide program for the regulation of surface coal mining in order to reduce

environmental impacts and to provide for the reclamation of previously mined and unreclaimed lands by -

52 (1) covering all coal surface mining (contour and area stripping and open-pit operations), the surface impacts of coal processing from surface and underground mines;

52 (2) establishing administrative, environmental, and enforcement standards for regulatory programs to be administered by the States on non-Federal lands and by tribes on lands within Indian Reservations;

52 (3) providing authority for a Federal regulatory program to augment State or Tribal programs if necessary on non-Federal lands and establish a Federal regulatory program for Federal lands;

52 (4) establishing a program for the reclamation of previously mined and inadequately reclaimed lands;

52 (5) establishing a program for designating areas unsuitable for surface coal mining and a more limited program for minerals other than coal;

52 (6) establishing a new Office of Surface Mining Reclamation and Enforcement for implementing provisions on this Act;

52 (7) establishing a Federal grant-in-aid program to the States for State mining and mineral resource research institutes;

52 (8) establishing procedures for public review of the administrative and enforcement program through access to data, hearings, inspections and standing to sue for damages and for non-compliance with the Act; and

52 (9) recognizing the rights of surface owners and off-site water users.

52 Following the discussion of the need for legislation, the most significant elements of the bill are described in greater detail.

NEED

52 COAL AND OTHER ENERGY RESOURCES

52 Coal has always been a major contributor to the United States energy needs. For various reasons, the growth of the coal industry, in terms of U.S. consumption per year, has been relatively stagnant, or even declining during past decade (see Table No. 1, p. 54). In 1973, coal contributed only 18 percent of the Nation's energy supply, while petroleum and natural gas combined to produce approximately 77 percent. Hydropower supplied a further 4 percent and nuclear, 1 percent.

52 In spite of the currently small proportion of the energy market served by the coal industry, coal represents over 90 percent of our total hydrocarbon energy reserves. (See Table No. 2, p. 54). This fact alone dictates that coal will be called upon to supply a significant proportion of our energy needs in the years to come. In addition, the fact that oil and gas are in short or uncertain supply means that coal is likely to become an increasingly important source of fuel for the Nation through the year 2000 (see Table No. 3(a), p. 54).

53 According to the latest Bureau of Mines figures, coal production in 1974 amounted to 590 million tons. Total U.S. consumption was approximately 551 million tons, while exports amounted to 60 million tons. The overwhelming majority of domestic consumption was in electrical power generation (approximately 69 percent). Other uses included: bunker fuels, beehive coke plants, oven coke plants, and other manufacturing and retail deliveries (see Table No. 4, p. 53). Of the total 1973 U.S. production of coal, about 52 percent was produced by surface mining methods, representing a sharp increase in the past few years.

53 The Federal Energy Administration estimates U.S. coal consumption will increase to 692.5 million tons by 1980. Of this amount, 612.9 million tons (88.5 percent) is committed to the electric utility demand. Non-utility coal demand is forecast to increase slightly, however, the demand for metallurgical coals is expected to remain relatively constant during the period 1975 through 1980. The coal production estimated by F.E.A. (Table No. 3(b), p. 53) is the coal that could be produced for the years 1977 and 1980 by ranges of sulfur content and by state and general geographic areas in the U.S. Of the national coal production having a sulfur content of one percent, or less, the Appalachian region is projected to contribute almost 71 percent. With the advent of the deadline for compliance with the E.P.A. air quality regulations, the potential for developing the vast reserves of Appalachian low sulfur coal will take on greater importance.

53 DISTURBED LANDS

53 Surface mining of coal in the United States involves the temporary or permanent degradation of vast tracts of land. With some outstanding exceptions, there has been little effort on the part of coal operators to restore disturbed areas to their previous levels of productive capacity. In the light of an unprecedented growth rate for the surface mine industry (see Table No. 5, p. 56), the passage of laws regulating coal surface mining in some 29 States has proven to be generally ineffective in bringing about necessary reclamation of the disturbed land areas.

53 A number of experts in government and industry think the continuation of

the majority of the rapid growth in the coal surface mining industry will most likely occur in the West. The imminent disturbance of these lands is due to the large quantities of strippable reserves located primarily in the Northern Great Plains region. A National Petroleum Council report indicates that there are some 32 billion tons of bituminous, sub-bituminous coal and lignite in the West which are recoverable through surface mining techniques. (See Tables Nos. 6 and 7, pp. 57-58.) The fact that many of these deposits are extremely thick, as compared with those of the eastern and mid-western United States makes them economically attractive. Federal regulation of this development is made mandatory by the fact that 80 percent of Western coal is owned by the Federal government. The total coal reserves located on Indian lands is estimated by the U.S. Geological Survey to be in the vicinity of 25 billion tons.

54 A report issued by the Soil Conservation Service of the Department of Agriculture concerning the status of land disturbed as of January 1, 1974, indicates the scope of the problem state by state. Quoting a previous estimate by the Department of Interior to the effect that "153,000 acres of land were disturbed in 1964 by strip and surface mining", the report notes that in the past two years that rate has been exceeded by 35 percent.

54 "The present concerns about energy, combined with the knowledge about our huge coal reserves make it quite likely that the annual rate of land disturbance will be even greater," the report concludes. (See Table No. 9, p. 59.)

2
TABLE

1. -
Annual
consumption of bituminous coal, 1963-73

Year	Consumption (thousands of tons)
1963	409,225
1964	431,116
1965	459,164
1966	486,266
1967	480,416

1968 498,930
 1969 507,275
 1970 517,158
 1971 494,873
 1972 516,776
 1973 n1 556,022
 1974 n1 551,263

54 Source: "Bituminous Coal Data", 1972 edition, National Coal Association.

54 n1 Preliminary figures.

*4*TABLE 2. - TOTAL

U.S. HYDROCARBON
 RECOVERABLE
 RESERVES

	Number	Times 1015 Btu	Percent
Coal (billion tons)	182.0	4,136	88.4
Oil (billion barrels)	48.3	270	5.8
Natural gas (trillion cubic feet)	266.0	274	5.8

54 Source: Bureau of Mines.

5
 TABLE
 (3) (A). -
 COAL AS AN ENERGY SOURCE IN THE UNITED STATES, PROJECTED
 5 [USDI, 1972, table 18]
 2
 Total energy demand
 2
 Energy demand

rn													
Great Plains :													
Montana				16,48		20,10				25,75			
31,40													
North Dakota	1,510	1,870	240	0		0	2,355	2,920	375	0		0	
20,20						12,95							
Wyoming	5,945		3,665	3,005	335	0	9,270		5,715	4,685	530	0	
50,00		29,20				32,70		44,65					
g		0	3,500			0		0	5,360			0	
101,6		31,07		19,48		65,75	11,62	47,57	11,44	30,43			
Total	7,455	0	7,405	5	335	0	5	0	0	5	530	00	
Rocky Mountain:													
Arizona													
4,600	3,875					3,875	4,600						
Colorado	4,475	2,200	110	15		6,800	5,130	2,525	125	20			
7,800													
New Mexico						10,85							
12,00													
Utah	1,955	8,875	20			0	2,160	9,815	25			0	
7,000	3,685	895	1,900	20		6,500	3,970	960	2,050	20			
31,40		11,97				28,02	15,86	13,30					
Total	13,990	0	2,030	35		5	0	0	2,200	40		0	
Pacific:													
Alaska	800					800	1,000						
1,000													
Washington							12,40						
12,40													
gton	8,000					8,000	0					0	
13,40							13,40						
Total	8,800					8,800	0					0	
Total, United States		134,3	80,79	111,1	336,6	755,0	112,4	165,6	97,29	146,4	373,1		
895,0													
States	92,110	55	0	00	45	00	85	55	0	35	35	00	

55 Source: U.S. Bureau of Mines.

56

TABLE 4. 1974 U.S. Domestic Coal Consumption n1
2(In thousands of tons)

Electrical power utilities

389,070

Bunker fuels

80

Beehive coke plants
 1,258
 Oven coke plants
 88,410
 Steel and rolling mills
 6,155
 Other manufacturing
 57,850
 Retail dealer deliveries
 8,440

56 n1 Preliminary figures.

56 Source: Bureau of Mines.

*3*TABLE 5. AMOUNT OF
 TOTAL U.S. COAL PRODUCTION
 PROVIDED BY SURFACE MINING

		Total tonnage coal	
Year		produced (in million short tons)	Percentage produced by surface mining
1974	n1	590	52.0
1973	n1	591	49.0
1972		595	48.9
1971		552	50.0
1970		603	43.8
1969		561	38.1
1968		545	36 .9
1967		553	36.9
1966		534	36.5
1965		512	35.0
1964		487	33.9
1963		459	33.2
1962		422	33.4
1961		403	32.3
1960		416	31.5
1959		412	31.3
1958		410	30.0
1957		493	26.8
1956		501	27.0
1955		465	26.2
1954		392	26.3
1953		457	23.4

56 n1 Preliminary figures.

56 Source: Bureau of Mines.

57

*6*TABLE 6. -
 SUMMARY OF
 ESTIMATED
 RESERVES OF
 STRIPPABLE
 BITUMINOUS
 COAL IN THE
 UNITED STATES

n1
 6[Million
 short tons]

Region and State (feet:feet)	Remaining strippable reserves	Available strippable reserves	Minimum coal bed thickness (inches)	Maximum overburden thickness (feet)	Economic stripping ratio
Appalachia:					
Alabama	607	134	14	120	24:1
Kentucky - East	4,609	781	28	120	14:1
Maryland	150	21	28	120	15:1
Ohio	5,566	1,033	28	120	15:1
Pennsylvania	2,272	752	28	120	15:1
Tennessee	483	74	28	120	19:1
Virginia	2,741	258	28	120	15:1
West Virginia	11,230	2,118	28	120	15:1
Subtotal	27,658	5,171			
Midwest:					
Arkansas	200	149	14	60	30:1
Illinois	18,845	3,247	18	150	18:1
Indiana	2,741	1,096	14	90	20:1
Iowa	1,000	180	28	120	18:1
Kansas	1,388	375	12	120	15:1
Kentucky West 18:1	4,746	977	24	150	
Michigan	6	1	28	100	20:1
Missouri	3,425	1,160	12	120	15:1
Oklahoma	434	111	12	120	15:1
Subtotal	32,785	7,296			
Rocky Mountain and Pacific Coast:					
Alaska n2	1,201	480	14	120	10:1
Colorado	870	500	60	50-120	4:1-10:1
Utah	252	150	60	39-150	3:1-8:1
Subtotal	2,323	1,130			
Total n3	62,766	13,597			

57 n1 The Bureau of Mines released an updated estimate of U.S. coal reserves by region and recovery method in July 1974. These figures show a loss of some 30,000,000,000 tons in reserve estimates for West Virginia alone; from previous estimates other Eastern States lost smaller amounts (1,000,000,000 to 2,000,000,000 tons range). Moreover, the new figures show a growing ratio of strip to deep mineable reserves. Until such time as the Bureau of Mines can demonstrate the basis for these new figures, it was determined to use the older reserve figures for this report. It should be pointed out that, according to the Institute of Ecology, 72 percent of the Nation's coal reserves lie in the east, if one calculated on a Btu, rather than a tonnage basis.

57 n2 Includes 478,000,000 tons of reserves in Northern Alaska fields (North Slope) that may not be economically strippable at this time.

57 n3 Strippable bituminous coal reserves for Idaho, Montana, New Mexico, Texas, and Washington were not estimated.

57 Source: "U.S. Energy Outlook, Coal Availability," National Petroleum Council, 1973.

58
 *6*TABLE 7. -
 SUMMARY OF
 ESTIMATED
 RESERVES OF
 STRIPPABLE
 SUBBITUMINOUS
 AND LIGNITE
 COAL IN THE
 UNITED STATES

Region and State (feet:feet)	Remaining strippable reserves	Available strippable reserves	M Minimum coalbed thickness (inches)	Maximum overburden thickness (feet)	Economic stripping ratio
n1					
6[Million short tons]					
Subbituminous n2					
Rocky Mountain and Pacific Coast:					
Alaska	6,190 n3	3,926	60	120	12:1
Arizona	400	387	60	130	8:1
California	100	25	60	100	1:1
Montana	7,813	3,400	60	60-125	2:1-18:1
New Mexico	3,307	2,474	60	60-90	8:1-12:1
Washington	500	135	60	100	10:1
Wyoming	22,028	13,971	60	60-200	1.5:1-10:1
Total	40,338	24,318			
Lignite					
Southwest:					
Arkansas	32	25	60	100	15:1
Texas	3,272	1,309	60	90	15:1
Subtotal	3,304	1,334			
Rocky Mountain and Pacific Coast:					
Alaska	8	5	0	0	0
Montana	7,058	3,497	60	60-125	2:1-18:1
North Dakota	5,239	2,075	60	50-125	3:1-12:1
South Dakota	399	160	60	100	12:1
Subtotal	12,704	5,737			

Total	16,008	7,071
Total, all ranks	119,112	44,986

58 n1 The Bureau of Mines released an updated estimate of U.S. coal reserves by region and recovery method in July 1974. These figures show a loss of some 30,000,000,000 tons in reserve estimates for West Virginia alone, from previous estimates; other Eastern States lost smaller amounts (1 to 2,000,000,000 tons range). Moreover, the new figures show a growing ratio of strip to deep mineable reserves. Until such time as the Bureau of Mines can demonstrate the basis for these new figures, it was determined to use the older reserve figures for this report. It should be pointed out that, according to the Institute of Ecology, 72 percent of the Nation's coal reserves lie in the East, if one calculates on a Btu, rather than a tonnage basis.

58 n2 Subbituminous coal reserves not estimated for Colorado and Oregon; lignite reserves not estimated for Alabama, Kansas, Louisiana, and Mississippi.

58 n3 Includes 179,000,000 tons of undifferentiated subbituminous-lignite and 3,387,000,000 tons of subbituminous coal reserves in the Northern Alaska Fields (North Slope) that may not be economically srippable at this time.

58 Source: U.S. Energy Outlook, Coal Availability, National Petroleum Council, 1973.

59

*3*TABLE 9. -

STATUS OF LAND
DISTURBED BY COAL
SURFACE MINING IN
THE UNITED STATES
AND NEEDING
RECLAMATION AS OF
JAN. 1, 1974, BY
STATES

3[Acres]

State	Reclamation not required by law	Reclamation required by law
Alabama	57,878	118
Alaska	2,400	
Arizona	150	
Arkansas	9,451	494
California		
Caribbean area		
Colorado	4,687	641
Connecticut		
Delaware		
Florida		
Georgia		

Hawaii		
Idaho		175
Illinois	49,748	20,891
Indiana	2,500	6,000
Iowa	25,650	
Kansas	43,700	2,500
Kentucky	69,000	117,000
Louisiana		
Maine		
Maryland	2,250	3,851
Massachusetts		
Michigan	500	
Minnesota		
Mississippi		
Missouri	75,506	1,250
Montana	300	300
Nebraska		
Nevada		
New Hampshire		
New Jersey		
New Mexico		25,798
New York		
North Carolina		
North Dakota	10,000	200
Ohio	23,926	45,825
Oklahoma	13,858	6,350
Oregon		
Pennsylvania	159,000	33,000
Rhode Island		
South Carolina		
South Dakota	790	
Tennessee	20,500	5,200
Texas	5,470	
Utah	120	
Vermont		
Virginia	18,000	5,014
Washington	471	1,010
West Virginia	25,720	51,560
Wisconsin	234	76
Wyoming	3,078	2,828
Total	621,887	337,081

59 Source: U.S. Soil Conservation Service.

60 SOCIAL AND ENVIRONMENTAL IMPACTS

60 The social and environmental impacts of surface and underground coal mining have been enormous. The most serious effects are to be seen in the Appalachian region, where the entire socio-economic infrastructure of parts of

Pennsylvania, West Virginia, Ohio, Kentucky, Virginia and Tennessee and Alabama

has been profoundly affected by decades of extracting coal from the rich bituminous deposits. As a consequence of the hazardous environment associated

with both underground and surface mining of coal, the health and safety of

people living and working near the coal mines of the region are in more or less constant peril. One example of exposure of the general public to dangerous conditions is the disastrous collapse of a mine waste impoundment on Buffalo Creek, West Virginia, in which 124 people were killed and 4,000 rendered homeless in 1972.

60 The side-effects of coal mining in the humid areas of the East and mid-West, acid drainage which has ruined an estimated 11,000 miles of streams; the loss of prime hardwood forests and the destruction of wildlife habitat by strip mining; the degrading of productive farm land; recurrent landslides; siltation and sedimentation of the river systems; the destructive movement of boulders; and perpetually burning mine waste dumps - these constitute a pervasive and far-reaching ambience. Tragically, coal mining in America has left its crippling mark upon the very communities which labored most to produce the energy which once impelled the Nation's industrial plant and now generates much of its electrical power.

60 In the western States and the Northern Great Plains region the discovery of vast reserves of lignite and sub-bituminous coal has inspired plans for the expansion of coal surface mining on a very large scale, thus major adverse impacts to the region's land and people lie ahead. Since the climate is arid and water therefore in short supply, the removal of thick coal seams and the consequent disruption of stream and river channels forming part of the hydrologic regime of the area will pose difficult and in some cases insurmountable reclamation problems. A 1973 study by the National Academy of Sciences entitled, Rehabilitation Potential of Western Coal Lands has this to say about re-establishing vegetation in these circumstances:

60 The potential for rehabilitation of any surface mined area in the West is critically site specific. Nevertheless, some broad principles apply to all sites. The rehabilitation of a specific site will depend on the detailed ecological and physical conditions at that site, the projected land use for the site after mining, the available technology that is applied to the site, and the skill in applying that technology.

60 We believe that those areas receiving 10 inches (250 mm) or more of annual rainfall can usually be rehabilitated provided that evaporation is not excessive, if the landscapes are properly shaped, and if techniques that have been demonstrated successful in rehabilitating disturbed rangeland are applied.

(p.3)

60 The drier areas, those receiving less than 10 inches (250 mm) of annual rainfall or with high evapotranspiration rates, pose a more difficult problem. Revegetation of these areas can probably be accomplished only with major,

sustained inputs of water, fertilizer, and management. Range seeding experiments have had only limited success in the drier areas. Rehabilitation of the drier sites may occur naturally on a time scale that is unacceptable to society, because it may take decades, or even centuries, for natural succession to reach stable conditions. (p.3-4)

61 Since much of the Nation's prime grazing and farming land is located in the band of western states where these immense coal deposits are located - North Dakota, South Dakota, Montana, Wyoming, Colorado, Utah - the possibility for permanently despoiling thousands of acres of productive agricultural lands is very real indeed, as the Committee is well aware. Other land uses associated with surface coal mining and concomitant power and fuel development, are also expected to impact the region as population inflow creates residential, commercial and industrial growth in sparsely settled areas. Over-all water demands, socioeconomic stresses and pollution loads of various kinds brought by expected westward migration provide cause for genuine concern.

61 Officials, coal operators and other interested citizens testifying before the Subcommittee on Environment and the Subcommittee on Mines and Mining in 1973 touched on many of these environmental issues. The following sampling indicates a breadth of concern behind the strong dissatisfaction with existing state regulation of surface mining, evident throughout the hearings.

61 Joe Begley (Blackey, Letcher County, Kentucky):

61 Strip mining is completely destroying the land, its hills and its people. For 130 years people here have lived hard lives, no money, no medicine, no education. They live in fear of the only industry they have known, the coal industry - and what that industry has done to the people here in the past. Now our valuable minerals and fossil fuels are being taken at even a faster rate and yet our people starve to death living on the top of a gold mine . . . Strip mining means just what it says. It strips the people of everything they have . . .

61 Russell Train (then Chairman, President's Council on Environmental Quality):

61 Additional damage can occur from strip mining - devastated wildlife habitat, landslides, silt and acid choked streams, and a blighted landscape. In particularly rich farmland, area strip mining can adversely affect future fertility, as it can the opportunities for revegetation in the arid West.

61 Dr. Moid Ahmad (Professor of Hydrology and Geophysics, Ohio University):

61 Satellite pictures indicate that the scars due to strip mining are deep and permanent and show that the soil and hydrological characteristics are different than the surrounding land. Strip mines are producing acid water, salty water in the West, and toxic elements. They will continue to produce these for a long time.

62 Liane B. Russell (Tennessee Citizens for Wilderness Planning):

62 We supported passage of the Tennessee Strip Mine Law of 1967; and when this law and its enforcement proved to be quite inadequate to control the ravages of ever-increasing strip-mining in our State, we drafted and supported strong, yet still moderate, State legislation . . . We have also been in frequent contact with the Division of Surface Mining and Reclamation of the Tennessee Department of Conservation in an attempt to promote strong administration. These State efforts have been only partially successful, both at the legislative and administrative level.

62 E. A. Nephew (Oak Ridge Laboratory, Oak Ridge, Tennessee):

62 There is much that can be learned from the German experience in restoring surface mine lands. Their program has been in effect for some twenty years and has helped greatly to minimize social dislocations and environmental damage from brown coal mining.

62 Ernest Preate (Attorney, Scranton, Pennsylvania):

62 To often in the past the purpose has been to shut (citizens) out of participating in these extremely important matters with a result that abuse and non-enforcement of State surface mining laws has created the very groundswell of public opinion which has necessitated this committee and this Congress focusing their attention on this problem . . . with respect to the drafting of a strong Federal surface mining law.

62 James L. Coen (Blacksburg, Virginia):

62 It is my belief that the State government itself is either unwilling or unable to deal with the problems strip mining presents. The failure of the Virginia Legislature to pass the minimal regulatory bill is quite indicative of the situation. When our State officials fail to provide for the needs of its constituency, we must turn to our Federal Government for relief.

62 Robert Handley (President, Coal River Improvement Association, West

Virginia):

62 (Answering a question as to whether it is his impression that, whatever the wording of the law in West Virginia or the way it is administered, the primary criterion is to enable the operator to maximize his profit) "I think that is unquestionable."

62 James W. McGlothlin (President, Tri-County Independent Coal Operators Association, Grundy, Virginia):

62 The majority of my membership and myself included favor a very strong reclamation program. It will no doubt be expensive, however, I think that the cost of that is going to be borne by every citizen in the Nation if they decide to use electricity from coal. I really favor a Federal program to cause each State to pass a reclamation law and cause each State to enforce it.

63 Walter Heine (Associate Deputy Secretary for Mines and Land Protection, Pennsylvania Department of Environmental Resources):

63 We would welcome wise Federal legislation in the area of surface mine control so that the unfair competitive advantage now enjoyed by States which are allowing poorly regulated strip mining to devastate the countryside, will not continue. Some of these State programs have been quite ineffective because of weak laws, inadequate funding, and frankly, political interference.

63 Henry Clandillon Phibbs II, Sierra Club, Wilson, Wyoming):

63 In Wyoming, there is another factor which makes Federal action imperative. This is the simple fact that the Federal government owns roughly 50 percent of Wyoming's land surface and roughly 70 percent of its minerals. It is a fundamental Federal responsibility to protect and utilize these land and mineral resources for the immediate and long range benefit of the entire country. This is not a question that can be left to the individual states.

63 Bruce Hagen (Commissioner, North Dakota Public Service Commission):

63 Governor Link says he wants to emphasize that our State law only covers privately owned and State lands, and he believes that Federal legislation is urgently needed to cover all lands that are surface mined in the United States.

63 As this sampling of testimony shows, the social and environmental side-effects of coal surface mining and the related failure of State regulation to provide an adequate degree of protection, are matters of widespread concern. At the present time when world food shortages are placing increasing pressures

on America's once-overabundant food and fiber production, the Nation cannot afford to lose any productive range and farmland. Neither can the Nation afford to waste prime timberland, nor jeopardize the shrinking water resources of its river systems, whether in the Rockies or in the Appalachians. The likelihood of a materials scarcity and the possibility of public health problems resulting from contaminated or depleted water supplies, should serve to emphasize the foolhardiness of continuing on the present course in coal surface mining regulation.

63 A NATIONAL ISSUE

63 President Ford has urged the passage of a bill to regulate coal surface mining nationally.

63 Across the Nation, church organizations, environmental and public interest groups and others have reacted against the excesses of coal surface mining by pressing for enactment of Federal legislation outlawing this method of coal mining. These groups claim that reclamation has been shown to be neither feasible nor enforceable. Some industrial groups are equally opposed to strong Federal enforcement of environmental standards for coal surface mining.

63 The Committee has taken the position that coal surface mining is essential to fulfilling the Nation's energy requirements. The Committee is equally convinced that equity requires that environmental and social costs which have heretofore been relegated to off-site property owners and to the community at large, must be borne by the producers and users of coal. The means of accomplishing such restitution is through a system of minimum Federal enforcement standards established in the Act to protect environmental values and property rights.

64 STATE REGULATION OF COAL SURFACE MINING

64 Twenty-nine States, responding to popular discontent regarding the social and environmental impacts of coal surface mining, at various times have enacted regulatory legislation imposing more or less stringent controls on the industry (see Table No. 10, p. 65). Such laws have been often hailed as the strictest in the Nation. Citizens who organized and lobbied for the new State laws generally assumed that old abuses were ended; that the rights of other property-owners would be respected by surface mine operators; and that the environmental resources of the community, would be fully protected by the State regulatory authority.

64 Unfortunately, public confidence in State regulation of surface coal mining has frequently been misplaced. As environmental problems multiply rather than recede, popular discontent has reasserted itself. The reasons for the failure of State regulation vary from State to State.

64 One factor in the disappointing record of State regulation has been the continued rapid expansion of the industry relative to the States' capability of managing such mines due to the relatively low cost and high profits of surface mining. Because it is capital-intensive rather than labor-intensive consequently offering an alternative to the mounting costs of labor in underground coal mining operations, surface mining has proved attractive to operators. In some States, the increasing trend toward surface mining has placed heavy burdens on the State regulatory agency. Even where State law is strong and unambiguous, enforcement agencies have often been under-staffed, under-equipped and under-financed.

64 Political influence is another factor in the failure of State regulation. Subtle or otherwise, it is often used to moderate enforcement of State laws. In States where the coal industry dominates the economy as a major source of jobs and taxes, powerful leverage is available.

64 Some studies have examined the effectiveness of coal surface mining regulation in two States, Kentucky and West Virginia. In 1972, the Stanford Research Institute completed a study for the West Virginia legislature, which was then considering legislation to outlaw surface mining of coal. This study indicates that although West Virginia coal surface mining had been under continuous State surveillance since 1941, the results of reclamation requirements were not impressive. The amount of vegetative cover was selected as the prime indicator of overall effectiveness of reclamation required by the State, and on that basis, a 75 percent vegetative cover was considered acceptable. The results were as follows:

64 A total of 6,565 linear miles (248,078 acres) were disturbed by contour strip mining in West Virginia as of October 1971.

65 However, mining affects lands beyond the limits of the mines themselves. These affected areas could be from 3 to 5 times the area disturbed in mining or from 744,234 acres to 1,240,390 acres.

65 A total of 2,868 linear miles (109,613 acres) had less than 50 percent cover and were classified as not reclaimed. An additional 2,001 miles (76,463 acres) had more than 50 percent cover from natural sources. However if the

standard measurement for natural revegetation were raised to 75 percent cover, most lands would be considered not reclaimed since they have less than this value. If added to the acres with less than 50 percent cover, more than 71 percent of all surface mined land would be considered not reclaimed . . .

*2*TABLE No. 10. - Summary of provisions included in current State coal surface mining laws

States having coal surface mining laws	
29	
Hearings:	
Public hearings at time of permit application	
1	
Public hearings at other times	
14	
Enforcement and penalties:	
Closing of surface mine for noncompliance	
15	
Fines for violations	
23	
Bond forfeiture requirements	
27	
Denial of future permit for violation	
25	
Imprisonment for violations	
7	
Bonding:	
Bonding requirements	
29	
Partial bond release	
8	
Performance standards:	
Separation of topsoil	
2	
Slope limitation on reclaimed area	
11	
Time period for completion of reclamation	
20	
Specified treatment of highwalls	
5	

65 Source: Congressional Research Service.

65 In reviewing the policy decisions which led up to this result, the Stanford Report comments "the Executive Branch has taken the position that there is no specific proof or evidence that surface mining causes certain types or degrees of environmental damage, although environmental consequences are acknowledged. In the absence of being able to provide such proof, the Executive Branch has interpreted the statute to apply the operational letter of the law regardless of the environmental consequences . . . "

65 A second study, sponsored by the Appalachian Regional Commission and the Commonwealth of Kentucky, Department for Natural Resources and Environmental Protection, was completed by Ford, Bacon & Davis of New York for Mathematica,

Inc., of Princeton, New Jersey. The focus of this study is on surface mining and reclamation technologies and the economics thereof. However, some observations of State regulatory efficiency and recommendations for improvements were offered in the course of the study. In referring to a marked disparity between the record of violations per inspection (taken as an indicator of the alertness of State inspectors) as shown for different inspection areas, the study noted that the disparity was eventually acknowledged to be the result of "widespread corruption and inefficiency" in the inspection area in question. "Division personnel claim knowledge of this prior to disclosure, but noted their inability to deal effectively with the situation because of political constraints," the study comments.

66 Apart from the deficiencies of State regulatory systems (although some, to be sure, function with marked efficiency) perhaps the greatest handicap faced by conscientious State regulators consists of the very real possibility of job and tax loss to the State if its laws are strictly enforced so as to drive surface mine operators into more lenient neighboring States. The ease with which small surface mining equipment can be transported long distances, and the relative simplicity of gaining access to coal for surface mining operations, allows many Eastern operators a high degree of flexibility as to where and when they will mine coal. Only Federal regulation establishing uniform requirements can deal with this situation.

66 The obvious inability of the States to develop any coherent, comprehensive national or regional policy covering the surface mining of Federall-owned coal or coal under Indian lands is a further limiting factor related to the broader aspects of regulation already mentioned. Federal grants to the States and Federal enforcement standards uniformly applied to provide the necessary minimum protection of environmental values and off-site properties will ensure continuance of coal surface mining to meet the energy needs of the Nation, and will also eliminate many if not all of the regulatory problems which have plagued the States and frustrated citizens of the coalproducing regions.

66 SURFACE MINING METHODS AND TECHNIQUES

66 In contrast to underground coal mining (which requires removing coal from the earth), surface mining consists of removing earth from the coal. If the size of the coal deposit justifies the cost of large equipment, surface mining operators may penetrate the surface to a depth of 500 feet or more. Equipment depends upon the terrain, the ratio of coal to overburden, and the value of the

coal deposit per acre. In general, there are three broad categories of surface mining operations: contour, area and open pit.

66 Contour mining occurs on steep terrain, the steepness being defined differently state-by-state. In the mountains of Appalachia where contour mining is prevalent, the operator excavates a portion of the hillside (the "first cut") on the coal seam where it intersects with the surface. He then proceeds to strip off the overburden, following the seam along the contour and excavating as far into the mountain as may be profitable. Component parts of a contour mine are: The "bench," or flat area from which the coal is removed; the "outslope" or spoil bank, consisting of overburden material which has been cast over the downhill side of the bench; the "highwall," a more or less vertical bank marking the inner limit of the bench; and the "haulroad" which permits access to the mine site. "Augering," or drilling into the coal seam under the highwall to recover more of the coal, frequently accompanies contour mining.

67 A variant of contour mining is called "mountain-top removal". This method of mining proceeds entirely through the elevation, following the coal seam. It permits nearly complete recovery of the coal seam, or of multiple coal seams if done sequentially. The overburden is placed downslope in the so-called "head-of-the-hollow fill." The end result is not a serpentine bench and highwall but rather a flat area comprising the "solid bench" from which the coal has been removed, and the contiguous "fill bench" where the overburden has been deposited.

67 Area mining occurs on flat or rolling country-side, which may include relatively steep areas, depending on the size of the equipment being used. Overburden is piled to one side in a ridge on the area from which coal has been removed. This continuous backfilling results in a furrowed mine site terminating in a ditch and a highwall which marks the final "cut", usually at the limit of the disturbed area. Area mining is practiced in the western Appalachians and in the Midwest and West.

67 Open pit mining is similar to area surface mining in some respects. Except for one or two special cases in the West, this type of mining does not resemble deep open pit copper mines. The terms "pit" is appropriate mainly because the ratio of overburden to coal is small as compared to the ratio found in area surface mining (i.e., the thickness of coal removed is greater than the thickness of the overburden removed). As a result, the amount of overburden is insufficient to fill the pit and a depression or hollow configuration is the end product.

67 Surface mining equipment includes bulldozers used to provide access to the site and to prepare coal for loading, as well as drill rigs used to bore holes in which explosives are detonated, shattering the overburden. The most costly part of the operation is removal of the overburden, which is accomplished in contour mining with front-end loaders or small power shovels. On bigger operations requiring massive movements of rock and soil, giant drag-lines, wheel excavators and power shovels are preferred (Big Muskie, the world's largest drag-line, based near Cumberland, Ohio, weighs 27 million pounds and is capable of moving 325 tons of rock at a time). Smaller shovels and front-end loaders generally load the exposed coal into trucks which may carry as much as 200 tons per trip. Some mechanical augers are able to drill horizontally 250 feet into the coal seam, in the process removing coal from under the highwall. Transportation of the coal to final destination is usually by train or barge.

67 Following removal of the coal, reclamation of the mining site takes place, in two phases. First comes the back-filling, drainage and regrading required to achieve the desired configuration of the surface and proper drainage of water on or under it. Next comes revegetation: the preparation of topsoil, fertilization, cultivation, and seeding or planting desired species. Special equipment designed to spray a mixture of fertilizer, seed and mulch is widely utilized either with trucks or with helicopters for revegetation on rough terrain.

68 Both regrading and revegetation must be integrated into the total mining plan of the operator. The most serious off-site environmental impacts result from exposure of overburden to the weather with consequent erosion, sedimentation, siltation, acid drainage, landslides, and leaching of toxic chemicals. The essence of good reclamation therefore consists of reducing as much as possible the time from initial disturbance of the land surface to the successful re-establishment of a vegetative cover, to achieve which, performance standards relating to environmental protection must be carried on concurrently with the mining operations, except under special circumstances.

68 New surface mining methods, such as mountain-top removal, are generally modifications of existing methodology, made possible by the increased versatility of different types of self-propelled machinery now available. Combinations of rubber-tired and tracked vehicles together with semi-stationary equipment such as augers, are often used to great effect. Most of this equipment has been adapted from the construction industry and in fact is sometimes used interchangeably.

68 Aside from the development of safe, powerful explosives replacing

nitroglycerine, perhaps the most significant development in coal surface mining during the past decade has been its enhanced earth-moving capability. The range of existing technology needs to be brought fully to bear upon accomplishing rapid and effective reclamation of disturbed areas, as regards both current operations and, in addition, those areas which have been improperly reclaimed in the past and abandoned.

68 In the humid East, retention of overburden material on the bench, avoiding all unnecessary placement of unconsolidated material on steep slopes, would contribute most significantly to the elimination of slides, sedimentation, siltation and other off-site effects which threaten downstream areas. The basic concept embodying this principle is returning the mining site to its approximately original contour.

68 Approximate original contour is equally valid when applied to midwestern and western coal surface mining, inasmuch as the concept includes the idea of blending the site into the surrounding terrain to the greatest degree possible. It also embodies conformity to the prevailing hydrologic pattern. Because low rainfall and erodability of soil severely handicap reclamation efforts in the West, minimizing the impacts to the hydrologic balance of the mine site and surrounding area takes on special significance in assuring that the reclamation objectives of the Act are met.

68 The emphasis on return to the approximate original contour, should not obscure the fact that the appropriate methodology will vary from site to site. Responsibility for devising methods for reaching any necessary reclamation goals should be left up to the operator. Within the limits of economic constraints, the available equipment and his own ingenuity, the surface mining operator will develop whatever approach best suits his needs and the peculiarities of his mining site. Considering the remarkable increase in productivity which economics of scale and adaptation of suitable equipment have achieved in coal surface mining, and considering the novel means for handling overburden being practiced in some States, new reclamation techniques will certainly be forthcoming to meet higher reclamation requirements.

69 TIMELINESS OF FEDERAL REGULATION

69 A primary constraint upon the coal industry in discharging its reclamation responsibilities is the poor competitive position of coal relative to oil and natural gas. In the 1940's and 1950's the industry experienced the trauma of losing its steamship market to oil. Subsequently, the switch of

railroads to diesel engines and the relinquishment of the home heating market to oil and gas further stunted the growth of the coal industry. Economic depression haunted the coal fields for years, held at bay only by expansion of the electric utility market for high sulfur-low But steam coal, and by the rising demand of Canadian, Japanese and other foreign steel mills for high Btu-low sulfur metallurgical coal.

69 This picture has altered radically since the onset of the national energy crisis precipitated by the Arab oil embargo. The Nation's dangerous over-reliance on imported oil and the parallel inadequacy of its domestic oil and natural gas supplies have brought about a general awareness that increased development of our coal reserves is a matter of top priority in terms of protecting economic growth and national security. The Federal government has responded to the crisis with a series of proposals which will ensure a long-range, continuous demand for coal both as a direct source of energy and as converted into various substitutes for oil and natural gas.

69 The Federal Energy Administration has instituted a program calling for the conversion, where possible, of electric power generating plants to coal consumption. In the 93rd Congress, the Energy Research and Development Appropriations Act was approved. This Act includes \$2 83,400,000 channeled to the Office of Coal Research and a further \$1 03.7 million to the Bureau of Mines for coal-related research (see Table No. 11). A large portion of these funds are earmarked for coal gasification and liquefaction projects. Other funds are to be expended on stack gas emission removal technology to enable the burning of medium and high sulfur coal by electric utilities which are currently finding the availability of adequate sources of low-sulfur coal conforming to the requirements of Federal air quality standards limited.

69 These Federal programs signal a widespread commitment to the development and utilization of coal in the Nation's energy future. The coal industry has responded to this renewed interest with major increases in prices (see Table No. 12). The import of these recent events is to belie the claim that fluctuations in demand for coal and concomitant price uncertainties make the cost of reclaiming surface mined land economically unacceptable.

70

TABLE No. 11. - Research and development funds for coal as authorized in the

Energy Research and Development Appropriations Act for fiscal year 1975

Office of Coal Research:

Coal liquefaction

\$79,600,000

High Btu gasification

37,800,000

Low Btu gasification
 49,000,000
 Advanced power systems (including \$7 ,500,000 for MHD)
 12,700,000
 Direct boiler combustion
 34,000,000
 "Pioneer plant" projects
 42,100,000
 Advanced research and supporting technology; systems studies
 21,637,000
 Administration
 6,563,000
 Total
 283,400,000
 Bureau of Mines:
 High Btu gasification
 19,200,000
 Coal liquefaction
 27,388,000
 Basic research on chemistry of coal and conversion processes
 3,200,000
 Other coal projects
 2,712,000
 Sulfur-oxides removal from powerplant stack gases (citrate
 process)
 2,000,000
 Improved coal mining technology
 46,200,000
 Total
 100,700,000
 U.S. Geological Survey:
 Determination location and properties of coal resources; coal
 environmental analysis
 2,496,000
 Investigation on coal hydrology (water needs for development of
 this resource)
 1,250,000
 Total
 3,746,000
 Total coal research and development appropriations
 387,846,000

70 Source: Congressional Record, Apr. 30, 1974, p. H3356.

70 Because the industry can be confident that the Federal government is
 committed to a program of research and development which will vastly expand
 the
 market for coal, the future for the industry is assured. The coal industry
 can
 also be assured of a reasonable return on its investment. On a per-Btu
 basis,
 coal remains one of the cheapest of all of our energy resources. (See Table
 No.
 13).

70 Thus the argument that reclamation is prohibitively expensive, if it
 was

ever valid, is certainly no longer so. In regard to the most stringent performance standards, namely those associated with returning the mining site to the approximate original contour, recent studies have shown that even in the steepest Appalachian terrain, reclamation according to these requirements is economically feasible using currently available equipment. There is evidence, in fact, that compliance in some cases increases profitability to the operator.

70 A report by the President's Council on Environmental Quality entitled "Coal Surface Mining and Reclamation; An Environmental and Economic Assessment of Alternatives" states that:

70 . . . the cost of advanced reclamation techniques are small compared to the market value of coal, e.g., only three to nine percent of the price of coal at the mine. In fact, since coal can be produced by surface mining in Appalachia for \$0.75 to \$2 .50 per ton less than by underground mining, the competitive position of surface mined coal would not deteriorate even at the highest range of reclamation costs.

71 (See Table No. 14).

71 Recent rises in the price of coal give this statement even greater emphasis. Responsible spokesmen within the industry have pointed out that reclamation costs are economically acceptable. For example, a report entitled "Coal and the Energy Shortage" presented by the Continental Oil Company, (of which Consolidation Coal Co., the Nation's second largest producer of coal is a wholly owned subsidiary) states that:

71 even taking the largest of these (reclamation) costs would add only two to three percent to the average residential electric bill.

71 A recent study done by Mathematica, Inc., of Princeton, New Jersey, entitled Design of Surface Mining Systems in the Eastern Kentucky Coal Fields, (January 29, 1974), states that the estimated average total reclamation costs for surface mined land in Eastern Kentucky is \$1 65 per disturbed acre. The report points out that this cost ". . . is equivalent to approximately \$0 .32 per ton based on the oft-used estimate of 0.5 disturbed acres per 1,000 tons of coal produced. Note that this estimate excludes charges for depletion and depreciation, since these are not true cash flows. If, however, these charges were included, estimated reclamation costs would be about \$0.38 per ton."

71 Recent coal price increases unrelated to reclamation costs have already added considerably more than this amount. Bituminous coal prices (f.o.b. mine)

rose over 50 percent between 1969 and 1971, according to "Bituminous Coal Data" for 1972, issued by the National Coal Association and 112.1 percent between 1971 and 1974, according to the preliminary figures of the Bureau of Mines. Federal Power Commission figures show an almost 100% increase in coal prices paid by utilities between October, 1973 and October, 1974. (See Table 13, p. 69 and Table 15, p.70). Moreover, there is evidence that the price increases have yielded substantial profits. Drs. James R. Barth and James T. Bennett in a paper entitled "An Economic Analysis of Price Increases in the U.S. Coal Industry", summarize their findings as follows:

71 . . . Coal prices remained relatively stable during the period 1958-1968, but since that time enormous price increases have occurred. These price increases cannot be fully explained by increases in the cost of production, for unit labor cost increases are of much smaller magnitude than price increases. Nor do available data indicate that the coal operators were attempting to rapidly expand output, for the evidence indicates that in recent years the industry has operated substantially below normal capacity. These finds are summarized in Figure 1.

72 [See Original]

73 From Figure I, it is evident that employment and output since 1967 have remained relatively constant. Admittedly, average weekly earnings have increased, but prices have risen far more dramatically. On the basis of Figure 1, one finds that output in 1971, 1972, and 1973 was below the level of 1970. It, therefore, cannot be argued that these price increases can be explained entirely by shortages of coal or by excess demand. A review of the available data on profits of coal companies and coal operating companies reveal tremendous increases in profits. Thus, price increases have been translated into profits. The fact that the price of coal is and is likely to remain unrelated to the cost of production is further supported in the Coal Supply Potential Task Group Report, prepared by the Federal Energy Administration. This report states that at least for the near term, (1975-1978) the ". . . equilibrium price of coal may be set by competitive forces of competing fuels and most particularly oil, rather than by the cost of production and normal competition within the coal industry."

73 It therefore appears that the ability of the industry to absorb any increased costs of reclamation consistent with the standards of the Act is no longer in doubt. (See Tables No. 16(a) and (b).)

73 RESEARCH AND TRAINED TECHNICIANS

73 The consequences of dependence on foreign powers for one of the basic

mineral fuels - petroleum - has been brought home to Americans; but that dependence does not stop with petroleum. In 1974, minerals and mineral fuels accounted for an estimated \$2 3 billion deficit in the U.S. balance of trade. An increase of \$1 5 billion over 1973. The thrust of Title III of the Act is not an immediate solution to the energy crisis as a whole or to the specific problems of extraction, reclamation, and processing of minerals and fuels, in particular. Its purpose is to assure that the U.S., in the future, will have the research base, the technological capability, and the qualified manpower to avoid repeated crises of mineral supply and technology. Only thus can it avoid disadvantageous dependence upon foreign sources for these items so critical to its domestic welfare.

73 The need to provide a more adequate national program of mining and minerals research through the establishment of mining and minerals research centers is documented in House Report No. 92-1028. The Report focused upon the expanding consumption of non-renewable resources in the United States; the failure of the U.S. to develop mineral and mineral fuel technology at a rate fast enough to cope with increased consumption; and, finally, the current inadequate and decreasing supply of trained manpower in the mineral engineering fields.

74

*4*TABLE 13. - COST
OF COAL VERSUS
OTHER HYDROCARBON
ENERGY RESOURCES,
OCTOBER
1973-OCTOBER 1974

million	Quantity delivered	Percent of total Btu's	Average price (cents per Btu's)
October 1973:			
Coal (thousand tons)	33,600	56.1	41.9
Oil (thousand barrels)	44,800	20.6	88.9
Gas (million cubic feet)	302,600	23.3	35.5
October 1974:			
Coal (thousand tons)	38,900	60.1	80.9
Oil (thousand barrels)	43,300	19.1	198.9
Gas (million cubic feet)	284,600	20.8	53.2

*6*TABLE 14.
- ESTIMATED
INCREMENTAL
PRODUCTION
COSTS FOR

VARIOUS
RECLAMATION
COSTS

per acre	Calculated production per acre mined n1	Costs of reclamation, cents/ton			
		\$1,000 per mined acre	\$2,000 per mined acre	\$3,000 per mined acre	\$4,000 mined
Appalachia-					
region:					
Alabama	4,030	24.8	49.6	74.4	99.2
Kentucky					
(eastern)	4,460	22.4	44.8	67.2	89.6
Ohio	5,330	18.8	17.6	56.4	35.2
Pennsylvania	4,610	21.8	43.6	65.4	87.2
Tennessee	4,180	24.0	48.0	72.0	96.0
Virginia	5,900	17.0	34.0	51.0	68.0
West Virginia	7,060	14.2	28.4	42.6	56.8
Average	5,080	20.4	40.8	61.2	81.6
Central					
region:					
Illinois	7,200	13.8	27.6	41.4	55.2
Indiana	6,620	15.0	30.9	45.0	60.0
Kentucky					
(western)	7,340	13.6	27.2	40.8	54.4
Average	7,050	14.2	28.4	42.6	56.8
Western					
region:					
Colorado	12,100	8.2	16.4	24.6	32.8
Montana n2	66,100	1.6	3.2	4.8	6.4
Wyoming	66,100	1.6	3.2	4.8	6.4
Average	48,000	3.8	7.6	11.4	15.2

74 n1 Based on density of 1,440 tons of bituminous coal per acre-foot at 80 percent recovery, based on 1960 data.

74 n2 Montana entry changed to reflect mining of sub-bituminous coal in Power River Basin.

74 Source: Advanced from Surface Mining and Our Environment, Department of Interior, 1967, p. 114. Coal Surface Mining and Reclamation An Environmental and Economic Assessment of Alternatives, Council on Environmental Quality.

75

5

TABLE
15. -
AVERAGE
VALUE
OF

BITUM
INOUS
COAL
5
Per
ton
f.o.b

Year	Strip mines n1	Auger mines	Underground mines	Total all mines
1940	\$1.56		\$1.94	\$1.91
1945	2.65		3.16	3.06
1950	3.87		5.15	4.84
1955	3.48	\$3.60	4.86	4.50
1956	3.74	4.17	5.20	4.82
1957	3.89	4.12	5.52	5.08
1958	3.80	3.60	5.33	4.86
1959	3.76	3.83	5.23	4.77
1960	3.74	3.37	5.14	4.69
1961	3.67	3.24	5.02	4.58
1962	3.64	3.33	4.91	4.48
1963	3.57	3.25	4.82	4.39
1964	3.55	3.35	4.92	4.45
1965	3.57	3.36	4.93	4.44
1966	3.64	3.58	5.05	4.54
1967	3.68	3.59	5.18	4.62
1968	3.75	3.53	5.22	4.67
1969	3.98	3.81	5.62	4.99
1970	4.69	6.08	7.40	6.26
1971	5.19	6.57	8.87	7.07
1972	5.48	6.54	9.70	7.66
1973				
(preliminary)	5.95	6.95	10.67	8.42
1974 (estimate)	n(2)	n(2)	n(2)	15.00

75 n1 Includes power strip pits proper and excludes horse stripping operations and mines combining stripping and underground in the same operation 1940. Includes data on all strip mines subsequent to 1940.

75 n2 Not available.

75 Source: National Coal Association "Bituminous Coal Data" 1972 edition, and U.S. Bureau of Mines.

*3*TABLE 16. - (A) INCREASED PROFITS OF SELECTED MAJOR INDEPENDENT COAL PRODUCERS 1969-70

Profits

as

percentages

	of sale 1969
1970	
Pittston	4.1
6.9	
Westmoreland Coal Co	1.5
5.2	
North American Coal Co	2.9
3.4	
Eastern Gas & Fuel	5.8
7.7	

75 Source: "Concentration by Competing Raw Fuel Industries in the Energy Market and its Impact on Small Business," hearings before the Subcommittee on Special Small Business Problems of the Select Committee on Small Business, House

of Representatives, 92d Cong., 1st sess., vol. 1, p. 41.

*4*TABLE 16. - (B)

- COAL COMPANY

SELECTED PROFITS,

3D QUARTER 1973

VERSUS 3D QUARTER

1974

	3d, 1973	3d, 1974	Percent change (sic)
Pittston	\$3,100,000	\$27,500,000	787
Westmoreland Coal Co	1,030,000	12,800,000	1,242
Consolidation Coal Co	200,000	15,900,000	7,850
Island Creek	929,000	35,200,000	3,690

75 Source: American Public Power Association.

75 The Minerals Resources Research Act, which was the forerunner of Title III is supported by the Final Report of the National Commission on Materials Policy, June 1973; and again in "Mining and Minerals Policy, 1973," Second Annual Report of the Secretary of Interior under the Mining and Minerals Policy Act of 1970.

76 It is well-known that demand for all minerals is growing rapidly, both domestically and worldwide. Most of the known, rich, easily recoverable deposits of minerals have been developed. The United States must now turn to exploration for new deposits and development of known low grade ore deposits. Research will also be needed into substitution, alternative uses of minerals, improved mining and processing technology and deep seabed mining. This effort will require an increasing amount of trained talent in the mining and minerals engineering fields.

76 The urgency of sustaining grants (on a dollar-for-dollar matching basis) and other Federal financial assistance for mining and minerals research and training centers to ward off the progressive weakening of mineral engineering disciplines in U.S. colleges and universities is evident. Neither industry, the States, nor the Federal government provide sufficient support to halt and

reverse present downward trends in research and research manpower at a time when both should be expanding to meet present deficiencies and growing needs.

76 DATA ON COAL RESRVES AND LEASES

76 Tables presenting following data have been included at the conclusion of this section of the Report: Total coal reserves (see Table No. 17, p. 71); Federal coal leases (see Table No. 18, p. 71). Indian coal leases (see Table No. 19, p. 72).

77
 *8*TABLE
 17. -
 TOTAL
 ESTIMATED
 REMAINING
 MEASURED
 AND
 INDICATED
 COAL
 RESERVES
 OF THE
 UNITED
 STATES AS
 OF JAN.
 1, 1970
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 *8*In
 beds
 28-in and
 more
 thick,
 for
 bituminou
 s,
 anthracit
 e, and
 semianthr
 acite,
 and 5 ft
 or more
 thick for
 subbitumi
 nous and
 lignite
 beds -
 Million
 tons]

	Total -	
	All ranks	
Measured	more than	and
	14 in and	
indicated	3,000 ft	as

percent State total	Remaining measured and indicated reserves					overburden of	
	Bituminous	Subbituminous	Lignite	Anthracite semianthracite	Total		
Alabama	1,731	0	n(2)	0	1,731	13,444	12.9
Alaska	667	5,345	n(3)	n(4)	6,012	130,087	4.6
Arkansas	313	0	n(2)	67	380	2,420	15.7
Colorado	8,811	4,453	0	16	13,280	80,679	16.5
Georgia	18	0	0	0	18	18	100.0
Illinois	60,007	0	0	0	60,007	139,372	43.1
Indiana	11,177	0	0	0	11,177	34,661	32.2
Iowa	2,159	0	0	0	2,159	6,513	33.1
Kansas	328	0	0	0	328	18,678	1.8
Kentucky west	20,876	0	0	0	20,876	36,482	57.2
Kentucky east	11,049	0	0	0	11,049	28,850	38.3
Maryland	557	0	0	0	557	1,168	47.7
Michigan	125	0	0	0	125	220	56.8
Missouri	12,623	0	0	0	12,623	23,339	54.1
Montana	862	31,228	6,878	0	38,968	221,698	17.6
New Mexico	1,339	779	0	2	2,120	61,455	3.4
North Carolina	n(5)	0	0	0	n(2)	110	0
North Dakota	0	0	36,230	0	36,230	350,649	10.3
Ohio	17,242	0	0	0	17,242	41,568	41.5
Oklahoma	1,583	0	0	0	1,583	3,195	49.5
Oregon	n(6)	n(6)	0	0	n(6)	332	0
Pennsylvania South	24,078	0	0	12,525	36,603	69,686	52.5
South Dakota	0	0	757	0	757	2,031	37.0
Tennessee	939	0	0	0	939	2,606	36.0
Texas	n(6)	0	6,870	0	6,870	12,918	53.2
Utah	9,155	150	0	0	9,305	32,070	29.0
Washington West	312	1,188	0	0	1,500	6,183	24.3
West Virginia	68,023	0	0	0	68,023	101,186	67.3
Wyoming	3,975	25,937	n(3)	0	29,912	120,684	24.8
Other States	n(6)	n(6)	46	0	46	4,721	1.0
Total	261,510	69,080	50,781	12,735	394,106	1,556,840	25.3

77 n1 Figures are reserves in ground, about half of which may be considered recoverable. Includes all beds under less than 1,000 ft of overburden and over 28-in in bed thickness for butiminous and anthracite and 5 ft or more for subbituminous and lignite.

77 n2 Small reserves of lignite in beds less than 5 ft thick.

77 n3 Small reserves of lignite included with subbituminous reserved.

77 n4 Small reserves of anthracite in the Bering River field believed to be too badly crushed and folded to be economically recoverable.

77 n5 Negligible reserves with overburden less than 1,000 ft.

77 n6 Data not available to make estimate.

77 Source: "U.S. Energy Outlook, Coal Availability," National Petroleum Council, 1973.

*3*TABLE 18. - COAL LEASES
ON FEDERAL LANDS

State	Number of leases	total acreage
Alabama	1	200.00
Alaska	5	2,753.14
California	1	80.00
Colorado	111	120,905.56
Montana	17	36,232.27
New Mexico	29	41,038.12
North Dakota	19	16,275.75
Oklahoma	53	87,013.56
Oregon	3	5,403.18
Tuath	194	266,632.49
Washington	2	521.09
Wyoming	89	199,701.04
Total	524	776,756.20

77 Source: U.S. Geological Survey. u

TABLE 19. - Coal leases on Indian lands

Leases	Type of mining on producing leases
1. Peabody Coal Co.:	
Hopi-Navajo (Arizona):	Surface mining.
(a) Hopi-Navajo, 40,000 acres	Surface mining.
(b) Navajo, 24,858 acres	Surface mining.
Southern Ute (southern Colorado), 19,452 acres	Surface mining.
Northern Cheyenne (southeastern Montana), 6 leases, 16,035 acres	Surface mining.
2. Utah International, Inc.: Navajo (northwestern New Mexico), 31,416	Do.
3. Pittsburg & Midway Coal Mining Co.: Navajo (west-tana), 1 13,237 acres	Do.
4. El Paso Natural Gas Co., and Consolidation Coal Co.: Navajo (northwestern New Mexico), 40,287 acres	
5. Westmoreland Resources: Crow (southeastern Montana), 2 leases, 30,876 acres	Do.
6. American Metals Climax: Crow	

(southeastern Montana),
14,237 acres
7. Shell Oil Co.: Crow (southeastern
Montana), 30,248
acres

77 Source: Bureau of Indian Affairs.

ISSUES

77 MINERAL COVERAGE

77 The resolution of the issue concerning mineral coverage arrived at through consideration of H.R. 1500 and S. 425 during the 93rd Congress was not reconsidered during Committee action on H.R. 25.

77 Legislation introduced in the 93rd Congress and referred to the Interior and Insular Affairs Committee included bills covering (1) only surface mining for coal, (2) surface coal mining and the surface effects of underground coal mines, and (3) surface mining for all minerals including the surface effects of underground mines.

77 The case of controlling the environmental impacts from surface coal mining can be readily made from the experience of strip mining in the Appalachian and Mid-West coal fields. The potential for irreparable environmental damage in the West clearly exists since it is not now known what the long-term effects of area mining will be and whether successful revegetation can be achieved.

77 Moreover, the necessity to include regulation of the surface effects of underground coal mining has been highlighted by the occurrence of such disasters as the Aberfam mine waste landslide in England in the Fall of 1966 and the collapse of a mining waste pile impoundment at Buffalo Creek, West Virginia, in 1972. Other hazards to the environment and human health and safety associated with underground mining include: surface subsidence and the spontaneous combustion of and long-term land and air pollution resulting from the disposition of mining wastes. In addition, the adequate control of surface mining environmental impacts in areas with an extensive mining history may require the concomitant regulation of the surface effects of underground mining because actual operations often combine surface and underground mines either on a contemporary or sequential basis.

77 Surface mining of minerals other than coal also presents environmental issues. The Committee found however, that the numerous distinctions between the

mining technologies and associated environmental problems of coal surface mining as opposed to surface mining of such minerals as copper, iron and molybdenum militated against inclusion of all minerals in a single bill. The Committee however, did adopt a separate title which is applicable to such minerals. Title VI discussed elsewhere in this report, addresses the serious problem of the development of mining sites in residential or urban areas or other locations that are inappropriate from a rational land use planning viewpoint.

79 FLEXIBILITY

79 Flexibility is a necessary element in a rational program of surface mining regulation. While performance standards should be cast in terms of general applicability, the Committee recognizes that land use considerations may justify a variance from the general standard or that a variable standard should be implemented in recognition of the distinctions in climate, terrain, and other physical features. While the bill allows variances or exceptions to the general standards, care has been taken to ensure that such exceptions have not been so broadly drafted that the exception could become the rule.

79 The bill is built upon the Committee's finding that in the vast majority of cases, certain reclamation goals must be achieved if the term "reclamation" is to have any real meaning. Nevertheless, the Committee has approved exceptions to these requirements to achieve flexibility and avoid arbitrary constraints. For example, the elimination of high walls, return of the land to approximate original contour, establishment of viable vegetative cover and the prohibition of dumping spoil material on mountain slopes are among the standards critical to the elimination of the worst effects of coal surface mining and yet these standards are either subject to exception, framed in variable terms, or both. Rather than weakening the effectiveness of these standards, such treatment is viewed by the Committee as justified and desirable. Workable Federal requirements must be appropriate to the mining setting and such standards should not preclude practices which are beneficial from a planning viewpoint.

79 Another element of flexibility is the avoidance of excessive detail in the requirements of the Federal performance standards. The Committee is aware, however, of the history of the development of State laws on the subject of regulation of coal surface mining. This history presents a pattern of increasingly detailed legislation and such detail is often traceable to regulations which have failed to provide full implementation of the more general performance standards of the legislation itself. The Committee believes that it has struck a balance between legislation which merely frames performance

standards in terms of general objectives and standards which are cast in terms more detailed than those generally found in regulatory legislation. In choosing a middle path, the Committee is mindful of the past failures on the State level and thus bases its approval of H.R. 25 on the expectation that Federal regulations promulgated under the Act will fully implement the environmental performance standards. Obviously, the mere reproduction of the statutory environmental performance standards in the regulations would be inadequate.

80 STATE AND FEDERAL LAND PROGRAMS

80 Every State which has, or contemplates having, coal surface mining operations is provided with the opportunity to prepare a State program for the regulation of surface mining within its borders. Within eighteen months after enactment of this Act, each such State may submit its State program to the Secretary of Interior for his approval, which must substantiate the existence of appropriate State laws, adequate funding, qualified personnel, and a permit system for surface mining and reclamation operations. The Secretary shall approve the State program after he has held at least one public hearing within the State, and after he has received the written concurrence of the Administrator of the Environmental Protection Agency (whose views he must publicly disclose along with those of the Secretary of Agriculture and of certain other Federal agencies) and if he has found that the State has the necessary legal authority and qualified personnel to enforce the Federal environmental protection standards.

80 Within six months after submission of the State program, the Secretary of Interior must either approve or disapprove it. In case of disapproval, the State may resubmit its program within sixty days. The Secretary has another sixty days to approve or disapprove the resubmitted State program.

80 A Federal program is to be implemented within a State only where the State fails to submit, or the submittal or resubmittal has failed to be approved by the Secretary, or where an approved State program or any part thereof is not enforced or implemented by the State regulatory agency. The Secretary is required to receive a proposed State program even after the Federal program has been established and when received must render his decision within six months. There is no limit placed on the number of times a State may resubmit its State plan under these circumstances.

80 In any event, within 34 months after enactment of this Act, either an approved State program or a Federal program must be established, and not later than 40 months after enactment of this Act every operator must have a permit issued under the State program or under the Federal program which is in full

compliance with all the provisions of the Act. Prior to the issuance of such a permit, as discussed in another portion of this report, permits must be in compliance with the interim performance standards.

80 This bill prohibits all surface coal mining on lands in the National Park System, the National Wilderness Preservation System, the National Wildlife Refuge System, on Federal lands within the boundaries of the national forests (exclusive of National Grasslands), or the Wild and Scenic Rivers System. On all other Federal lands, the Secretary is to prepare and implement a Federal lands program bringing all Federal mineral leases, contracts and permits into conformity with all requirements of the Act. Within six months after enactment of this Act, all requirements of the Act must be incorporated into the terms and conditions of every Federal mineral lease, permit, or contract issued by the Secretary. Rules and regulations covering the preparation and submission of State programs, development and implementation of Federal programs, and the permanent regulatory procedure based on the provisions of Title V must be promulgated by the Secretary within six months after enactment of this Act.

81 The Secretary may enter into joint Federal-State programs regarding Federal lands where unusual circumstances such as checkerboard ownership patterns exist, but in no case is a State law to be pre-empted by a less stringent Federal requirement.

81 The bill addresses itself to the needs of coal consumers, in particular electric utilities which may be hard-pressed (under the twin constraints of oil shortage and Federal air quality standards) to find adequate coal supplies. To make sure that Federally-owned coal is available to all classes of people on an equitable basis, the Act authorizes the Secretary to establish a program to assure that no class of purchasers of the mined coal shall be unreasonably denied purchase thereof.

81 Assistance to the States for implementing interim programs is provided on a non-matching basis, (Sec. 502(f)(5) and Sec. 714(a)). Additional assistance to the States in developing, administering and enforcing their State programs has been provided on a matching basis (80 percent the first year, 60 percent the second year and 40 percent for the third and fourth years), and a wide range of other forms of assistance relating to State programs on a cooperative basis will also be available from the Secretary and from other Federal agencies. Annual appropriations (under Sec. 714(b)) beginning at \$10 million for the fiscal year ending June 30, 1975, and increasing to \$20 million for the next two years and \$30 million for each fiscal year thereafter are to be available to the Secretary for these and administrative purposes.

81 STATE MINING AND MINERAL RESEARCH INSTITUTES

81 In keeping with the decision that the Federal role should be one of support and encouragement for ongoing State programs, and in view of the advisability of building on already existing institutions in order to foster the required growth of research and training in minerals engineering fields, the Committee has provided for support to the States, on a matching basis to meet this great need.

81 The rationale for establishing mineral research centers for the purpose of training manpower to meet mining industry's requirements for the 1970's and 1980's is illustrated by projected demand figures supplied in a paper prepared by the National Planning Association, entitled "The Demand for Scientific and Technical Manpower in Selected Energy-Related Industries - 1970-1985". The following table summarizes that report:

per 1985	Manpower category	Number required	
		1970	year 1980
Metallurgical engineers 2,700		900	1,900
Mining engineers 2,200		700	1,400
Petroleum engineers 9,600		5,600	7,300

82 By contrast, preliminary figures supplied by the National Association of State Universities and Land Grant Colleges - indicate that the supply of trained individuals in these areas will be severely deficient:

Category	Number graduating per year			
	1974	1975	1976	1971
Metallurgical engineers 327	269	314	285	
Mining engineers 412	388	329	351	
Petroleum engineers 547	395	381	398	

82 Grants are to be allotted by the Secretary on a matching basis to qualified public colleges or universities for generalized research and training through the establishment of mining and mineral resources and research institutes. Grants are also authorized to institutes for particular research and demonstration projects of industry-wide application, and to undertake research into any aspects of mining and mineral resources problems related to a mission of the Department of the Interior not otherwise being studied.

82 A basic grant of \$2 00,000 for the fiscal year 1975, would be limited to one qualified public college or university in a State conducting research and education in minerals engineering fields. The grant in the second year would be increased to \$300,000 in fiscal year 1976 and to \$4 00,000 for each fiscal year thereafter for five years. An Advisory Committee on Mining and Minerals Research consisting of the heads of various Federal agencies and four knowledgeable laymen, is to be organized by the Secretary for the purpose of determining the eligibility of applicant colleges and universities and to advise the Secretary on other aspects of the program.

82 A qualified public college or university is one which has a "school, division or department conducting a program of substantial instruction and research in mining or minerals extraction or beneficiation engineering", for a period of at least two years, employing at least five full-time faculty members for such length of time. In States where more than one college or university is eligible, the Governor is to make the designation. Where a State has no eligible public college or university, the Advisory Committee is authorized to allocate that State's allotment to one private college or university which it deems to be eligible.

82 Although the institutes will conduct research in mining and mineral resources, primary emphasis is expected to be placed on the training of mineral engineers and scientists. Research may include "exploration; extraction; processing; development; production of mineral resources; mining and mineral technology; supply and demand for minerals; the economic, legal and social engineering, recreational, biological, geographic, ecological, and other aspects of mining, mineral, resources and mineral reclamation."

82 Funds for specific mineral research and demonstration projects at the institutes are to be drawn from annual appropriations of \$15 million beginning in fiscal 1975, increasing by \$2 million annually for six years. These monies are to be available by application to the Secretary.

83 CITIZEN PARTICIPATION

83 The success or failure of a national coal surface mining regulation program will depend, to a significant extent, on the role played by citizens in the regulatory process. The State or Department of Interior can employ only so many inspectors, only a limited number of inspections can be made on a regular basis and only a limited amount of information can be required in a permit or bond release application or elicited at a hearing. Moreover, a number of decisions to be made by the regulatory authority in the designation and variance

processes under the Act are contingent on the outcome of land use issues which require an analysis of various local and regional considerations. While citizen participation is not, and cannot be, a substitute for governmental authority, citizen involvement in all phases of the regulatory scheme will help insure that the decisions and actions of the regulatory authority are grounded upon complete and full information. In addition, providing citizen access to administrative appellate procedures and the courts is a practical and legitimate method of assuring the regulatory authority's compliance with the requirements of the Act. Thus in imposing several provisions which contemplate active citizen involvement, the Committee is carrying out its conviction that the participation of private citizens is a vital factor in the regulatory program as established by the Act.

83 H.R. 25's major citizen participation provisions are as follows:

83 REGULATORY PROGRAMS

83 (a) Regulations - 180 days following enactment, the Secretary is to promulgate regulations for the Act's permanent program after holding at least one public hearing. (Sec. 501)

83 (b) Approval of State plan - Prior to the approval or disapproval of a State program, or approval or disapproval of a State's resubmitted program, the Secretary must hold at least one public hearing in the State. (Section 503)

83 PERMIT PROCESS

83 (a) Permit Approval or Denial - Prior to submitting an application for a mining permit, the applicant must give notice of intention to submit such application through newspaper advertisements and a hearing on the application shall be granted upon the filing of objections to the application. (Section 513)

83 (b) Exceptions from general environmental performance standards - H.R. 25 provides for exceptions to specific environmental performance standings relating to spoil placement, backfilling, and other specific standards. Notice and a public hearing are required before such exceptions may be granted. (Section 55(c)).

83 (c) Bond Release - After notice through newspaper advertisement, an operator may apply for a full or partial release of his permit bond. Upon the filing of objections to such release by any person with a valid legal interest, the regulatory authority must hold a public hearing on the matter. (Section

519)

84 ENFORCEMENT

84 (a) During the interim program, the Secretary is directed to implement a program of Federal inspections to enforce the Federal interim standards. Upon the receipt of any information which may be furnished by any person, and which gives rise to a reasonable belief that the interim standards are being violated, the Secretary is to order the immediate inspection of the alleged offending operation. The person who provides the Secretary with the information is to be notified as to the time of the inspection and may accompany the inspector during the inspection. (Section 502(f))

84 (b) A provision similar to that described immediately above is operative after the interim period. (Section 521)

ELEMENTS OF MINE REGULATION PROGRAM

84 The Committee is aware of the concern expressed by some that the citizen suit provision will encourage the commencement of frivolous suits brought by those who oppose all strip mining. Obviously, judges are quite capable of dismissing frivolous suits early in the proceedings and further protection is available as the judge may require the filing of a bond or equivalent security if a temporary restraining order or preliminary injunction is granted.

84 INTERIM PROGRAM

84 The implementation of a national program of coal surface mining regulation requires procedures for the orderly phase in of new standards and redefined agency responsibilities. The Committee was concerned that the bill give the States ample time to develop a program that will meet the Act's requirements and that will not threaten the continuous supply of coal by the sudden imposition of new performance criteria. On the other hand, the Committee found unacceptable the alternative of allowing mining to continue as it is currently practiced in many states during a lengthy period to the full implementation of the Act. Thus the interim program of the Act was designed in accordance with the following principles:

84 (1) The legislation should require the substantial curtailment of the most environmentally damaging aspects of surface mining relatively soon after the enactment date;

84 (2) Requirements imposed upon the States during the interim period should be capable of ready implementation by the States under present systems or regulations;

84 (3) The scheme of the interim period should provide a smooth transition into the implementation of the permanent program;

84 (4) The interim program should reflect the basic principles of the legislation (State lead, citizen participation, minimum Federal environmental standards, and concurrent Federal inspections to back up States).

84 Two environmental performance standards which are basic to the elimination of the most serious environmental degradation caused by coal surface mining are the prohibition of placement of materials downslope from the bench in mountain mining areas and the requirements that the mine site be regraded to the approximate original contour. These requirements are included in the interim program as well as other standards which are similar to requirements currently enforced in most States (adequate revegetation, segregation and replacement of top soil or other suitable growing medium, the protection of water resources and the control of surface disposal of mine wastes).

85 Although the spoil placement and regrading standards are of utmost importance, in recognition of the problems encountered in a phase in of new regulations, the Committee adopted variance procedures to operate during the interim period.

85 Subsection 502(d) provides that the procedures applicable to steep slope operations after the implementation of a full State or Federal program, will also apply to the general regrading standard as well as steep slopes during the interim.

85 Along with performance criteria structured to avoid the possible harsh results of the immediate imposition of new standards, the Committee was careful to establish an interim procedure which would allow the orderly phase in of the new program without an interruption of the delivery of coal. Under the terms of Section 502 and related sections, an operator may continue to mine coal after the date of enactment provided that he is in compliance with the interim standards by the 135th day after enactment. New operations may also commence during the interim period provided that the operator obtain a permit from the state agency as would be required prior to enactment except that after enactment all new permits must conform to the interim standards referenced in section 502. In order to avoid a hiatus at the end of the interim period the operator in expectation of mining after the interim period shall submit an application for a permit within 20 months after enactment. Thus the State is given ample time to act upon such application prior to the point when a permit in full compliance is required.

85 The Committee was concerned that the phase-in of the new regulatory program not result in the inadvertent interruption of ongoing operations due to administrative technicalities. The Committee recognizes that delays may be encountered in the permit approval process or in the procedures for approval of a State plan, the implementation of a Federal program for a State or the implementation of a Federal program for Federal lands. It is certainly the Committee's intent that the interim procedures be construed to avoid any interpretation of procedural technicality which could result in the shutting down of ongoing operations and specific mechanisms were included to assure the avoidance of any such result. Section 502(g) provides that if a State program is disapproved, existing surface coal mining operations can continue operation prior to the promulgation of a Federal program (including judicial review of such program) provided that such operations are in compliance with the performance standards referenced in section 502. Moreover, under section 506(a), a person conducting a surface coal mining operation pursuant to a permit issued under section 502 who has made timely application for a permit under the full program, may continue operations after the deadline for new permit approval if the administrative decision has not been rendered and the operator is in compliance with the applicable standards of the Act.

86 The Committee believes that the incorporation of the interim standards into existing operations within the regulatory time period is a practical mechanism for assuring compliance without raising the possibility of an unwarranted hardship on the operator. The approved language provides that operators are to be given a "reasonable time" to remedy conditions which are violative of the Act, and thus as an operator may have to accomplish significant adjustments in his operations to achieve initial compliance, a reasonable time may be a more lengthy period than would be the case after the Act is fully implemented. Similarly, where an operator is attempting to obtain a variance under the Act to allow the continuation of a particular operation, it is not the intention of the Committee that the operation be interrupted if action on the variance application is not taken prior to the implementation of the interim standards. In such an event, the determination of a reasonable time for the operator to comply should take into account the administrative capabilities of the regulatory authority during the implementation of new regulations and the operator acting in good faith should not be unfairly penalized.

86 The Committee structured the interim program on the premise that most existing operations are currently subject to State regulatory programs and thus a phase in procedure which relies, in part, upon existence of state agencies is appropriate. Regulatory programs presently exist in all but three states in

which coal surface mining is conducted. H.R. 25 sets no standards for the State agency during the interim period other than the requirement that any State program include the interim standards in permits as set forth in Section 502 and that any inspection comply with the procedures and enforce the standards of the interim program. Thus States which do not have a regulatory agency established by statute may still participate in the interim program through administrative action of a suitable agency. Certification of this fact by the Governor of a State to the Secretary is sufficient to qualify that State for the funding provided in H.R. 25 during the interim period.

86 While State regulatory mechanisms remain operative and constitute the chief element of the interim program, H.R. 25 does provide for backup federal inspections during this period. Along with federal inspections triggered by information from any citizen (see section on federal enforcement in this report), H.R. 25 requires federal inspection if State inspection reports indicate the occurrence of two consecutive violations of Federal standards as well as random federal inspections of mine sites. Thus the State machinery is preserved but the integrity of the Federal standards is assured through Federal oversight.

86 The Secretary is given considerable latitude in directing the Federal inspectors and as manpower limitations may be a factor, it is intended that the federal inspection activities be focused upon those areas where there may be the greatest difficulty in meeting the federal standards. This does not necessarily imply that the intensity of federal inspection should be in direct proportion to the number or size of mines, but rather that emphasis should be guided by such factors as the environmental hazards involved, the difficulty of the industry in meeting the interim standards and the difficulties which may be encountered by certain States in administering and enforcing such standards.

87 H.R. 25 also provides funds to the Secretary to fully reimburse the States for all costs involved in enforcing the interim standards through the administration and inspection system. In order to provide such resources on a timely basis to the Secretary, H.R. 25 provides that funds authorized for the interim inspection program reimbursement (and the other activities identified in Section 714(a)) shall be available under contract authority upon enactment. Thus the Secretary of Interior is granted authority to incur obligations under such authorizations. His action in so doing shall be deemed a contractual obligation of the United States for the payment of the cost thereof, and such funds shall be deemed to have been expended when so obligated.

87 PERMIT SYSTEM

87 In any coal surface mining regulatory system, the determination that reclamation can or cannot be accomplished in an area proposed to be mined depends initially upon the judgment of the regulatory agency. Experience has shown that without a thorough and comprehensive data base presented with the permit application, and absent analysis and review both by the agency and by other affected parties based upon adequate data, this judgment is apt to reflect the economic interest in expanding a State's mining industry. Valid environmental factors tend to receive short shrift. To meet this problem the bill delineates in detail the type of information required in permit applications in section 507 and the criteria for assessing the merits of the application in section 510.

87 The physical parameters of the mining site and its environs must be clearly set forth in the application, so as to yield an accurate picture of the geological, hydrologic, surficial, developmental, ecological and general land use features of the landscape which will be affected directly or indirectly by the operator. Due to the movement of water through the environment, the hydrologic aspects of the application requirements will have the most profound implications for off-site residents and the community as a whole. Both the quantity and the quality of water supplies available to downstream users have been destroyed by the abysmal reclamation practices of coal operators in areas where the State laws were insufficient or not enforced. Except for selected information derived from test borings relating to quantitative and qualitative analysis of the coal seam, all other such information shall be open to public scrutiny, especially that pertaining to toxicity.

87 The operator must show, through the vehicle of a mining and reclamation plan, just how he intends to protect surface and ground water, (both on- and off-site) and the rights of water users.

87 As part of a detailed description of measures to be taken in conformity with the Act to prevent hazards to public health and safety, a certificate of insurance covering on-site and off-site damage and personal injury is required.

87 Section 507 requires the submission of a reclamation plan along with the permit application. The reclamation plan, the requirements for which are detailed in section 508, is a blueprint for action, revealing the degree of practicality of the operator's commitment. Post-mining land uses are to be set forth in detail along with necessary public or private support activities, so that the transition from one mode of pre-mining land use to a possibly different

mode of postmining land use is shown to be in keeping with the Act and also feasible. The plan must include a time schedule indicating how each step in the procedure is to be carried out.

88 Each application will be available for public review at an appropriate place. The applicant must supply proof of newspaper notice that acquaints local residents with the location of the operation and where the application may be examined. This requirement responds to the Committee's awareness of the severe difficulty which local people frequently experience in attempting to investigate the nature of impending surface mine operations.

88 Permit approval or denial must be based on a written finding by the regulatory authority that the mining application affirmatively demonstrates:

(1) that all the requirements of the Act and rules and regulations of the Secretary will be met; (2) that reclamation that is required by the Act and the State or Federal program can be accomplished under the reclamation plan contained in the permit application; (3) that the proposed surface mining operation, if located west of the 100th meridian West longitude would (a) not have a substantial adverse effect on valley floors which are significant to present or potential farming or ranching operations, (b) not adversely affect the charge from underground water or springs that feed the valley floors which must be preserved, and (c) not alter a channel of significant water courses meeting specific criteria identified in the Act.

88 The Committee further clarified the definition of those areas of hydrologic importance, located west of the one hundredth meridian west longitude, which are intended to be protected against the adverse impacts of surface mining. First, the Committee reiterated the requirement in last year's bill (S. 425) that prior to approval of a permit it must be determined by the regulatory authority that the proposed operation "would not have a substantial adverse effect on valley floors underlain by unconsolidated stream laid deposits where farming can be practiced in the form of floor irrigated or naturally subirrigated hay meadows or other crop lands (excluding undeveloped range lands), where such valley floors are significant to present or potential farming or ranching operations."

88 In addition, the Committee determined that the proposed surface coal mining operations should not be located within "an area of hydrologic importance" where the proposed operation would "adversely affect the quantity or quality of water in surface or underground water systems that supply these valley floors." Finally, the Committee also determined that the proposed operations should not be located within an area of hydrologic importance where the operation would -

88 alter the channel of a significant watercourse which is identified as a stream fed by (1) a spring, other groundwater discharge, or surface flow that flows an average of 250 gallons per minute or more during one hundred and twenty days or more per year; and (2) a drainage area which encompasses 10,000 acres or more when measured above the lowest point on the watercourse by the proposed surface coal mining operations, as documented by the state or Federal regulatory authority.

89 In its review of the application, the regulatory authority must determine specifically that the affected land does not lie within an area either under study or under designation as unsuitable for mining pursuant to section 522. Moreover, the regulatory authority must find that the operation is designed to prevent irreparable off-site impacts to the hydrologic balance of the area affected as well as assuring the assessment of the probable cumulative impact of all anticipated mining in the area on the hydrologic balance, and that any operation under the applicant's ownership or control currently in violation of the Act or of other Federal air or water protection statutes is in the process of being corrected in a satisfactory manner to respective regulatory agency.

89 Any valid permit issued pursuant to this Act shall carry with it the right of successive renewal upon expiration with respect to areas within the boundaries of the existing permit and upon written finding by the regulatory authority that terms of the existing permit are being met; that the operation is in compliance with the environmental protection standards and with the approved State program; that renewal will not jeopardize the operator's continuing responsibility to satisfy any remaining reclamation responsibility; and that the performance bond will continue in full force and effect. However, any portion of a renewal application which concerns land areas beyond the boundaries authorized in the existing permit shall be treated as a new application, subject to all the provisions of the Act pertaining thereto.

89 A successor in interest to the permittee is granted the right to continue the coal surface mining operation while his application for a permit is under consideration by the regulatory authority, so long as the operation is in compliance with the permittee's mining and reclamation plan and so long as the permittee's performance bond continues in full force and effect.

89 The interim performance standards apply to all new permits issued by State agencies from date of enactment. After 135 days from date of enactment all operations existing on date of enactment must comply with these standards,

during which time the agency must have amended permits accordingly. Within 20 months after enactment, any operator who expects to surface mine following the time of approval of a State program must submit an application which is in full compliance with the Act and with the entire range of permanent performance standards, for land which he expects to mine under the approved State program. If he is to mine on steep slopes, the permit conditions must include, in addition to the general performance standards, standards specific to steep slope mining.

89 Since the Act covers surface impacts of underground coal mining concurrently with those of surface mining, underground coal operators will be bound by permit requirements of the Act. They are required to apply for permits, the terms of which include standards relating to minimizing surface subsidence, sealing portals and openings, disposing of mine wastes, constructing impoundments for mine wastes, revegetating disturbed areas, preventing off-site damages, and discharge of waterborne pollutants.

89 Section 512 requires that coal exploration which will substantially disturb the natural land surface must be conducted pursuant to a permit. Application for such a permit must be supported by technical data including certain requirements set out in the section and provision is made for preserving the confidentiality of information relating to the applicant's competitive rights.

90 LAND USE CONSIDERATION

90 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 H.R. 25. 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 pre-mining condition, and that such condition will not contribute to environmental deterioration and is consistent with the surrounding landscape.

90 Obviously, the principal performance standards (regrading to approximate original contour, avoiding reckless spoil placements, revegetation and others) have the same goal - restoration. Moreover, the permit process requires the submission and approval of post-mining 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. The environmental and social stresses engendered by surface mining, discussed elsewhere in this report, are well documented. It is this combination

of performance criteria and procedural requirements (coupled with the designation process discussed below) to be established by H.R. 25 that will assure the greatest possible minimization of the undesirable consequences of surface mining.

90 On the other hand, 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 a 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 post-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.

90 The process for designation of land areas as unsuitable for surface coal mining is also premised on the notion that successful management of surface mining depends, in large part, on the application of rational planning principles. While coal surface mining may be an important and productive use of land, it also involves certain hazards and is but one of many alternative land uses. In some circumstances, therefore, coal surface mining should give way to competing uses of higher benefit. Section 522 establishes a program by which such decisions can be made. Under this section, to become eligible to assume regulatory responsibility a State must establish a process designed to provide the technical data needed to enable the regulatory authority to make objective decisions as to which, if any, land areas in a State are unsuitable for all or certain types of surface mining.

91 The Committee wishes to emphasize that this section does not require the designation of areas as unsuitable for surface mining other than where it is demonstrated that reclamation of an area is not physically or economically feasible under the standards of the Act. The other criteria for designation, which relate to general planning and environmental concerns, are discretionary and thus the State could determine that no lands should be designated thereunder, or, on the other hand, could prohibit all or some types of surface mining entirely. In addition to the discretionary designation criteria, the designation process includes other elements of flexibility. For example, the designation of unsuitability will not necessarily result in a prohibition of

mining. The designation can merely limit specific types of mining and thus the coal resource may still be extracted by a mining technology which would protect the values upon which the designation is premised. In addition, after an area is designated, coal development is not totally precluded as exploration for coal may continue. Moreover, any interested person may petition for termination of a designation.

91 The designation process is not intended to be used as a process to close existing mine operations, although the area in which such operations are located may be designated with respect to future mines. The Committee recognized that an existing mine might not be one actually producing coal, because it was in a substantial stage of development prior to coal production. Thus the meaning of existing operations is extended to include operations for which there are "substantial legal and financial commitments".

91 The phrase "substantial legal and financial commitments" in the designation section and other provisions of the Act is intended to apply to situations where, on the basis of a long-term coal contract, investments have been made in power plants, railroads, coal handling and storage facilities and other capital-intensive activities. The Committee does not intend that mere ownership or acquisition costs of the coal itself or the right to mine it should constitute "substantial legal and financial commitments."

91 It should be noted that the designation process is structured to be applied on an area basis, rather than a site by site determination which presents issues more appropriately addressed in the permit application process. The Committee believes that the area by area approach of Section 522 thus serves the industry since such a process may, in advance of application, identify lands which are either not open to surface mining or where surface mining is subject to restrictions.

91 Although the designation process will serve to limit mining where such activity is inconsistent with rational planning in the opinion of the Committee, the decision to bar surface mining in certain circumstances is better made by Congress itself. Thus Section 522(e) provides that, subject to valid existing rights, no surface coal mining operation except those in existence on the date of enactment, shall be permitted on lands within the boundaries of units of

certain federal svstems (such as the National Park system and National Wildlife Refuge System), on Federal lands within the boundaries of any national forest or in other special circumstances, e.g., within one hundred feet of public roads, three hundred feet of public buildings or churches, or 100 feet of a cemetery.

92 ENVIRONMENTAL PROTECTION STANDARDS

92 Because of the evolution of the surface coal mining industry, reclamation and environmental protection actions are often viewed as necessary evils to be tacked on to the end of a process that has been developed for the purpose of producing coal at the least possible cost. Experience with sound reclamation practices, however, indicates that the best approach to mining and reclamation involves the combining of both of these activities in one process. Thus there is ample evidence to reject assertions that "the reclamation and mining processes cannot be combined." In fact, the opposite is true.

92 The authors of one recent engineering study concerned with the design of new and more environmentally acceptable mining systems observed in reviewing current practices that "preproduction mine planning and design is not a prerequisite to profitable mining" and thus for the surface mining industry in the Eastern coal fields, "the mining methods employed today remain essentially unchanged since their inception, even though equipment used has changed over the years (e.g., the front-end loader has replaced the power shovel for stripping and coal loading)". In addition, "because reclamation consists of a series of distinct post-mining activities - appended, as it were, to existing mining methods - the potential for significant further reduction in the environmental impacts of surface mining is severely limited." (Mathematica, page 155-56.)

92 A basic tenet underlying this legislation is the principle that the environmental protection and reclamation, at a minimum meeting the standards in this Act, are a co-equal objective with that of producing coal. The continued selection of mining techniques by engineers whose primary objectives are the most efficient removal of the overburden and transport of the coal is not sufficient to be fully responsive to the purposes and intent of the Act. Moreover, if the mine design objectives include the environmental performance standards as elements to be thoroughly integrated in the overall mining process instead of treated as separate rituals to be performed merely because they are required, then it is quite probable that accomplishment of the environmental practices will become cost-effective.

92 The following is a discussion of the key environmental performance standards of H.R. 25.

92 RETURN TO APPROXIMATE ORIGINAL CONTOUR

92 H.R. 25 requires that the mine site be regarded to the approximate original contour unless a variance, consistent with the terms of legislation, from the standard is necessary to achieve an alternative postmining land use. Moreover, the regrading standard of H.R. 25 was formulated to cover all types of mining operations under all conditions. Thus it is, of necessity, a flexible standard which imposes different mining circumstances. The bill's critics have alleged, to the contrary, that the term "approximate original contour" imposes an overly rigid and impractical requirement. It should be emphasized, therefore, that a reasonable interpretation of H.R. 25 cannot justify the assertion that the bill requires either the impossible task of restoration of the original contour or the useless act of digging a new pit to obtain fill material to achieve full restoration of the original topography.

93 As defined in the bill, approximate original contour means a surface configuration which closely resembles the configuration of the land prior to mining and blends into the drainage pattern of the surrounding terrain. The term contour is defined by the dictionary as "the outline of a figure or body, with a line or lines representing such an outline." The contour of ground is similarly defined as the outline of the surface of the ground with respect to its undulations. These two definitions primarily refer to the shape or configuration of a surface. In addition, with respect to mapping, contour takes on an additional meaning; the imaginary line connecting the points on the land surface that have the same elevation and the line representing such line on a map or chart. In order to understand this concept it is necessary to distinguish between the dimensions of elevation and configuration.

94 [See Original]

95 CONTOUR MINING

95 Contour mining operations operate on a portion of the local relief, a band on the mountainside or the top portion of the hill. A characteristic of this mining is that always some undisturbed land, either above or below, or both above and below the mining site remains. Operations do not cover the landscape on a contiguous tract basis.

95 In virtually all cases of contour mountain mining, sufficient spoil by volume is created to return the mine site to approximate original contour in terms of shape or configuration as well as elevation. The swell property of the materials removed (overburden) from the mine site during mining assures this condition with present stripping ratios. The geometry of the contour mountain mine as schematically shown in figure 2 bears this out. Original points on the

landscape, both above and below the mine, remain, becoming reference points for regarding.

95 A variation in contour mining which results in mountain top removal leaves no remaining highwall and thus no reference point on the original landscape above the operation. In this instance, regarding to approximate original contour takes on the principal property of shape or configuration, not elevation. The rebuilding of an escarpment removed by a mountain top operation is impossible, regardless of the amount of spoil produced. Regrading to approximate original contour, blending into surrounding land forms and uses, for such an operation in the Appalachian coal fields is schematically shown in figure 2. It should be noted that the provisions of the bill in this instance require shaping to provide for inward drainage and water control from the hilltop.

95 Application of the approximate original contour standard to mountain mining is that it forces mine operators to use a particular mining technique widely used in Pennsylvania known as the modified block cut. This is not the case. The Committee is prescribing performance standards to achieve a certain degree of reclamation and has no intention of dictating how these standards are achieved. In fact operators of surface mines in West Virginia and Tennessee are reclaiming to approximate original contour, backfilling all highwalls by methods other than the modified block cut. Indeed, the industry is already practicing methods which can be used to meet the standards of the bill in a number of States and under different conditions.

95 AREA TYPE MINING

95 Area mining, the second basic type of mining addressed in the proposed legislation, is characterized by operations covering relatively large, contiguous tracts of land that are relatively flat or gently rolling. The topography of such an area has low local relief. Although slopes may be relatively steep or near vertical, as in a mesa formation, the local relief is sufficiently small so that the mining destroys or turns over all of the land which makes up the local relief on the tract mined.

95 In area mining, the ability to reclaim to approximate original contour depends primarily on the quantity of spoil available in relation to the amount of coal removed (the stripping ratio).

95 A profile of a typical area mining operation where the volume of spoil equals or exceeds the volume of coal removed is shown schematically in figure 2. The environmental standard proposed intends that the overburden from the first

cut will be blended into the undisturbed landscape and mine site and the final cut is backfilled with spoil from several previous cuts as well as from the top of the highwall if desired. In such instances, the actual elevation of the reclaimed land might be higher than the premined lands due to the swell of spoil material.

96 Two other conditions arise, however, in the area mining situation. The first, however, occurs where the spoil is sufficient to return the mined area to approximate original contour but not to the approximate original elevation. The second condition arises when the stripping ratio is such that there is not sufficient spoil to achieve either element of approximate original contour (elevation or configuration).

96 The first condition is illustrated schematically in figure 2. The original topography is of low local relief (relatively flat). The average overburden is 50 feet thick and the average thickness of the coal seam is 100 feet. Conservatively assuming a 20% expansion of the overburden, the problem is to grade a pit averaging 150 feet deep by a length and breadth of the mining operation with 60 feet of fill material so that it blends into the surrounding environment. This can be accomplished by regrading the final mining site into a saucerlike depression which resembles the original landscape. Spoil material would be graded upward past the top of the coal seam on each of the highwalls while the overburden on top of the highways would be pushed down and blended into the slope between the original elevation and the depressed topography of the regraded spoil at the bottom of the mining site.

96 H.R. 25 provides special treatment for the second special condition, illustrated schematically in figure 2, presented in a few surface coal mines that are similar in nature to open pit hardrock mining. Such mines are described in the approximate original contour provision as thick seam operations carried out in the same location over a substantial period of time, where such an operation transects the coal deposit vertically (i.e., the operation moves down through the deposit as is the case in the area mining situation) and where the overburden removed is insufficient to return to either the approximate original configuration or elevation. In such cases the regrading standard requires that the overburden be used to cover the floor of the mining operation, to provide some drainage control and to establish a slope of at least the angle of repose against the highwalls completely covering the coal seam and extending to the original contour. An angle of repose fill against the highwall provides a surface which may be more stable than the highwall with respect to weather. The

covered coal seam is protected in part against accidental combustion, or other problems if the coal seam is an aquifer. In addition, the slope of natural repose has an added safety value, since it does not present a hazard to either wildlife or human life, as would a vertical face.

96 REVEGETATION

96 Revegetation of mined areas is an essential aspect of the reclamation process since it assures: (1) the surface stability and erosion control of the regraded areas, (2) appropriate water retention desirable on the mine site, (3) the long-range productivity of the land, (4) the diversity of species capable of sustaining pre-mining land uses, and (5) aesthetic value.

97 Elements critical to successful revegetation include climate, stability of regraded areas, appropriate drainage and moisture availability, the absence of toxic materials on the surface or in potential root zone levels, and appropriate surface soil manipulation and soil conditioning.

97 In recognition of such factors, H.R. 25 sets forth the following criteria:

97 (1) the operator must establish an effective and permanent vegetative cover consisting of diverse species native to the area or introduced species where appropriate, all capable of self-regeneration;

97 (2) the operator will be responsible for the survival of the revegetation for a period which varies with the annual amount of precipitation on the area; and

97 (3) the reestablished vegetation must be capable of plant succession within the ecological context and time frame particular to the area. The use of the term "effective" describes both the productivity of the planted species concerning its utility to the intended post-mining land use (e.g., nutritional value for livestock) as well as its capability of stabilizing the soil surface with respect to reducing siltation to normal pre-mining background levels.

97 The history of revegetation in Eastern and Central U.S. mined areas indicates a good probability of meeting the bill's requirements providing that a minimum of care is taken during the mining and reclamation cycle. In these areas a wide range of revegetation plantings (including grasses, trees, legumes and others) have proven successful. Under many different conditions in these areas, revegetation efforts have resulted in establishing diverse species and regeneration and plant succession has occurred. In some instances, however,

revegetation has been attempted through the establishment of ground cover monocultures and it is not at all clear that such methods will result in plant succession within a suitable time frame. Moreover, although volunteer growth may appear on abandoned mine spoil piles in humid areas if the soil is not toxic, the time frame necessary to achieve the desired degree of density - 20 to 30 years - is too long to be considered acceptable.

97 While conditions in humid coal mine areas are such that successful revegetation is reasonably probable, success cannot be assumed. A recently completed study on revegetation by the U.S. Forest Service stresses the need for advance pre-mining planning as a prerequisite to success.

97 First of all, vegetating mine spoils must not be considered only as an after-the-fact activity. If this were so, some problems could never be corrected, or at best could be corrected only at great cost and effort. For example, extremely acid spoils generally are the most difficult ones to vegetate. Treating them is difficult and costly and the treatment may be only temporary. Thus, to continue to permit the unrestricted mining of coal seams that produce mostly toxic spoils is to perpetuate a virtually insoluble problem.

(Revegetation, Forest Service, USDA, 1974, A report of Research and Demonstration of Improved Surface Mining Techniques in Eastern Kentucky, page 8.)

98 Similarly the Forest Service found that some spoils supported no vegetation because they are infertile, thus emphasizing the need for chemical analysis of spoils in all active strip mines, and "an even better way for predicting spoil quality is to sample the overburden by core-drilling". Indeed, the report recommended that "chemical analysis of samples of rock strata should be made in a qualified laboratory. Samples of unweathered rock should be collected several months in advance of mining so that rocks can be artificially weathered before they are analyzed." (Id., 12)

98 The presence of zones of toxic material in the overburden should be of great concern to operators and the regulatory authorities. Spoil toxicity is not a self-correcting condition. As the Forest Service notes, the "once popular

concept that spoils will become more suited for growing vegetation if they are left to leach for a couple of years before planting is an erroneous one." (Id.

at 17) According to the Forest Service, "Both laboratory leaching studies and field studies indicate that acid spoils do not necessarily become less acid or

less toxic with prolonged leaching and weathering. In fact, these studies indicate that, when weathered, some acid spoils will become even more acid or toxic and will remain acid for some, as yet undetermined, period of time."

(Id., 17)

98 Physical aspects of spoil are equally as important as their chemical characteristics. Long steep slopes are subject to severe erosion and are difficult to revegetate. The texture and color of spoil will substantially affect its water-holding and temperature characteristics.

98 It is essential that regulations specify that preparation of an adequate seed bed so that revegetation will achieve the required density of cover, productivity, and surface stabilization characteristics required by the Act. The use of mulch, fertilizer, and soil stabilizers will probably be common, if not universal, in revegetation activities.

98 In any event, revegetation of mine sites in arid and semi-arid areas of the country is considerably more problematical than that of the humid central and Eastern coal fields. In fact, the most recent scientific study concerning the revegetation potential of Western coal mine lands, Rehabilitation Potential of Western Coal Lands, a report of the National Academy of Sciences, emphasizes the relationship between the level of precipitation and the expected time for natural regeneration of plant cover.

98 We believe that those areas receiving 10 inches (250 mm) or more of annual rainfall can usually be rehabilitated provided that evapotranspiration is not excessive, if the lands are properly shaped, and if techniques that have been demonstrated successful in rehabilitating disturbed rangeland are applied. However, we must emphasize that this belief is not based on long-term, extensive, controlled experiments in shaping and revegetating western lands that have been surface mined. Few such studies have been made, and those in process have only a few years' data to report. Nevertheless, much research has been done on revegetating western ranges, disturbed roadways, and other denuded areas in arid lands. We believe that the techniques developed in these studies can and should be adapted to the higher rainfall areas of the West. The drier areas, those receiving less than 10 inches (250 mm) of annual rainfall or with high evapotranspiration rates, pose a more difficult problem. Revegetation of these areas can probably be accomplished only with major, sustained inputs of water, fertilizer, and management. Range seeding experiments have had only limited success in the drier areas. Rehabilitation of the drier sites may occur naturally on a time scale that is unacceptable to society, because it may take decades, or even centuries, for natural succession to reach stable conditions.

99 Rehabilitation of mined lands, however, requires more than achieving a stable growth of plants. If environmental degradation is to be avoided, the

plants themselves should be a mixture of species capable of sustaining the former native animals.

99 With the introduction of irrigation techniques, the time period required for reclamation in arid and semi-arid areas decreases considerably but the basic correlation between time and amount of rainfall remains. This is due in large part to the special problem of establishing vegetation which will be able to survive at the natural level of precipitation, including the natural cycles of moisture availability, after the irrigation is removed and the reclamation effort is concluded.

99 The differential time limits for revegetation responsibility of H.R. 25 is based on the average annual precipitation isopleth demarcating the coal fields in the arid and semi-arid West from those in the more humid areas of the East and Northwest. Thus the standard of 26 inches became the basic measure used in the bill to distinguish between coal mine regions in arid and semi-arid areas and such regions in humid areas.

99 The Committee recognizes, however, that within arid and semiarid regions the length of time necessary to reestablish vegetation on mining spoil varies considerably. The time estimates for revegetation set forth in the Academy report for the wettest of the potential mining areas (given the natural vegetation characteristics of the area) in the arid and semi-arid areas of the country ranges from 10 years upward. Thus a 10-year standard of the bill represents a minimum time under the most favorable circumstances. Regulatory authorities may establish longer periods of responsibility suitable to subregional climatic and vegetative zones.

99 The time limit set for revegetation responsibility in the more humid areas (over 26 inches of precipitation) was set at five years. This provides sufficient time for the revegetation to prove establishment and regeneration. For instance, "on the average, four years elapsed - after mining - before mine sites are adequately and totally reclaimed in accordance with Kentucky regulations. (Mathematica, page I-54).

99 The Committee recognizes that in some areas and under some conditions, intensive commercial agricultural activity such as row crop cultivation are suitable, post-mining land uses. In those instances where long-term intensive agricultural activities are approved as a postmining land use, the period of revegetation responsibility begins at the date of initial planting of the intensive agricultural crop and the period covers the agricultural activity for the respective time period. It should be noted that pasture, grassland, and similar agricultural land uses are not considered as intensive uses by the Committee. Such agricultural activities can be conducted on reclaimed mine slopes without requiring variances from the approximate original contour and

spoil placement standards. It is also noted that to date little mined land has been returned to row crop or other intensive agricultural use, with those instances being an exception rather than a frequent reclamation land use. It seems reasonable that the greatest likelihood of returning lands to intensive uses is in those instances where the land supported such activities prior to mining. This would also imply that the mining and reclamation cycle would result in the segregation of sufficient top and subsoil material (or other suitable spoil) so as to provide the capability of recreating the upper soil layers in sufficient depth to assure appropriate chemical and physical qualities suitable to such agricultural uses.

100 Some concern has been expressed that lands reclaimed for extensive agricultural use such as grazing or pasture must not be used during the period of reclamation responsibility. The Committee does not intend this at all. For instance, grazing use of such lands during the period of operator responsibility is consistent with the intent, but presumably the type and extent of use would be such that it would not endanger the survival coverage and productivity of the revegetation.

ELEMENTS OF MINE REGULATION PROGRAM

MINING IMPACTS ON HYDROLOGIC BALANCE

100 Surface coal mining operations can have a significant impact on the hydrologic balance of the mined area and also its environs. The hydrologic balance is the equilibrium established between the ground and surface waters of an area and between the recharge and discharge of water to and from that system. Some of the measurable indicators of such an equilibrium are: flow patterns of ground water within aquifers; the quantity of surface water as measured by the volume rate and duration of flow in streams; the erosion, transport and deposition of sediment by surface run-off and stream flow; the quality of both ground and surface water including both suspended and dissolved materials; and the interrelationship between ground and surface waters. The hydrologic balance of an area is a complex relationship maintained by a number of factors. The impacts of mining on any one of these factors can trigger changes throughout the system.

100 The total prevention of adverse hydrologic effects from mining is impossible and thus the bill sets attainable standards to protect the hydrologic balance of impacted areas within the limits of feasibility. For most critical

areas uncertain fragile hydrologic settings, the bill specifies standards which are imperative to begin to assure that adverse impacts to the hydrologic balance are not irreparable. It is not intended by such minimum standards that these measures will be considered wholly sufficient to meet the objectives of "minimizing disturbance to the prevailing hydrologic balance." It is anticipated that the State regulatory authorities will strengthen such provisions and require whatever additional measures are necessary to meet local conditions.

101 One of the major criticisms directed at the environmental standards pertaining to the hydrologic balance centers on the use of the terms "on and off" the permit area. Concern has been expressed that this means that the hydrologic characteristics of the site prior to mining must be maintained in the actual working mine excavation. Such an interpretation is not justified. Reference to "on-site" refers to the mine's permit areas. Potentially large areas can and have been included in applications for mining. Of course, the actual operating area of the mine is necessarily de-watered. The justifiable concern is how extensive the secondary effects could be - such as a draw-down of ground-water in surrounding areas. The bill requires that the operator will take such measures as are necessary to minimize the disturbance to the hydrologic balance in the surrounding areas. In addition, the operator is to conduct reclamation activities on a continuing basis that assure the impacts are minimized after mining has been completed.

101 The impact of coal mining on water resources has been well-documented. A number of studies provide insight into potential water resource impacts of mining in arid and semi-arid areas and of effects of mining in humid areas.

101 Five publications cited and the abbreviations used in this text are listed here:

101 Beaver Creek: Influences of Strip Mining on the Hydrologic Environment of Parts of Beaver Creek Basin, Kentucky, 1955-66, U.S. Geological Survey Professional Paper 427-C, Washington, 1970.

101 Tradewater: Effects of Coal Mining on the Water Resources of the Tradewater River Basin, Kentucky, Geological Survey Water Supply Paper 1940, Washington, 1972.

101 Cheyenne: Hydrology of the Upper Cheyenne River Basin, Sediment Sources and Drainage-Basin Characteristics, Geological Survey Water Supply Paper 1531, Washington, 1961.

101 NAS: Rehabilitation Potential of Western Coal Lands, National Academy of Sciences, A Study for the Energy Policy Project, Washington, 1974.

101 Decker: Hydrology of the Decker Coal Mine and Vicinity, Southeastern

Montana, Preliminary Report, Montana, Bureau of Mines and Geology, 1974.

101 Past mining operations have a mixed impact on stream flow regimes, In the Appalachian mountain mining areas, conventional contour mining has resulted in greater peak flows, more rapid changes in discharge, reduction in base flows and increased flooding of streams (Beaver Creek, page C-1).

101 Reclaimed spoil areas resulting from area mining in more gently rolling terrain under humid conditions act as deposits which can store and slowly release groundwater. Under such conditions, it has been found that "stream flow is sustained during extended periods of no precipitation . . . owing to drainage from mined areas while streams in non-mined sub-basins cease flowing." (Tradewater, page 60).

101 In arid and semi-arid settings, mining alters drainage patterns which can "result in a decrease in storm run-off volume and loss of recharge to alluvial aquifers in downstream valleys" (NAS, page 68). The unconsolidated materials resulting from strip mining can have similar hydrologic properties to the aggradational features of Western streams, which can result in a loss of water to both the surrounding lands and downstream areas (Cheyenne, page 168).

102 Water quality impacts are readily noticeable and have an extended geographic influence. Mining increases the mineralization of waters and is a function of the type or chemistry of the strata disturbed, the amount of water available, and the duration of contact with the disturbed material.

102 In Appalachian mountain mining areas, the dissolved solid content of streams has been measured and found to be 12 times greater than that in non-mined areas (for instance a yield of 1,370 tons per square mile compared to 111 tons per square mile). However, flow directly from mines sites has been measured containing dissolved solid concentrations equivalent to a yield of 1400 tons per square mile - a pollution load increase of 126 times that of unmined areas (Beaver Creek, page C-2).

102 Area mines in humid settings can have similar impacts, with stream flows containing 17 times the amount of dissolved solids and flows from non-mined areas. However, particular constituents had increase concentrations of up to 300 times that of non-mined areas (Tradewater, page 54).

102 These increases in chemicals in surface waters provided significant water problems for all types of uses as well as precluding the realization of the full potential of the streams for recreational and wildlife purposes.

102 In some arid and semi-arid areas, one of the possible impacts of surface mining on water quality is an increase in salinity (sodium, bicarbonate,

sulfate). For example, in one instance where water quality is monitored at an active Western mine, sufficiently high concentration of sodium, up to sixteen times that of the normal concentration in surface flow, indicates a high to very high alkalinity hazard for irrigation and thus for revegetation purposes at the mine site. In this case, downstream water uses are not affected because the volume of flow from the mine at this time is quite small (0.5 cfs) compared to the receiving stream (more than 20 cfs 99% of the time) and there is adequate capacity for dilution (Decker, page 12).

102 Sediment yields from strip mines can be exceedingly high and can persist at high levels for long periods after mining unless adequate revegetation and soil stabilization work is done to replace the appropriate surface drainage at the site.

102 In the Appalachian mountain mining areas, sediment concentrations in streams commonly exceed 30,000 parts per million (ppm) during storms whereas streams in non-mined areas yield 600 ppm under the same hydrologic circumstances. On an annual basis, such yields from watersheds containing strip mines are equivalent to 1900 tons per square mile compared to 25 tons sq.mi. on non-mined areas. Moreover spoil banks yielded a considerably greater amount of sediment, 27,000 tons per sq.mi., which is more than 1000 times greater than yields from non-mined areas. Yields from inadequately reclaimed mine sites continue at a high level of 5,600 ppm (250 tons per sq.mi.) for long periods after mining has ceased (Beaver Creek, pages C-38-41).

103 Sedimentation from coal mining has resulted in shortening the useful life of major public works facilities - flood control reservoirs and navigation channels - as well as clogging streams and increasing flood flows.

103 While the processes of sedimentation in the arid and semi-arid areas of the country are the same as those in humid regions, the potential for large area impacts adjacent to streams is greater in the arid and semi-arid coal areas since the erosional balance of stream valleys is more fragile.

103 Substantial surface mining in the arid and semi-arid areas of the West has not existed long enough to allow full analysis of the hydrologic consequences of such activities. Insight into the potential problem of sedimentation in such areas, however, can be gained through studies of the cumulative effect of past experiences with the destruction of vegetation over large areas (e.g., overgrazing, deforestation and construction). One such case is the experience of sedimentation on the Rio Puerco, a tributary of the Rio Grande River. Briefly stated the pattern presented in that situation entailed

the destruction of vegetation in part of the valley triggered substantial erosion and head cutting and deepening of the stream channel. This lowered the groundwater levels on adjacent alluvial valley floors which resulted in further destruction of vegetation since roots could not reach the lowered water table. Erosion increased and the cycle worsened. Over a period of years, the head cut moved up the valley. Eventually the entire alluvial floor was affected by reducing the amount of and changing the nature of the vegetation which was essential to the local economy as well as to the long-term productivity and stabilization of the land.

103 While the above example is an extreme case in which little was done to manage lands to control erosion, a pattern similar to the history of the Rio Puerco could result from expanded surface coal mining in similar areas of the West without regard for hydrologic consequences (NAS, page 68-69).

103 The purpose of the hydrologic balance provisions of H.R. 25 is to assure the maintenance of that balance on and off the mining site during and after the mining operation. Looking back at the Rio Puerco situation, the amount of disruption during any one year to the surface area of the basin could have been considered minimal. However, taken together and accumulating over a period of time, the disturbances resulted in a major alteration of the tributary valley.

103 Similarly, individual disturbances caused by mining might be considered minimal and of small geographic consequence. On the other hand, there are indications that their cumulative impact could be of long duration and of large geographic extent.

103 Provisions in the Act directed toward maintenance of the hydrologic balance include: (1) certain mining permit application requirements, (2) permit approval or denial criteria check off, (3) specific environmental standards, (4) monitoring requirements, and (5) compensation requirements for decrease in water availability to users.

104 APPLICATION FOR MINING

104 H.R. 25 requires that the operator make a determination of the hydrologic consequences of the proposed mining and reclamation operations. It is intended that the data assembled with this assessment be included in the application so that the regulatory authority, utilizing this and other information available, can assess the probably cumulative impacts of all anticipated mining in the area upon the hydrology and adjust its actions and

recommendations accordingly.

104 Meeting such requirements will necessitate more planning and engineering on the part of the mining operator than is now generally the case. It will also involve the necessity to use trained professional persons in a number of fields: mining and civil engineering; geology; hydrology; and plant and soil sciences. Current experience, however, clearly shows that where operators have carried out adequate planning and engineering, they have been able to identify ways of limiting environmental impacts to the mine site and have been able to conduct operations in such critical water and environmental areas as the Hanaford Creek basin in Washington.

104 PERMIT APPROVAL AND DENIAL

104 One of the written findings the regulatory authority makes in the approval or denial of an application for a mining permit addresses the impacts of mining on the hydrologic balance of the area. This finding also includes the authority's assessment of the probable cumulative impact of existing and anticipated mining on the hydrologic balance of the area affected. These specific standards are emphasized at the permit approval stage due to the critical and long-term impacts mining can have on the water resources of the area affected.

104 ENVIRONMENTAL STANDARDS

104 Principal environmental standards pertaining to the hydrologic balance focus on preventing toxic drainage, prevention of sedimentation and siltation using the best technology available, avoidance of channel-deepening and enlargement, restoration of recharge capabilities of the mine site, and preserving the functions of alluvial valley floors.

104 With respect to acid mine and other toxic drainage, a wide range of alternatives is available to the industry to avoid pollution of ground and surface waters through a number of techniques, including treatment, diversion of water from producing deposits, and isolation of toxic overburden from ground and surface water flow.

104 Similarly, technology exists to prevent increased sediment loads resulting from mining from reaching streams outside the permit area. Sediment or siltation control systems are generally designed on a mine-by-mine basis which could involve several drainage areas or on a small-drainage-area basis which may serve several mines. There are a number of different measures that when applied singly or in combination can remove virtually all sediment or silt resulting from the mining operation. A range of individual siltation control measures includes: erosion and sediment control structures, chemical soil

stabilizers, mulches, mulch blankets, and special control practices such as adjusting the timing and sequencing of earth movement, pumping drainage, and establishing vegetative filter strips.

105 One example of the best available technology for sediment control, which is applicable throughout the U.S. and can be used on a mine-by-mine or a multiple mine basis, is that technology employed at the surface coal mine of the Washington Irrigation and Development Company. This mine is located in the Hanaford Creek drainage, south of Centralia, Washington. The general geographic characteristics of this area are common to other coal areas. Precipitation averages 45-50 inches annually, winter stream flows reach 500 cfs, and summer stream flows can be as low as 2 cfs, background turbidity of natural streamflows during the rainy season is 20-55 Jackson Turbidity Units (JTU's), the terrain is a rolling topography with steep slopes, and the overburden is of a fine-grained and highly erodable material. The mine produces over 3 million tons per year, and over its 35-year life will actually mine 7,000 of the 21,000 acres contained in the permit area.

105 In this instance, in order to meet year-round water quality standards for migrating fish, the company designed a relatively inexpensive method of settling virtually all of the sediment in the surface runoff from the mining operation. Several sets of double siltation entrapment ponds were constructed on the small tributaries leaving the mine property. Elimination of sediment loads is achieved through a twostage process, with the initial gravity settling occurring in the first pond and the introduction of a biologically inert flocculating compound into the flow between ponds. This results in a discharge that contains even less silt than the normal background flow (25-55 JTU's):

	Mg/l	JTU's
105		
Entering silt load, upper pond	10,000 to 15,000	, +100
Entering silt load, lower pond	12 to 130	81-12
Discharge to stream from second pond	Clear water	4-15

105 Source: Mining Congress Journal (June 1973) at 35.

105 This technology sets a standard for the industry and is representative of the innovation the mining industry can achieve when required to meet specific water standards as a precondition to operation.

105 It should be noted that this approach is applicable not only in areatype mining situations but also in the mountain mining operations in the Appalachian coal fields, where such facilities might serve more than one specific mine site in a small drainage area.

105 The bill requires that the standard for siltation control should be the best available technology in recognition that the application of such technology might well increase present siltation control costs of some mine operations. However, the Committee rejected the notion that the standards should be adjusted to what individual mine operators state they can or cannot afford. The Committee's action requires the adjustment of operation to the environmental protection standards rather than the opposite. With this approach, the Committee believes that operators will find the right combination of techniques to meet the siltation standard on the most cost-effective basis.

106 After regrading to approximate original contour and during or immediately after the replacement of topsoil, one of the major problems facing the operator is control of erosion during the reestablishment of vegetation. It should be noted that the regrading standard of approximate original contour allows for the surficial shaping of the regraded area to adequately control drainage and erosion. Appropriate control measures involving the shaping of the surface include, for instance, a series of diversion ditches or ridges across the final grade of the slope, the use of grass-lined waterways, gouging to retard surface runoff and increase infiltration into the spoil, and similar measures which are in common use in areas by the Soil Conservation Service or Environmental Protection Agency.

106 In cases where there will be water discharge from the mine sites, the number of such discharges should be minimized by collectively controlling and channeling the water course into an acceptable receiving stream or areal location. It also should be understood that prior to any discharge off the permit area, the discharge should be treated to remove pollutants that may be present. Such treatment must, at a minimum, meet the requirements of this Act and ensure compliance with applicable local, State, or Federal water quality requirements.

106 Avoidance of channel deepening and enlargement is also specified for those operations requiring discharge of water. This is particularly important in the arid and semi-arid areas where the natural erosional balance of the streams is in accordance with ground water levels. Deepening of the channel often results in lowering the ground water level since in such areas streams maintain the equilibrium of ground water systems. This is in contrast with streams in more humid areas where ground water levels often determine the flow

in streams. The lowering of ground water in the semi-arid and arid areas could result in a reduction in the vegetative cover which in turn would trigger greater erosion from the landscape during rainstorms. Thus the cycle of increased runoff and erosion, channel deepening and additional lowering of the ground water is started and continued. A number of techniques are available to prevent this from occurring, including specifically timing and controlling the amount and rate of release of discharge from mines to stream channels, or the use of other techniques to assure appropriate infiltration downstream from the mine.

106 In order to assure that both the short and long term disruptive impacts of mining and ground water supplies are minimized, it is necessary that reclamation be conducted in such a way so as to maximize the recharge capacity of the minesite upon completion. Recharge capacity refers to the ability of an area to replenish its ground water content from precipitation and infiltration from surrounding lands. Restoring recharge capacity does not mean restoring the aquifer, but rather that the capability of an area to recharge an aquifer be restored. Spoil handling and placement and grading operations should be designed to enhance the recharge potential of the site. It is anticipated that in those mining operations which singularly or in combination would mine or seriously affect large aquifers, mining should be predicated on the ability of the operator to replace to the extent possible the ground water storage and recharge capability of the site by selective spoil material segregation and handling.

107 ALLUVIAL VALLEY FLOORS

107 Of special importance in the arid and semi-arid coal mining areas are alluvial valley floors which are the productive lands that form the backbone of the agricultural and cattle ranching economy in these areas. For instance, in the Powder River Basin of eastern Montana and Wyoming, agricultural and ranching operations which form the basis of the existing economic system of the region, could not survive without hay production from the naturally sub-irrigated meadows located on the alluvial valley floors. In reviewing the reclamation potential of lands in the West and adjusting mining to assure its compatibility with existing and future land uses, the National Academy of Science study stated:

107 In the planning of any proposed mining and rehabilitation it is essential to stipulate that alluvial valley floors and stream channels be

preserved. The unconsolidated alluvial deposits are highly susceptible to erosion as evidenced by the erosional history of many western valleys which record several periods of trenching in the past several thousand years.

Removal

of alluvium from the thalweg of the valley not only lowers the water table but

also destroys the protective vegetation cover by draining soil moisture.

Rehabilitation of trenched valley floors would be a long and expensive process

and in the interim these highly productive grazing areas would be removed from

use.

107 H.R. 25 specifies that the operator is to "preserve throughout the mining and reclamation process the hydrologic integrity of alluvial valley floors in the arid and semi-arid areas of the country." While the Academy study

called for the preservation of alluvial valley floors, such a requirement would

not recognize that under site-specific circumstances it is possible to mine on

valley floors and still be able to assure the maintenance of the hydrologic functions of the area. Where mining is proposed on alluvial valley floors the

methods of ground and surface management would have to be designed for the specific characteristics of the site and could be difficult to achieve.

However, given the potential short and long-term disruption of the lands and economy so affected, this additional effort appears necessary and justifiable.

107 It should be noted that efforts by the Federal government to rehabilitate alluvial valley floors which have been denuded and damaged have been very expensive, of long duration, and only partially successful. The effort to prevent such damage from occurring, however, would have required careful planning, but also would have been much less expensive than later rehabilitation efforts. Indeed, it is the present practice at a number of existing Western coal mines to avoid damaging such valley floors and stream channels.

107 Concern has been expressed as to the definition of alluvial valley floor

- especially with respect to the scale and size of the deposit and drainage area. Alluvial valley floors as used in this report refers to those unconsolidated deposits formed by streams (including their meanders) where the

ground water level is so near the surface that it directly supports extensive vegetation. Alluvial valley floors receive recharge from a large area. In effect, water availability in the valley floor is far in excess of the actual precipitation on the surface of the deposit. If a mining operation encompasses

the upstream end of an alluvial valley floor deposit, the hydrologic consequences of mining would tend to be less complex than an operation which would intercept and cut through a valley floor. Maintenance of the hydrologic

function during the mining process means assuring that the water balance both upstream and downstream of the mine is maintained so that natural vegetative cover is not destroyed and the erosional balance of the area is not seriously

disrupted. In addition, upon the completion of mining, the backfilling, placement of material, and grading, must assure that the hydrologic function of the area prior to mining is continued and that the operation does not become a barrier to water movement and availability in the valley deposit.

108 MONITORING HYDROLOGIC IMPACTS

108 H.R. 25 also specifies special monitoring procedures to be followed in water scarce areas or in those instances where the mining has a potential to substantially disrupt the hydrologic balance or use of water. Particular types of data to be collected and analyzed are specified. It is intended that the data collection and resulting analysis take place before and continue throughout the mining and reclamation process, and be conducted in sufficient detail so that accurate assessments of the impact of mining on the hydrologic setting of the area can be determined. Throughout the mining process such data and analysis should also prove useful to the regulatory authority in assessing the impact of additional applications for mining permits and in determining what types of adjustments should be made.

108 The bill also requires a regulatory authority to establish guidelines covering the design, content, and procedures of data collection and analysis in order to assure that such data is accurate and acceptable to all parties. This is a long-standing provision of other Federal regulatory programs such as the Environmental Protection Agency, the Atomic Energy Commission and the Federal Power Commission which depend in part on data collected and analyzed by firms being regulated. Consideration might well be given to establishing third party operations (nonprofit groups) for the purpose of monitoring, data collection and analysis, in order to assure that all information collected is handled in a neutral way, and available equally to government, industry and the public. Such groups might also be able to make estimates as to prospective impacts of changes in mining and how such impacts might be minimized in order that an orderly development of the resources may take place without significant or long-term damage to the environment or the productivity of the land.

108 STEEP SLOPE MINING

108 Surface coal mining on steep slopes requires special environmental protection provisions since such operations present special environmental hazards. The provisions of H.R. 25 addressing steep slope mining were written in recognition of the natural instability of the geologic structure of many steep slope coal areas, which greatly increases the possibility of land slides

and leads to rapid and massive erosion. The problems of steep slope mining are magnified by the fact that steep slope areas are located in some of the highest zones of annual average precipitation in the country.

109 Based on available landslide and mining operation data, the Committee defined for the permanent program steep slopes as those slopes of 20 degrees or more with the recognition that it might be desirable for regulatory authorities to include lower slopes based on specific geologic conditions, climatic and other factors.

109 Many of the State regulatory programs controlling mining in steep slope areas have some special environmental standards geared to this situation. The effectiveness of these standards for specified practices is problematical. Most Appalachian states do restrict spoil placement on the downslope and prohibit fill benches (the placement of spoil over the slope) on only the steepest slopes. Fill benches are prohibited in slopes over 33 degrees in Maryland and Kentucky and over 30 degrees in West Virginia. The amount of material that can be placed down slope from the mine bench is controlled in relation to the slope. For instance, Kentucky's regulations specify that the width of the first cut (depth of cut into hillside) which can be thrown over the side are: 45 feet for 31-33 degrees slopes; 55 feet for 29-30 degrees slopes; 60 feet for 28 degrees slopes; 80 feet for 27 degrees slopes, and so on. Experience, however, has shown that it is extremely difficult to stabilize such massive amounts of material placed on steep downslopes. Moreover, regulation of operators is frustrated since it is difficult to determine actually how much material has been placed over the side of the hill. Most contour surface mining in the Appalachian states occurs on steep slopes between 14 and 33 degrees; therefore operations governed by existing state regulations prohibiting fill benches are few. An excerpt from a 1973 Senate study, Factors Affecting the Use of Coal in Present and Future Energy Markets, clearly summarize the situation:

109 [Bench] width limits are largely disregarded if the operator finds that the economic limit of mining permits additional cuts. These practices have resulted in continued landslides which occur during mining as well as many years after. A sample study of 190 landslides resulting from strip mines in eastern Kentucky revealed that 86 percent of landslides were on slopes of 20 degrees or

more, with 54 percent of the slides being on slopes of 25 degrees or more.

109 Subsequently, in 1970, Kentucky required some operators, on a demonstration basis, to purposely spread out the overburden pushed downslope in order to prevent landslides. Such methods, however, are subject to massive sheet and gully erosion and slumping, especially in the high rainfall areas such as the Appalachian region, and, in effect reduce neither the amount of environmental damage nor the number of operator violations. Substantial insight into the effectiveness of regulating Appalachian mountain strip mining under present laws is given by a study which assessed the enforcement activities of the Kentucky Division of Reclamation. In spite of the fact that the present Kentucky statute and regulations are considered to be model state surface mining legislation, preliminary data reveal the occurrence of significant violations to the State law and regulations by strip mining operators (Table 7). For all types of mountain strip mining, more than one-third of the inspections (the State inspects each mine every two weeks) revealed major violations including, for instance: exceeding bench width, operating off permit area, dumping excessive material over the outslope, and lack of drainage controls.

*2*TABLE 7. - Percentage of Official State Inspections in Which One or More Violations Found and Recorded in Eastern Kentucky Strip Mine Operations, 1971

	Percentage of inspections having one or more violations
Mining method:	
Conventional contour	43
Slope reduction	50
Parallel slope fill	34
Head of hollow fill	49
Pit storage of spoil	41
Mountaintop removal	47
Mountain auger	42

110 The significance of this is further emphasized when it is recognized that most damages from such violations cannot be remedied; the operator usually agrees to stop activities which are in violation and to avoid such practices in the future. The evidence reinforces the concept that certain surface mining practices cannot be regulated satisfactorily, and in these instances, the best answer is to prohibit those specific activities.

110 The general standard for steep-slope mining is a prohibition on placing overburden or other materials downslope from the mining bench. The Committee recognized that some temporary placement may be necessary in new operations only

in order to provide a site in close proximity for spoil from the first "initial block or short linear cut necessary to obtain access to the coal seam." It is expected that the initial block or short linear cut will only be sufficient to gain access to the coal seam for the initial lift of coal after gaining equipment maneuvering room. The principal factors governing the size of this cut include the type or design of mining technique employed, the scale or size of equipment, and the angle of slope. Thus, such a cut would only be several hundred feet at the most along the outcrop.

110 This temporarily placed material, however, must be removed in order to satisfy the regrading standards of the Act. It should be noted that other options are available to the operator for the disposal of spoil from the first cut in mountain areas. Spoil can be used in the construction of access or coal haul roads, placed on less steep slopes provided they are designated disposal areas identified in the approved mining plan, and spoil can also be placed on abandoned mine sites which have not been regraded to approximate original contour and which are prevalent in the mountain areas. The use of such sites or designated disposal areas on less steep slopes, is practiced now in West Virginia.

110 The Committee expects that under most circumstances, only one initial cut will be needed on any coal seam beneath the common high-point of elevation. There may be instances in which an operator may want to make additional cuts into a coal seam at various intervals around the seam outcrop. Spoil from these additional cuts should not be placed on the downslope. In other words, the Committee does not contemplate that the regulatory authority will allow a series of "initial" cuts to be made such that the general prohibition relating to downslope spoil would be frustrated. Present practices in some of the Appalachian States indicate that this is entirely feasible as well as practical since there are alternative places for the placement of spoil from such operations if it is not possible to keep it entirely on the bench.

111 Similarly, with respect to the placement of the spoil from the first initial cut the mine operator need not necessarily use the downslope if, for example, the permit area includes flat land which may be used (if approved by the regulatory authority) as an appropriate area.

111 ECONOMICS AND PRACTICALITY

111 The assertion has been made that meeting the requirements of "approximate original contour" in mountain mining situations is not practical, and is technically or economically impossible. These and related arguments were fully answered by a study published last January, "The Design of Surface Mining Systems in Eastern Kentucky Coal Fields" a study funded by the Appalachian

Regional Commission, directed by the Kentucky Department of Natural Resources and Environmental Protection and conducted jointly by two consulting firms: Mathematica (Princeton, New Jersey) and Ford, Bacon & Davis (New York, New York). The objectives of the study were to identify modified surface mining technologies and regulatory policies and procedures at the State level which would result directly and indirectly in reducing and preventing environmental impacts of surface mining. The findings of this study are generally applicable to mountain mining in the entire Appalachian coal fields since regional applicability was one of the purposes of the study.

111 The study and recommendations fully support the position that the requirement of regrading of mountain mining sites to approximate original contour and limitations on dumping spoil downslope are necessary, workable, and should not result in any significant reduction of coal supply. With respect to environmental impacts of conventional contour mining methods, the study states that:

111 [the] conventional methods employed always result in permanent fill bench - the result of disposal of overburden on slopes below the coal seam. And, except where entire mountain tops are removed, the conventional methods leave an exposed highwall after mining. These two characteristics of conventional mining - the permanent fill bench and exposed highwall - are the direct cause of many of the undesirable environmental effects of mining. Landslides occur when the fill benches become unstable, erosion results from unvegetated outcrops, and exposed highwall degrade aesthetic values immediately following mining, at least.

112

112 The study concludes that:

112 Elimination of the highwall and permanent fill bench would, in our opinion, significantly reduce the major remaining environmental impact of surface mining.

112 This conclusion is expanded in the text:

112 The primary finding is the [mining] methods areas is that complete contour restoration methods are generally desirable and feasible using existing equipment. Those methods involve a change in operating procedures, such that overburden materials are not placed, even temporarily, on natural slopes below the coal seam being mined. While this study was in progress, the practicability of complete contour restoration methods was demonstrated - without government funding of any kind - at mines in West Virginia and Pennsylvania. . . . Planning and operating procedures for two contour-restoration methods - the buried highwall and spoil above highwall methods - are described in detail in Chapter V of this report. Employment of either of these methods is feasible at the present time in Eastern Kentucky, and would result in an improved

appearance, fewer landslides, and better materials classification (thus reduced water pollution).

112 In another section of the report, the authors comment on the economic and practical aspects of meeting these requirements.

112 The surest way to prevent landslides is probably . . . the use of 'no fill bench' mining methods. Such methods - known by various names; including pit storage of spoil and block cutting - have been widely publicized of late but are not practiced in Eastern Kentucky. However, as discussed later in this chapter, such methods are roughly comparable in profitability to existing conventional contour methods and can be practiced using existing equipment.

112 It should be noted that the coal price levels and operating costs used for analysis were for the years 1971-72. Since then, as discussed earlier in this report, coal prices have risen substantially faster in the years 1973-74 than the costs of the various factors of production, thus removing any doubt about the levels of profitability utilizing such techniques.

112 These conclusions are further substantiated by recently completed work in Campbell County, Tennessee, sponsored by TVA. In December, 1974, TVA released an analysis of a mining operation using a "block-cut" approach on steep slopes (over 26 degrees) including reclamation to approximate original contour. The experience gained on this single-seam mining operation in which the operator used bulldozers and front-end loaders for overburden removal and coal loading, shows that the entire on-site mining and reclamation costs come to \$8.65 per ton of coal for a 36-inch seam. Costs decrease as seam thickness increases. While these costs do not include haulage to the user, it is clear that such an operation is economically competitive within present market prices and should not exert an upward influence on coal prices which average about twice the amount of the costs shown here. (Congressional Record, December 18, 1974, S22069.)

113 EXCEPTIONS-VARIANCES

113 Although usually preferable, it may not always be best to return mountain lands to their approximate original contour. In various areas such as the mountainous Appalachian coal fields, there is a paucity of flood free, relatively flat developable land. Thus some surface mining operations offer the opportunity for creating a resource which otherwise might not be available or might be prohibitively expensive.

113 The mining application process and environmental standards allow for

variances from the regrading and spoil placement requirements for mountain-top mining in order to achieve qualifying post-mining land uses including industrial, commercial (including commercial agricultural), residential, or public facility (including recreational facilities) development. The bill stipulates that such proposed uses of land must be reasonable and capable of being met with respect to public and private investments. It is expected that fill areas created for such development are to be designed and constructed in lifts so that the land is capable of development upon completion of mining. It is intended that the Secretary of Interior will include in regulations to be issued under the Act such fill placement standards as are necessary to assure suitable site development for its intended use upon completion of mining. Standards should parallel those used by the Department of Housing and Urban Development or the Federal Highway Administration for developing fill areas for construction purposes.

113 The Committee felt that these planning and fill placement requirements were reasonable since:

113 (1) The utility of a flat land site on a mountain top is dependent upon suitable access, adequate utilities, such as water, storm water and sewage control. Without indication that public jurisdictions involved will assume responsibility for maintaining the necessary public facilities, the development of flat areas should not be encouraged.

113 (2) Controlled placement and compaction of spoil is desirable so that surface created is suitable for use without waiting for settling prior to development.

113 (3) As the requirement of return to approximate original contour and the limitation of dumping spoil downslope are environmentally preferable, exceptions to the standards should only be granted where it is demonstrated that such exceptions are necessary to allow the desirable and achievable post mining land use. As agricultural and recreational uses can be accomplished by following the general requirements of the Act, it is not contemplated that numerous exceptions will be granted for such uses. Thus most recreational and extensive agricultural uses can be conducted on the mountain slopes which have been regraded to their approximate original contour.

113 SURFACE DISPOSAL OF MINE WASTES FROM PROCESSING PLANTS

113 With respect to surface disposal of mine wastes in dry wastebanks (not in embankments or impoundments), H.R. 25 requires operators to lay down and compact wastes in layers or lifts in order to prevent combustion, water pollution through leaching, and assure stability of the waste bank. The final

outslope grade of such piles and their configurations are to be such that they are compatible with the surroundings. (Presumably such grade would be less than the steep-slope definition in the Act since this would help assure stability and prevent massive sheet erosion on such outslopes.) Waste banks are to be revegetated with a diverse and permanent vegetative cover capable of self-regeneration and plant succession and at least equal in extent to the cover of the natural vegetation of the area. Such revegetation should also assure appropriate surface stabilization of the soil in order to meet the hydrology standards of the Act.

114 The Committee also recognized the need to establish standards controlling the construction, use and abandonment of impoundments used for the disposal of liquid mine wastes and coal processing wastes.

114 Consideration of this aspect of the legislation in the 93rd Congress started in March, 1973 - approximately 1 year after the Buffalo Creek disaster on February 26, 1972. At that time, the Department of Interior had still not issued regulations covering the construction of such impoundments. During the consideration of this legislation in Subcommittee, the engineering and construction standards of the small watershed program (P.L. 83-566) were incorporated as a minimum basic yardstick for impoundment construction. This was adopted for several reasons. First, these standards for dams are sufficiently flexible to allow for the wide range of physical and land use conditions in coal fields throughout the U.S. and yet adequately provide for the protection of health or safety of citizens, downstream land uses, and the environment of each area. Secondly, these standards are appropriately applied to the regulation of waste impoundments since they cover structures of small to moderate size, provide variable standards appropriate to different downstream conditions or uses (remote forests or rangelands to densely populated and urbanized areas) and assure that the structural embankment is built to be impervious and not used purposefully or incidentally as a filter for clarifying or treating mine wastes.

114 However, throughout the last session of Congress and until the final decision on the provisions of the Conference Report, representatives of the Department of Interior recommended that these engineering standards be deleted as inappropriate while stating that "in a few weeks" the Department would issue strong new regulations governing the design, engineering, construction, operation and abandonment of mined waste impoundments pursuant to its authority under the Coal Mine Health and Safety Act.

114 It is now more than three years after Buffalo Creek and the Department

has yet to issue these new regulations in final form governing such structures.

114 The draft regulations governing mine waste impoundments issued by MESA in January, 1974, are inadequate with respect to stipulating the engineering and design parameters in sufficient detail so that multiple interpretation is not possible.

114 Draft regulations developed by the Department, contemplated for use in conjunctions with Federal Surface Mining Control Legislation, as of November 1, 1974, still had not provided the engineering detail necessary to carry out the intent of Congress as expressed in S. 425 and its legislative history.

115 Draft regulations issued in January, 1975, "requiring operators on Federal lands to reclaim the mined land in substantially the same manner as would the standards which the President supported in the 93rd Congress" and which were substantially drawn from S. 425, did not more than restate the legislative language of the Act with respect to mine waste impoundments. This, too, is patently deficient.

115 Since one of the President's recommendations was to further generalize the standard with respect to mine impoundments, the Committee moved to resolve the conflicts by assigning responsibility for such impoundments to the Corps of Engineers. Under provisions adopted in Committee, and with respect to the surface disposal of mine wastes, tailings, coal processing wastes, or other liquid and solid wastes in impoundments, the U.S. Army Corps of Engineers is to supervise the design, location, construction, operation, maintenance and abandonment of all existing and new coal mine wastes embankments, and refuse piles used for the disposal of such mine wastes. In doing this, the Corps is to use the same standards and practices as used in the Public Works Flood Control Program.

115 Over the past three years, the Corps of Engineers has headed an interagency task force which has inventoried all mine waste embankments in the Appalachian Region and has thus developed adequate experience and familiarity to assume this responsibility. By being the principal author of the inventory and analysis of the safety of existing impoundments and waste banks, the Corps is in a unique position to supervise the initiation of those corrective measures needed during the interim program of the Act, starting 130 days after enactment.

115 SURFACE IMPACTS OF UNDERGROUND MINES

115 The environmental problems associated with underground mining for coal which are directly manifested on the land surface are addressed in Section 212 and such other sections which may have application. These problems include surface subsidence, surface disposal of mine wastes, disposal of coal processing wastes, sealing of portals, entry ways or other mine openings, and the control of acid and other toxic mine drainage. Wastes resulting from underground operations are governed by the same standards which apply to wastes from surface mined coal. Mine waste is mine waste regardless of its origin and it is entirely appropriate to deal with the problem in one bill. Moreover, both types of mines are often in close proximity and frequently wastes are disposed of jointly and operations are intermingled. These provisions are discussed in a separate portion of the report.

115 Subsidence control. Underground coal mining across the country has resulted in creating large areas of land which are subject to surface subsidence. These areas range from intensively developed cities such as Wilkes-Barre and Scranton, Pennsylvania, and Rock Springs, Wyoming, to rural lands being used for agricultural or timber-growing. Surface subsidence has a different effect on different land uses. Generally, no appreciable impact is realized on agricultural and similar types of land and productivity is not affected. On the other hand, when subsidence occurs under developed land such as that in urbanized areas, substantial damage results to surface improvements be they private homes, commercial buildings or public roads and schools. One characteristic of subsidence which disrupts surface land uses is its unpredictable occurrence in terms of both time and location. Subsidence occurs, seemingly on a random basis, at least up to 60 years after mining and even in those areas it is still occurring. The estimated cost for controlling subsidence under the 200 urbanized areas now affected is approximately \$1 billion. It is the intent of this section to provide the Secretary with the authority to require the design and conduct of underground mining methods to control subsidence to the extent technologically and economically feasible in order to protect the value and use of surface lands. Some of the measures available for subsidence control include:

116 (1) leaving sufficient original mineral for support;

116 (2) refraining from mining under certain areas except allowing headings to be driven for access to adjacent mining areas, or

116 (3) causing subsidence to occur at a predictable time and in a relatively uniform and predictable manner. This specifically allows for the uses of longwall and other mining techniques which completely remove the coal.

116 (4) Backstowing or returning mine wastes underground to provide some

measure of direct roof support and shoring up pillars left for support.

116 Sealing of underground mine openings. Underground mine openings should be sealed for both health and safety reasons as well as environmental protection purposes when mines are worked out or the openings are otherwise no longer needed. Protection of public health and safety is clearly apparent and is not disputed. The environmental effects of abandoned underground mine openings can be quite severe in those instances where such mines are a source of acid or toxic water pollution.

116 Acid and toxic water pollution. Underground mining is the principal source of existing acid and mineral pollution from coal mining. Such acid and mineral pollution have already affected more than 10,500 miles of streams in the 8 Appalachian coal states and nearly 6,000 miles of these streams are continuously polluted by acid mine drainage. In terms of the number of sources of acid mine drainage, underground mines account for 67% of the sources, yet produce 88% of acid drainage. Surface mines produce the rest. However, active underground mines are proportionately the greatest pollution source since they represent only 5% of all mines, yet produce 19% overall acid drainage.

116 Contrary to the situation in most industries, the discharge of water from many underground coal mines does not cease when the operation shuts down or is abandoned. Usually mine operators are not required to develop a mining operation in a manner designed to eliminate or minimize polluting discharges after mining. The standards included in the bill pertaining to minimizing the disturbances to the prevailing hydrologic balance both during and after coal mining operations, Sec. 516(b)(9), are intended to meet the problem of continuing pollutional discharges after mining has ceased.

117 SPECIAL BITUMINOUS COAL MINES

117 For some special and very narrowly defined mining situations occurring West of the 100th meridian West longitude, the Committee provided for the adjustment of several environmental standards. This action is predicated on the assumption that there are probably a few "open-pit" type coal mines in the Western States which would be unduly burdened by meeting all of the environmental standards as proposed in the bill. The only example of a mining operation which would be so burdened by being forced to comply with the standards of section 515 brought to the Committee's attention is the "big pit" at the Kemmerer Mine in Wyoming. This section is generalized, however, so that it would be applicable to other mines which have the same unusual characteristics of the "big pit" at Kemmerer.

117 The specific environmental standards which are adjusted are related to: spoil handling, regarding to approximate original contour, the elimination of depressions capable of collecting water, and creation of impoundments. It is thought that some mine pits, because of their setting, design, and duration of existing operation, are sufficiently committed to a mode of operation which makes very difficult the adjustment to the basic standards in the Act. A judgment was made that in these limited cases, such pits could continue with their basic mode of operation, meeting the special requirements of this section and all other requirements in the Act.

117 This section was carefully drawn to apply to pits which were operational prior to January 1, 1972. New mine pits, those open or restarted after January 1, 1972, must be designed to meet the basic environmental standards of the Act. This applies even in those same settings where existing pits may be determined eligible for the adjustments addressed here in Sec. 527. In other words, specific pits, not entire operations which may cover thousands of acres, are eligible under section 527.

117 COAL ACCESS AND HAUL ROADS

117 The access and haul roads constructed for the purpose of the mining operation are a major source of siltation on a continuing basis both during and after mining. Present practice, especially in mountain mining areas, is simply to abandon such roads upon completion of mining on the premise that permanent access is provided to the previously "remote or inaccessible" areas. In fact, however, there has been little continuing social or economic value for such access to remain. Moreover, in many instances these roads have been used for nothing more than dumping areas for solid wastes and other debris. On the other hand, the Committee recognizes that such roads, under limited and prescribed conditions, might well continue to serve a useful purpose to landowners. It is expected that such instances will be identified before hand in the approved mining and reclamation plan under which the mining operation is being conducted.

117 In order to overcome the continuing and long-standing environmental problems these roads present, the Committee specifies in the bill that roads are to be designed and constructed with appropriate limits to grade, width, surface materials and culvert placement and size in order to control drainage and prevent erosion outside the permit area. Such design and construction features are especially critical if roads are part of long-term post-mining intensive land use development since they provide a reasonable basis for the post-mining maintenance and use. In such instances, a measure of assurance as to their

continuing maintenance is required as part of the mining application.

118 Access roads if appropriately constructed can perform environmental protection functions by breaking up drainage down long slopes or perhaps serving as a barrier to keep spoil off the outslope. The design and construction of such roads under appropriate engineering standards assuring that the environmental and maintenance objectives are met implies that in some instances there well might be some narrow and shallow fill areas on natural slopes for the construction of such roads as an initial activity preceding the actual mining process.

ELEMENTS OF MINE REGULATION PROGRAM

118 ENFORCEMENT

118 H.R. 25 contains comprehensive provisions for inspections, enforcement notices and orders, administrative and judicial review, and penalties. These requirements are of equal importance to the provisions of the bill regarding mining and reclamation performance standards since experience with State surface mining reclamation laws has amply demonstrated that the most effective reclamation occurs when sound performance standards go hand in hand with strong, equitable enforcement mechanisms.

118 INSPECTIONS AND ENFORCEMENT: FEDERAL-STATE RELATIONSHIP

118 Efficient enforcement is central to the success for the surface mining control program contemplated by H.R. 25. For a number of predictable reasons - including insufficient funding and the tendency for State agencies to be protective of local industry - State enforcement has in the past, often fallen short of the vigor necessary to assure adequate protection of the environment. The Committee believes, however, that the implementation of minimal Federal standards, the availability of Federal funds, and the assistance of the expertise of the Office of Surface Mining Reclamation and Enforcement in the Department of Interior, will combine to greatly increase the effectiveness of State enforcement programs operating under the Act. While it is confident that the delegation of primary regulatory authority to the States will result in adequate State enforcement, the Committee is also of the belief that a limited Federal oversight role as well as increased opportunity for citizens to participate in the enforcement program are necessary to assure that the old patterns of minimal enforcement are not repeated.

118 The role of the Federal Government has been carefully delineated in this bill, particularly in regard to its activities in those situations where the State is the prime regulatory authority. For the "interim" period discussed

above, section 502(f) provides that beginning no later than one hundred and thirty-five days after enactment and continuing until a State program has been approved or a "full-Act" Federal program has been implemented, the Secretary is required to carry out a Federal enforcement program which includes inspections, and enforcement actions in accordance with the provisions of section 521. The intent of this provision is to place the Secretary in the role of monitoring State activity in the interim period and providing back-up enforcement where appropriate.

119 Once State programs or Federal programs replace the interim regulatory procedure, section 517 requires that Federal inspections must be made for purposes of developing, administering, or enforcing any Federal program, and assisting or evaluating the development, administration, or enforcement of any State program.

119 In those situations in which the Secretary is the regulatory authority, Federal inspections must occur on an irregular basis averaging not less than one inspection per month for the operations covered by each permit, as is the case when the State is the regulatory authority. In those situations where the State is the regulatory authority and the Secretary carries out inspections for assistance and evaluation purposes, Federal inspections should take place in sufficient number to carry out properly these back-up and monitoring functions. In addition to normally programmed inspections, section 521(a)(1) of the bill also provides for special inspections when the Secretary receives information giving him reason to believe that violations of the Act or permit have occurred. It is anticipated that "reasonable belief" could be established by a snapshot of an operation in violation or other simple and effective documentation of a violation. Of course any inspection, Federal or State, must occur without prior notice to the permittee or his agents or employees.

119 By mandating primary enforcement authority to field inspectors, this bill recognizes that inspectors are in the best position to recognize and control compliance problems. The bill establishes three strong but flexible enforcement mechanisms which provide inspectors with the tools necessary to respond to the most minor and the most serious violations.

119 I. Cessation order (section 521(a)(2)). - During any Federal inspection, if the inspector determines that any violation of the Act or permit condition or any other condition or practice exists which creates an imminent danger to the health or safety of the public, or is causing or can reasonably be expected to cause significant, imminent irreparable environmental harm to land,

air, or water resources, the inspector must order a cessation of the mining operation causing or contributing to the danger or harm. The cessation order may apply to all or a portion of the surface coal mining and reclamation operation in question. The imminent danger or environmental harm closure provision is so critical that the Federal inspector is required to act even if the inspection is being made for purposes of monitoring a State regulatory authority's performance. To provide otherwise would be to perpetuate the possibility of tragedies such as the Buffalo Creek Flood, which can be at least partially attributed to the sad fact that government regulation of the collapsed mine waste banks fell between the cracks of the not quite meshed functions of various State and Federal agencies.

119 When determining "significant, imminent, irreparable environmental harm," the Committee intends that the fact that the hazard to the environment is physically capable of being repaired should not preclude a cessation order. Rather, the degree of difficulty with which the damage may be undone should be considered along with the significance of the damage. In general, it is the Committee's intention that where there is a risk of significant imminent environmental harm to land, air or water resources, cessation should not be ordered only where the damage can be easily repaired. Moreover, the term "significant" should be construed to include factors other than whether environmental damage to land, air or water resources can be repaired. The test is whether the harm is significant and irreparable.

120 Since neither the Congress nor any regulatory authority can totally predict the public and environmental hazards arising from such a complex endeavor as surface coal mining, the bill does not restrict the closure authority of section 220(a)(2) to violations of the Act or permit. Instead any condition or practice giving rise to imminent danger or environmental harm is sufficient to invoke the authority.

120 II. Notice of violation (section 220(a)(3)). - Where the Secretary is the regulatory authority or Federal inspection is being conducted pursuant to sections 502, 504(b) or subsection (b) of section 521, and a Federal inspector determines that a permittee is violating the Act or his permit but that the violation is not causing imminent danger to the health or safety of the public or significant, imminent environmental harm, then the inspector must issue a notice to the permittee setting a time within which to correct the violation. The inspector can extend this initial period for up to ninety days. If the violation has not been corrected within the established time, the inspector must immediately order a cessation of the mining operation relevant to the violation.

120 The enforcement mechanism of section 521(a)(3) will be utilized by the inspector in the great majority of compliance problems. It not only enables the

inspector to gain immediate control of the problem, but also provides him with essential flexibility to appropriately deal with minor as well as major violations.

120 III. Show cause order (section 521(a)(4)). - Where the Secretary is the regulatory authority or Federal inspection is being conducted pursuant to section 502, 504(b) or subsection (b) of section 521, and a Federal inspector determines that a pattern of violations of the Act of permit exists or has existed and that such violations are caused by unwarranted failure of the permittee to comply or are willfully caused by the permittee, the inspector must issue an order to the permittee to show cause as to why his permit should not be suspended or revoked. Further action on the show cause order is subject to the provisions of section 525(d).

120 While the bill grants a great deal of authority to Federal inspectors, it is important to remember that adequate protection must be afforded the regulated parties against the possibility of abuse of this authority. To this end formal internal administrative review and judicial review of inspectors' decisions are permitted by sections 525 and 526 respectively. Furthermore, section 521(a)(5) insures that due process will begin at the inspectorate level and provides the opportunity to modify, vacate, or terminate a clearly erroneous notice or order without the burden of more formal administrative review.

120 Section 521(d) provides that as a condition of approval of any State program, the enforcement provisions thereof shall, at a minimum, incorporate sanctions no less stringent and identical or similar enforcement procedures to those provided in the Act.

121 ADMINISTRATIVE REVIEW

121 In order to assure expeditious review and due process for persons seeking administrative relief of enforcement decisions of Federal inspectors under the provisions of section 521, section 525 of the bill establishes, clear, definitive administrative review procedures. Those persons having standing to request such administrative review include permittees against whom section 521 notices and orders have been issued and persons having an interest which is or may be adversely affected by such notice or order. Any person with standing may request a public hearing which must be of record and subject to the Administrative Procedure Act. Pending review the order or notice complained of will remain in effect, except that in narrowly prescribed circumstances temporary relief may be granted to a notice or order issued under section

521(a)(3). In no case, however, will temporary relief be granted if the health or safety of the public will be adversely affected or if significant, imminent environmental harm will be caused. This provision will insure that the mining and reclamation performance standards will continue to protect the public health and safety or the environment during any administrative proceeding in which their validity is challenged, until the issue is determined on the merits.

121 In all cases where a section 521(a)(4) show cause order has been issued a public hearing must be held. The Secretary must issue a decision within sixty days following the completion of the hearing as to whether or not to suspend or revoke the permit.

121 JUDICIAL REVIEW

121 Section 526 of the bill establishes specific provisions for judicial review of Secretarial actions. Because of the thoroughness and degree of due process afforded judicially reviewable actions by the Secretary, judicial review is to be based on the record made before the Secretary. The findings of the Secretary, if supported by substantive evidence on the record considered as a whole, shall be conclusive. Temporary relief from Secretarial decisions may be granted only under the same kind of narrowly prescribed circumstances as discussed above in the context of administrative review.

121 PENALTIES

121 Where the Secretary is regulatory authority or Federal inspection is being conducted pursuant to section 502, 504(b) or subsection (b) of section 521, section 518 of the bill provides that civil penalties will be mandatory for violations leading to a cessation order under section 521 or a cessation order entered by a court pursuant to section 518. The Secretary has discretionary authority to assess civil penalties for other violations. The Secretary is required to make findings of fact and issue a written decision as to the occurrence of a violation and the amount of the penalty which is warranted only where the person charged has availed himself of the opportunity for a public hearing and the hearing has, in fact, been held. The bill also provides that approved State programs must contain criminal and civil penalties no less stringent than the Federal provisions with the same or similar procedural requirements relating thereto.

122 SURFACE OWNER PROTECTION

122 Protecting the interests of the private individual who owns surface lands over coal reserved to the United States was one of the most controversial subjects addressed by this legislation throughout its development in the 93rd

Congress. Although H.R. 25 contemplates the full reclamation of strip mined lands following the destruction of the surface during the mining process, the interruption of the use of the surface during the mining period and the delay in the restoration of the surface to full productivity or value requires that the interests of the surface owner be recognized.

122 The Senate bill of the last Congress, S. 425, dealt with this problem by prohibiting leasing of Federal coal lying under land not owned by the United States. The House amendment to S. 425 (the text of H.R. 11500) provided that where coal belonging to the United States is to be surface mined, the consent of the surface owner would be required. According to the Conference Report:

122 The Conferees agreed that neither approach was wholly right. Just as there should not be an absolute prohibition to development of a natural resource belonging to all citizens of the nation, particularly when there is an energy crisis, so there ought not to be an opportunity for an individual owning land to reap a windfall in order to obtain his consent.

122 Section 716 of the Conference Report includes a moratorium, but for a short period only from the date of enactment of the bill until February 1976. And it embodies the House concept of surface owner consent, but with a carefully drafted definition of what a "surface owner" is. He must not only hold title to the land, but also, for at least three years before granting consent to a surface mining operation, must have his principal place of residence on the land, or personally farm or ranch the land affected by the mining operation, or receive directly a "significant portion" of his income from such farming. . . . By so defining "surface owner," the Conferees seek to prevent speculators purchasing land only in the hope of reaping a windfall profit simply because Federal coal deposits lie underneath that land." (Statement of Managers accompanying Conference Report to S. 425, Report 93-1522, 93rd Congress, Second Session, December 5, 1974 at 81-82.)

122 The Conference Report emphasized that in the determining what is a "significant portion" of the holder of title to the surface land's income from farming or ranching they did not intend to impose an arbitrary or mechanical formula. "Significance" is to be construed in terms of the importance of the amount to the surface owner's income and is not intended to be measured by a fixed percentage of income.

123 Where a person's gross income is relatively small, the loss of but a fraction thereof may be significant. In adopting this surface owner protection provision without amendment, the Committee agrees with the Conferees that by

limiting the definition of "surface owner", speculators will be prevented from purchasing land in the hope of reaping a windfall profit simply because Federal coal deposits lie underneath the land. At the same time, so that there will not be any undue locking up of Federal coal, generous compensation is guaranteed to the surface owner, based not only upon the market value of the property but also the costs of dislocation and relocation, loss of income, and other values and damages.

123 By requiring that coal subject to section 715 be leased only by competitive bidding after the Secretary has negotiated with the surface owner, "side deals" between the surface owner and a speculator should be precluded. In any event, such side deals are prohibited by section 715 and will result in the assessment of a penalty and termination of the lease.

123 Concern has been expressed that this provision might be interpreted to apply retroactively to require new consents and payments to the surface owner where written consents have already been obtained. It is not the intention of the Committee that the operation of section 716 should nullify valid consent obtained prior to December, 1974.

123 In addition, concern has also been expressed about how the requirement that coal deposits subject to section 716 be offered for lease by competitive bidding after the surface owner gives his consent will affect the existing Federal prospecting permits on such coal deposits. The Committee is of the opinion that whether the holder of a Federal coal prospecting permit has an interest which vests him with the right to a coal lease is a matter of interpretation of the Mineral Leasing Act of 1920 and other applicable laws. However, if the permittee does have a property right, it is not the intention of the Committee to deprive him of it. Section 716(i) specifically states that nothing in section 716 is to be construed as increasing or diminishing any property rights held by the United States or by any other landowner.

123 A related issue, which is addressed in section 717 is the protection of the lessee or permittee of surface lands over Federally owned coal. In this case, a strict written consent requirement is not imposed. Section 717 provides for either written consent or, in the alternative, posting of a bond to secure payment to the lessee or permittee for such damages as may be caused to his surface rights and the use and enjoyment thereof. It is the intention of the Committee that any such damages should be calculated on the basis of the benefits recognized in section 717, which would have been enjoyed by the permittee or lessee during the time remaining under the lease or permit which exists at the time surface use is interrupted by surface mining operations.

123 ROLE OF THE SECRETARY OF THE INTERIOR

123 The administration and enforcement of all Federal provisions contained in the Act is the responsibility of the Secretary of Interior. More specifically, in Title II an Office of Surface Mining Reclamation and Enforcement is created within the Department of Interior, headed by a Director who is to be appointed by the President with the advice and consent of the Senate. The Director is responsible to the Secretary who will assign him duties, consistent with the Act.

124 Initially, the Secretary's responsibility relates to the enforcement of Federal interim performance standards which are implemented during the interim period. It is the Secretary's duty to respond to any reasonable evidence of violations of these Federal standards by using the authority vested in him to bring about compliance.

124 During the interim period, the Secretary also must review the proposed State enforcement programs to determine whether or not the requirements set forth in the Act are being met, particularly with reference to a State's ability to enforce the full range of Federal performance standards. Once a State program is approved, the Secretary is still obliged to monitor the State's performance and where there is a breakdown in the State enforcement, he may take over the State program in whole or in part. The system of Federal inspection is designed to provide random but regular on-site review of operations during the interim period (triggered where appropriate by information provided to the Secretary by any individual) and to ensure that inspection reports are readily available for review by citizens who desire to monitor the operation. The Secretary must accord any person who reported a violation which brought about an inspection the right to accompany the inspector onto the surface mining site.

124 The establishment of permanent Federal regulatory programs on Federal lands and in States that are without approved State programs, and the promulgation of rules and regulations governing these programs, constitutes another significant aspect of the Secretary's responsibility.

124 The Secretary shares with the Secretary of Agriculture the responsibility for administering the Abandoned Coal Mine Reclamation Fund. Under the provisions of Title IV, certain types of land which have been mined or affected by mining for coal may be acquired by the Secretary, reclaimed and deposited of. In addition, other lands may be acquired by the Secretary for use in developing housing for persons affected by coal mining dislocations or by natural disasters. Matching grants to the States may be made by the Secretary

to assist in acquiring lands for rehabilitation, and any State's governor may request the filling of voids, sealing of tunnels and disposing of other mine-related public hazards by the Secretary.

124 The Secretary's role is not limited to the environmental protection provisions of the Act. In addition he is given charge of employee protection.

Any employee who believes he has been fired or discriminated against in his employment because of actions taken to testify or file proceedings under the Act may appeal to the Secretary. Moreover, a continuing study of shifts of employment resulting from enforcement of the Act is to be conducted by the Secretary.

124 The Secretary's performance in carrying out these provisions will rectify the inadequacies of past reclamation. However, the advice and counsel of the other Federal agencies, notably the Environmental Protection Agency, is required prior to making key decisions enumerated in the bill.

125 DESIGNATION OF NONCOAL MINE LANDS

125 Under the Mining Law of 1872 anyone is free to explore for hard rock minerals in the public domain, including minerals reserved to the United States located under surface held in private ownership. Upon the discovery of a valuable deposit, the mining laws convey the right to mine without regard to the environmental consequences and with severely limited protection for the surface owner or property owners within the vicinity of the mining operation. Quite literally, this allows a mining company to prospect and mine in people's back yards and other developed areas where mining is totally inconsistent with established land uses or areas of extremely important environmental value. While the Committee chose not to address the surface effects of mining of minerals other than coal in H.R. 25, it did include a mechanism in title VI which would allow the elimination of the worst abuses under the mining law on a case by case basis but would not unduly interfere with the operation of the mining law pending its complete review and revision.

125 Section 601 establishes a program for designating areas unsuitable for mining of minerals other than coal. The process contemplated by Section 601 gives citizens the right to petition for review by the Secretary for a designation of unsuitability on the basis of criteria spelled out in the section. Under these criteria designation could be made in areas of predominantly urban or suburban character or such areas where mineral entry would result in significant damage to areas of historic, cultural, scientific, aesthetic, or natural values of more than local significance or where mining would unreasonably endanger human life and property. Pursuant to the definition of the term "Federal lands" in section 701(8), title VI authorizes the designation of areas where both the surface and subsurface rights are owned by

the United States, as well as where the United States owns the minerals beneath privately owned surface.

125 Lands upon which there is an actual ongoing mining operation being conducted prior to the hearing on a proposed designation are not eligible for designation and section 601(d) provides that valid existing rights shall be preserved and not affected by a designation.

125 It should be emphasized that the section does not withdraw any area from the operation of mining laws, nor does it ignore the interests of mineral development. Indeed, before any designation could be made, the Secretary would be required to make a determination of the impact of such a designation upon the availability of necessary minerals. The section simply says that where mineral entry is obviously inappropriate from an environmental and planning viewpoint - on the basis of rather narrow criteria - mineral entry may be prohibited.

125 INDIAN LANDS PROGRAM

125 The committee approved, without amendment, the Indian Lands Section of H.R. 25 that was the product of the conference on S. 425 during the 93rd Congress. This section provides for a study of the issues involved in implementing a full regulatory program on Indian lands rather than adopting a regulatory scheme which could be implemented by the tribe under the approved provision. The Secretary is to submit his report by January 1, 1976, along with proposed legislation designed to allow tribes to assume regulatory authority over a surface mining regulatory program. Section 712 also requires operations on Indian lands to comply with requirements at least as stringent as the full program's provisions by 30 months after enactment. The Secretary is to enforce these provisions as well as incorporate such standards into existing and new leases.

126 REHABILITATION OF ABANDONED MINE LANDS

126 Historically, the environmental effects of mining coal have been neglected upon the abandonment of the operation. Even during the heyday of coal production in the Appalachian and Western coal fields, there were few constraints upon the industry to clean up its wastes. Rather, it was assumed implicitly that the permanent degrading of the local surroundings and the pollution of streams was the inevitable price which the community had paid in return for jobs and tax revenue generated by the coal industry.

126 Giant dumps of burning mine waste often containing waste water and constituting a threat to downstream communities; rivers clogged with coal fines from coal treatment plants; streams devoid of aquatic life as a result of acid

drainage; derelict tipplers and mine buildings; black roads spreading coal dust; the tumbledown shanties of company towns; surface subsidence of land due to caving of abandoned underground mines and underground mine fires - all too often, this has been the heritage of coal mining in America.

126 With the rapid development of improved surface mining techniques and equipment during the decades following the second World War, many coal communities were faced with new and forbidding factors. The introduction of the bulldozer and shovel into mountainous regions where geological conditions coupled with high rainfall brought periodic floods and landslides in the normal course of events, further extended the variety and severity of environmental costs imposed on area residents. These new forms of mine wastes were brown and red rather than black: silt, rocks and boulders of all sizes, released in the process of uncovering the coal seam, and causing leaching and sedimentation of creeks and rivers of the region.

126 Where the sulfur content of coal is high, exposure of low-grade coal and other toxic materials which have been cast aside causes the formation of acid, often for long periods of time. These acids further reduce the quality of water available to local people, often ruining the domestic water supplies. The widespread use of cheap and powerful explosives to loosen and breaken up overburden lying above the coal seam further complicates these effects by opening fissures into old abandoned underground mines, frequently hastening the process of acidformation underground and simultaneously bringing about its release into aquifers and well.

126 Contour surface mining has created thousands of miles of unstable outslopes below the mined bench. Belatedly, state laws were enacted to control these drastic consequences. However, irrespective of state reclamation laws, coal operators in general have continued in the old tradition, abandoning their operations once the coal was exhausted or its removal no longer economically attractive.

127 The Committee takes the position that the Federal government has a responsibility to remove this longstanding blight from regions which fueled the industrial growth of America prior to the advent of the internal combustion engine. The cost of rehabilitation is estimated at \$7 to \$10 billion.

127 In all, it is estimated that a million and a half acres of land have been directly disturbed by all coal mining and over 11,500 miles of streams polluted by sedimentation or acidity from surface or underground mines.

127 Estimates of program costs for correcting these problems have been made

by several Federal agencies during the past four years total nearly \$10 billion

and are summarized as follows:

*2*Cost estimates

Environmental impact:	Millions
1. Stabilization, reshaping and revegetation of strip mined lands	\$2,040
2. Controlling acid mine drainage, clearing heavily silted streams, sealing of mineshafts	6,600
3. Stabilization of mine waste banks and removal of fire and flood hazards	220
4. Control of subsidence under urbanized areas	1,000
5. Extinguishment of underground and outcrop mine fires	50
Total	9,910

127 These estimates provide a basis for identifying the order of magnitude of funds required to correct these problems.

127 Last year the Corps of Engineers developed a program to rehabilitate a small area, Cabin Creek, West Virginia. Cabin Creek is a short 10-mile tributary to the Kanawha River near Charleston, West Virginia. The Corps has designed a program for basic rehabilitation which provides for: (1) erosion and sediment control by stabilization of strip mines and coal refuse banks; (2) flood control needed due to sediment-filled streams through clearing stream channels; and (3) water quality control from acid mine drainage. The estimated first cost for this work is \$11.4 million:

*2*Cabin Creek program - Corps of Engineers

	Millions
Strip mine and waste bank stabilization	\$6.4
Sediment removal from streams	2.5
Acid drainage and water quality control	2.5
Total (first cost)	11.4

127 This type of program is representative of the work needed in virtually every watershed in which there has been significant amount of underground and surface mining over the past decades.

127 Reclamation also plays a major part in protecting existing public

investments in some areas. For instance, the Cabin Creek case study centers on a tributary that contributes a major silt load to navigable waterways. Similarly, the drainage area of the \$5 7 million Fishtrap Dam and Reservoir in Eastern Kentucky has been substantially affected by both underground and surface mining. Reclamation expenditures are warranted to protect such public investments. Acid mine drainage and other pollution problems substantially have affected the useful life other reservoirs and water control works in the Appalachian chain and other coal fields.

128 The burden of paying for reclamation is rightfully assessed against the coal industry. The bill adopts the principle that the coal industry, and by extension the consumers of coal, must bear the responsibility for supporting special rehabilitation programs to recover and reclaim areas which have been severely impacted in the past by coal mining operations.

128 ABANDONED MINE RECLAMATION PROGRAM

128 In order to help correct the legacy from past coal mining, the Committee approved an abandoned land reclamation program funded by a small reclamation fee on each ton of coal mined after the date of enactment.

128 The program established under the Act is to be administered principally by the Secretary of Interior for the purpose of protecting the health or safety of the public, protecting the environment from continued degradation from past surface and underground mining activities, conserving land and water resources, expanding public facilities such as utilities, roads, recreation and conservation facilities, improving land and water for the economic and social development of the area, and providing research and demonstration water quality control programs and techniques.

128 Even though the principal responsibility is given to the Secretary of Interior for administration of the program and the fund, however, the Committee recognized that other agencies would have to be involved in order to substantially address and correct past damages. Thus, the Secretary of Agriculture was given specific authorization for a rural lands program and the Secretary of Interior is directed to transfer funds to other Federal agencies such as the Corps of Engineers, the Environmental Protection Agency, and others to carry out purposes of the title.

128 RECLAMATION FEE AND FUND

128 The Committee decided to establish a fund for a period of ten years

based on a reclamation fee in order to assure the availability of monies for program purposes. The release of monies to the Secretary for obligation from the fund is through the annual appropriation process, thus providing Congress with an opportunity to be informed of the progress being made and to review the specification of the activities, areas, and specific purposes for expenditures in the corresponding fiscal year.

128 During the development of this legislation, the Committee reviewed the history of reclamation fees imposed by States on coal. A number of States have enacted various reclamation fees or taxes on coal, ranging up to the equivalent of 30¢ a ton. It is evident that such fees have not constrained the development or production of coal in these States, nor placed that coal at a competitive disadvantage with adjacent States having no or substantially lower fees. Kentucky is a good case in point. For the three years after imposing a fee of 30¢ per ton, or 4% of the sales price (whichever is greater), coal production continues to rise even though the surrounding states had either no or substantially lower fees.

129 Several principal considerations form the basis for the Title IV reclamation fee: first, to set the fee at such a level that it is not a burden on the industry; second, to provide at the same time sufficient funds for meeting program objectives within a reasonable time frame; and third, to structure the fee so it would not exert an inflationary influence in the economy.

129 A differential fee was established, at 35¢ per ton for surface mined coal and 10¢ per ton for underground mined coal. This differential reflects the Committee's cognizance of the present disproportionately high social costs incurred by underground coal mine operators in meeting responsibilities under the Coal Mine Health and Safety Act of 1969, as amended. It should be noted that the reclamation fee on surface mined coal can be adjusted somewhat to reflect its heat value: if 10% of the value of the coal at the mine, as determined by the Secretary, is less than 35¢ per ton, then the lesser amount is paid into the fund. The Committee expects, though, that only a small proportion of the low-heat sub-bituminous coal will be eligible for this reduced fee.

129 It is estimated that the reclamation fee adopted by the Committee would yield approximately \$125 million per year based on the most recent annual coal statistics concerning tonnage, method of mining, and estimated average value at the mine. The fee is quite small relative to current prices of coal. When translated into power costs per kilowatt hour (assuming conservative figures of 10,000 BTU's/lb and a conversion rate of 10,000 BTU's/kwh) it is less than

0.015~ per kwhr of electricity. The consumer is utilizing 250 kwhr per month, this represents an increase of 4~ per month on his utility bill. The Committee does not consider this small increase a burden on current coal consumers or inflationary in nature.

129 RURAL LANDS PROGRAM

129 Rural lands, which have been damaged by mining activity and remain unreclaimed are the focus of a program administered by the Secretary of Agriculture utilizing monies from the fund. Up to one-fifth of the monies accruing to the fund in any one year are to be transferred to the Secretary for this purpose. The Secretary of Agriculture may enter into agreements with landowners, residents, tenants, or owners of water rights to accomplish reclamation on rural lands. The Secretary can share the costs of reclamation work by grants up to 80% of the total cost, and the landowner (or participant) can provide the matching amount through labor and equipment. The Committee had previously included a one-time 30-acre limitation for such grants in order to prevent windfall gains by individuals taking part in this program for speculative reasons. This acreage limitation was raised to 160 acres because of the desire to assure program applicability in all coal areas of the country. However, the Committee intends that the Secretary of Agriculture provide through regulation appropriate safeguards to prevent such parties as large corporations, coal companies, and land development concerns from using this program to reclaim lands. This program is intended to stabilize abandoned mountain mines on the properties of small, rural lands residents in the Appalachian coalfields and to bring agricultural lands in Midwestern coal fields back into agricultural production. The one-time eligibility of individuals still applies. It is expected that where larger acreages are involved in such projects, the amount of Federal cost-sharing will be predicated on the expected income production from the post-mining land use.

130 Thus, the higher the expected post-mining income flow, the smaller the Federal cost share. It should also be noted that those whose water rights have been affected adversely by the disturbance of the hydrologic balance due to coal-mining activities, may also qualify for assistance.

130 The Act specifies that the Rural Lands Program is to be implemented through the Soil Conservation Service. With specific authorities for the program to be carried out through the Soil Conservation Districts. Such activities may include grants to appropriate county Soil Conservation Districts since these local organizations are the grass roots counterpart of the S.C.S. and its members in many instances will be doing the actual reclamation work.

130 The Soil Conservation Service may want to consider integrating such projects on a watershed or drainage area basis in order to enhance program effectiveness; however, it is not intended that such an approach and its planning process slow down reclamation or deny work in those areas or instances where the landowners are willing to participate but the watershed planning is not completed. It is also expected that the Rural Lands Program will be coordinated to the extent necessary with the reclamation program implemented by the Department of Interior.

130 DEPARTMENT OF INTERIOR PROGRAM

130 The widest range of land and water damage from both underground and strip mining are approached under the grant of authority to the Secretary of Interior.

130 The program authorized for the Department of Interior to provide the mechanism for bringing lands, or appropriate interests therein such as reclamation easements, into public ownership prior to reclamation and then utilizing such lands for various purposes which may require a change in ownership.

130 It is expected that appropriate selection of areas will be made in order to undertake land and water reclamation in a systematic way to assure the most critical areas and problems are addressed first. An example of an initial review of such an approach is contained in Ohio's report, Land Reborn, A Study of Unreclaimed Coal Strip Mined Land in Ohio, January 1, 1974.

130 The Secretary of Interior has also been given authority to reclaim lands to be used for the purposes of housing for miners, mining related employees, or persons displaced by natural disasters or catastrophic failures. This authority grows out of the needs arising after the Buffalo Creek disaster as well as Committee cognizance that Western coal operators, in supply an even larger share of the Nation's energy requirements, will bring about the movement of workers and families into the new coal regions. Most of the local western political units are in no position to cope with the impending growth problems, especially with respect to tax and bonding capacity, in order to provide funds for public facilities and services. The need to forestall the destructive effects of this growth is seen as requiring the bill's departure from a totally retroactive approach to mined lands rehabilitation.

131 Reclamation work in this instance includes the construction of on-and off-site public facilities necessary to support such housing. The Act specifically excludes the use of these funds for the actual construction or rehabilitation of such housing. For the purposes of this section, the term "public facilities" includes those public works needed for supporting housing,

on-and-off-lands developed for housing sites), including roads, water and sewer systems, education, health, or other municipal facilities; supporting services and equipment required.

131 Such facilities, works, and services may be temporary or permanent. Through this program the Secretary may provide aid to communities undergoing rapid growth due to the opening of coal mines and coal-related operations such as power plants and coal conversion facilities. Employment in all such activities is considered to be coalrelated. The Secretary is given authority to contract for plans, technical assistance, demonstrations, including that planning and technical assistance which is a necessary prerequisite to determining the feasibility of such projects. In order to get such activities under way in a timely manner to meet current needs, contract authority is provided the Secretary in Section 714(a) for the planning work.

131 Even though the Secretary of Interior can carry out this work directly, authorization is also provided to make grants to the States, their instrumentalities, or other public bodies for non-profit organizations designated by the State. Such projects might well provide appropriate opportunity for the Secretary to work through such suitable groups as nonprofit housing corporations and regional commissions which are providing technical assistance to the States and localities concerning similar housing needs. Existing applicable Federal standards for the design and construction of such facilities should, in general, be followed by the Secretary where appropriate; however, the Secretary may fund innovative projects meeting the identified needs.

131 ELIGIBLE LANDS

131 Eligible lands for reclamation program activities as stipulated in Sec. 403, are those which have been mined prior to the date of enactment and left or abandoned in either an unreclaimed or inadequately reclaimed condition; and for which there is not a continuing responsibility (by the operator) for reclamation under existing State or other Federal laws. With respect to the authority granted the Secretary for funding public investments to support housing necessary to accommodate miners and related employees, Sec. 405(b) (4) provides that such investments can be made on lands which do not meet the mining and reclamation test of Sec. 403, if it is in or serves an area of rapid coal development.

131 Areas of rapid coal development can be those experiencing significant population growth due to increases in coal production from existing mine operations or to development of new coal production operations which result in

shortages of existing housing and community facilities. Thus an area such as Colstrip, Montana, which had virtually no on-going coal production, but experienced both the start-up of a mine and the construction of a mine-mouth power plant and related population influx would qualify. An area similar to Gillette, Wyoming or the surrounding Wyoming portion of the Powder River Basin coal field would qualify on the basis of significant increases in coal production through the opening of new mines and the expansion of production from existing mines. Rapid coal development also occurs in areas within the central and eastern coal fields in those instances of the construction and opening of major underground or surface mines or conversion facilities and thus some of the investment would also be on reclaimed lands. The basic test to be met is that of significant increase in coal production or conversion which results in a need for additional community facilities and housing to accommodate related population growth.

COMMITTEE ACTION

132 LEGISLATIVE HISTORY

132 With the exception of correction of typographical errors, H.R. 25 * as introduced is identical to the text of the Conference Report accompanying S. 425, the Surface Mining Control and Reclamation Act of 1974, report No. 93-1522, 93rd Congress - 2nd Session (December 5, 1974), passed by the 93rd Congress but "pocket-vetoed" by the President following the adjournment of that Congress. Thus the legislative history of H.R. 25 includes the history of S. 425 of the previous Congress.

132 * Identical bills Nos. H.R. 26, H.R. 27, H.R. 28, and H.R. 2062 brought sponsorship to 105 Members. Also introduced and referred to the Committee were other versions of surface mining legislation (H.R. 1000, H.R. 2121, H.R. 2587, H.R. 2823, H.R. 2827, H.R. 3119, H.R. 3463, H.R. 3472).

*2*History of S. 425 in the 93d Cong.

Hearings:

House - Apr. 9, 10, 16, and 17 (H.R. 3) and May 14 and 15, 1973 Serial No. 93-11.
Senate - Mar. 13, 14, 15 (S. 425) and 16, 1973 9 93-2130.
Committee action:
House - Reported H.R. 11500, May 14, 1974 H.Rept. 93-1072.
Senate - Reported S. 425, Sept. 21, 1973 S.Rept. 93-402.
Floor action:
House - Floor debate: July 17, 18, 22,

23, 24, and 25, 1974; S. 425 amended by substituting the text of H.R. 11500 as amended and passed July 25, 1974. Senate - Floor debate: Oct. 8 and 9, 1973; S. 425 passed on Oct. 9, 1973. Conference: Conference (after 18 meeting) agreed Dec. 3, 1974 H.Rept. 93-1522. Action on conference report: House failed to pass conference report under suspension Dec. 9, 1974. Passed House Dec. 13, 1974. Passed Senate Dec. 16, 1974. Presidential Action: S. 425 vetoed Dec. 30, 1974.

133 The Committee believes that in light of the extensive consideration given S. 425 in the last Congress, little would be gained by following the normal procedure of subcommittee referral, hearings, and Full Committee markup, in addition to subcommittee markup sessions. Accordingly, H.R. 25 was retained in the Full Committee and, pursuant to a resolution adopted by the Committee, no formal hearings were held. The Secretary of the Interior and other interested parties were invited to submit their comments and proposed amendments, and the Committee had the benefit of an oral presentation by the Secretary of the Interior and the Administrator of the Federal Energy Administration. The Secretary of the Treasury, the Secretary of Commerce, Chairman of the Council on Environmental Quality and the Administrator of the Environmental Protection Agency, and the Director of the Office of Management and Budget, were also invited to appear before the Committee but chose not to do so.

133 Following the Administration's presentation, and again pursuant to the resolution adopted by the Committee, the Committee held three days of markup sessions. At the conclusion of the markup sessions, the Committee voted to report H.R. 25 to the House with an amendment by a vote of 29 to 11.

133 RELATION OF H.R. 25 TO OTHER LAWS

133 Certain aspects of coal mining operations are now subject to regulation under two major Federal programs - the Coal Mine Health and Safety Act of 1969 and the Federal Water Pollution Control Act.

133 Under the Coal Mine Health and Safety Act of 1969, as amended, the Secretary of Interior regulates certain health and safety aspects of both surface mines and surface activities of underground mines.

133 The implementation of this Act though has been directed at the protection of the miner while on the site of the mining operation.

133 In several instances, H.R. 25 specifies that certain activities are to be conducted in such a way as to provide for the protection of the health or safety of the public (both on and off the mine site). For example, standards are set forth controlling the design, construction and use of impoundments for the disposal of mine wastes. Such provisions are not duplicative of the Coal Mine Health and Safety Act but are supplementary to the authority granted to the Secretary of Interior by that Act.

133 Since the Secretary of the Interior is given the principal responsibility for administering both laws, the Committee feels that he will be able to coordinate the implementation of his responsibilities under H.R. 25 with those under the Coal Mine Health and Safety Act of 1969.

133 The Committee does not contemplate that any of the environmental protection standards or other provisions of this Act be implemented in such a way as to endanger coal miners working underground nor to contravene the health and safety standards and other provisions of the Coal Mine Health and Safety Act of 1969, as amended.

133 The Committee felt that the requirement for the Secretary of the Interior to obtain the concurrence of the Administrator of the Environmental Protection Agency is necessary to ensure that any environmental requirement of this Act is consistent with the environmental programs and authorities of the EPA and, in particular, those programs authorized under the Clean Air Act, as amended, and the Federal Water Pollution Control Act, as amended. Specifically, the Secretary must obtain the Administrator's concurrence in the coal surface mining regulations and requirements under the environmental protection and State program approval provisions of the bill, as well as the final approval of any State Program. The EPA has been directed by the Congress to ensure the environmental well-being of the country. EPA has established water quality standards, air quality standards, and implementation and compliance requirements for the coal mining and processing industry, and issues permits to the industry to ensure appropriate pollution abatement and environmental protection. The committee concluded that because of the likeness of EPA's abatement programs and the procedures, standards, and other requirements of this bill, it is imperative that maximum coordination be required and that any risk of duplication or conflict be minimized.

134 Statutory authority to regulate the adverse environmental effects of surface and underground coal mining under the Federal Water Pollution Control Act, as amended, is limited to the treatment or removal of any pollutants from discharges into the waters of the United States. Section 402 of the Act

requires operators of all industrial facilities having point source discharges, including most but not all coal mines, to obtain a permit to discharge their effluent. Such permits are conditional to require the removal of pollutants by employing the best practicable control technology currently available. Section 304(h) (2) of the Act requires EPA to promulgate effluent guidelines specifying the requirements for coal mining. In most cases surface and underground coal mining operations may be required to treat or otherwise control their discharge to remove or reduce iron, manganese, suspended solids, acidity and alkalinity, heavy metals, and other toxic substances.

134 The vast majority of coal mines are covered by this program. Some coal mines which do not have any discharge or do not have a point source discharge, that is, they do not discharge through a defined culvert, pipe, ditch, channel, or other conveyance structure, are not covered by the program. Section 304(e) of the Act requires the EPA to issue guidelines for processes, procedures, and methods to control nonpoint sources of pollutants from mining activities, including runoff and siltation from new, currently operating, and abandoned surface and underground mines.

134 The above programs authorized by the Federal Water Pollution Control Act, as amended, can deal only with a part of the problem. The FWPCA does not contain the statutory authority for the establishment of standards and regulations requiring comprehensive preplanning and designing for appropriate mine operating and reclamation procedures to ensure protection of public health and safety and to prevent the variety of other damages to the land, the soil, the wildlife, and the aesthetic and recreational values that can result from coal mining. The statute also lacks the regulatory authority to deal with the discharge of pollutants from abandoned surface and underground coal mines.

134 It is clear that broader authority, such as that proposed in H.R. 25 is necessary to provide the needed authority and regulatory framework to minimize the adverse environmental effects of coal mining.

135 COST OF LEGISLATION

135 In compliance with clause 7 of Rule XIII of the Rules of the House of Representatives, the Committee estimates that the following costs will be incurred in carrying out the provisions of H.R. 25.

*5*A.

REGULATION OF
SURFACE COAL

MINES

5[In millions
of dollars]

Authorization for appropriations set forth in H.R. 25

(fiscal

years)

	1975	1976	1977	1978 and thereafter
Interim program, Indian lands, etc., sec. 712(a) Administration of State programs, sec. 712(b) Specific studies, sec. 708(e), 709(c)	10.0	10	10	
	10.0	20	20	30
	0.7			
Total	20.7	30	30	30

135 Fiscal year 1975. - It is estimated that about one half of the funds authorized for the initial fiscal year, especially those provided by section 712(a) will be needed for obligation during the balance of this fiscal year. The Committee recognizes that the Secretary of Interior has made some commitment of other resources in order to partially prepare for the enactment of this legislation and such funds should be made available upon enactment for the continuation and expansion of this work.

135 Fiscal years 1976 and 1977. - It is estimated that \$3 0 million will be needed for each of the first two full years of activities under this Act. From this, \$1 0 million each year is available for: (1) reimbursing the States for implementing the minimum Federal environmental performance standards during the interim program while the States are developing their permanent regulatory programs; (2) funding the development of regulatory programs for Indian tribes; (3) developing a capability within the States to meet the responsibilities under the designation of lands authority (section 522); and (4) meeting various planning requirements of other portions of the Act as referenced in section 712(a).

135 During each of these two years, \$2 0 million is made available to the Secretary of Interior to establish and operate an Office of Surface Mining Reclamation and Enforcement in order to carry out the administrative responsibilities under the Act, including the review of State programs, providing for Federal enforcement, and other activities identified in Title II.

135 Fiscal year 1978 and later. - H.R. 25 authorizes \$3 0 million per year to the Secretary of Interior on a continuing basis. It is estimated that this

will be needed to provide matching grants to the States during the first four years of implementation of the approved State program and to cover the expenses of the Federal administration and enforcement responsibilities under the Act.

136

*6*AUTHORIZATIONS FOR APPROPRIATIONS AS SET FORTH
IN H.R. 25

*6*B. RESEARCH AND DEMONSTRATION ON ALTERNATIVE
COAL MINING TECHNOLOGIES
6[In millions of dollars]

	Fiscal year -			
	1976	1977	1978	1979
1980				
R. & D. mine technology, sec. 713(c)	35	35	35	35
35				

136 Fiscal years 1976-80. - H.R. 25 authorizes for each of these five fiscal years, \$35.5 million for research and demonstration of alternative mining technologies which have lesser environmental impacts and increased resource recovery compared to existing surface coal mining operations.

*8*AUTHORIZATIONS FOR APPROPRIATIONS
AS SET FORTH IN H.R. 25

*8*C. STATE MINING AND MINERAL
RESOURCES RESEARCH INSTITUTES
8[In millions of dollars]

	Fiscal year -					
	1975	1976	1977	1978	1979	1970
1981						
Allotments to institutes sec. 301(a)	7	10.5	14	14	14	14
14						
Research funds to institutes sec. 302(a)	15	17.0	19	21	23	25
27						
Planning sec. 306(d)	1	1.0	1	1	1	1
1						
Total	23	28.5	34	36	38	40
42						

136 Fiscal year 1975. - In view of the short period of time remaining between the date of enactment and the close of the fiscal year 1975 (June 30, 1975) it is anticipated that none of the funds authorized will be necessary.

136 Fiscal year 1976. - It is anticipated that 35 institutions will qualify for the section 301(a) grants at the outset and with three hundred thousand dollars per institution authorized, the total comes to 10.5 million dollars. It is anticipated that research funds for the institutions and for other purposes will be used at the authorized levels in order to meet the critical requirements of manpower training and research. Funds available under section 306(d) should be used in this initial year for the administrative planning necessary.

136 Fiscal years 1977-81. - The amount shown for allotments to institutes are based on grants of four hundred thousand dollars annually with 35 institutions qualifying. The research funds to these institutes increase at a rate of \$2 million annually. Funds available under section 306 will be used for a combination of planning, administration, and publication of research results. With the orderly growth of the program of institution building and research and training support, the total appropriation through this period increases in an orderly manner from \$34 million to \$42 million annually.

136 INFLATION IMPACT

136 Pursuant to clause 2(1)(4), Rule XI, of the House of Representatives, the Committee estimates that enactment of H.R. 25 will have virtually no inflationary impact on the U.S. economy. The following analysis, provided by the Library of Congress, concludes that the Federal expenditures authorized under the Act, if assumed all inflationary in nature, would translate to a 0.026% push per year. This is an insignificant amount.

137 FISCAL BURDEN

137 Authorized public spending for the administration, enforcement, and research attendant to the Strip Mining bill, including Mineral Institute funding, would ascend from \$80 million to \$130 million. In terms of impact on general economic and fiscal aggregates - private and public demand levels, present budget estimates, and even recommended shifts in Federal spending - this sum would work no appreciable change.

137 The influence of fiscal policy on output, employment, and prices is determined by the relative balance of revenues against outlays; a strong case currently argues that lack of discipline in past year accounts for much of our immediate difficulties with inflation. But the steady increases in living costs since 1965 followed persistent and vast Federal deficits whose pattern was set not by incremental boosts in relatively small Federal programs, but by an unplanned or unplanned-for growth in the responsibilities of our national government. The cost of implementing H.R. 25 should certainly enter into future calculations of needed tax receipts - the "fiscal impact" of this measure will be determined by the willingness to finance it and other spending programs out of current revenues. Yet even if expenditures required by the bill constituted an uncompensated-for addition to prevailing budget commitments, its magnitude severely limits any possible impact. By way of comparison: \$130 million represents about 0.04% of present Federal spending; assuming a rather generous multiplier of 3.0, and further premising that all additional spending pushed prices rather than real production up, \$130 million translates to a \$390 million boost in total public and private demand - or enough to feed a

"demandinduced" inflation of about .026% per year.

137 Such observations do not deny the importance of renewed discipline in government budgeting as a tool of economic management - they merely demonstrate that changes in either expenditures or tax schedules must be both large and sustained to work any significant alteration on general economic conditions. With or without H.R. 25, the task will remain precisely the same; seeking a workable convergence between spending and revenue trends.

137 COST OF RECLAMATION TO PRODUCERS AND CONSUMERS

137 The relative inconsequence of H.R. 25's fiscal impact traces to the bill's fundamental approach; placing on private industry and the free market the real burden of adequate reclamation progress. The legislation's cost to producers of coal - and their customers - would take two basic forms: 1) Payments into a reclamation fund of 35~ per ton of stripped coal and 10~ per ton of deep-mined ore;

137 2) The costs of compliance with mandated reclamation standards set by H.R. 25 and the regulatory machinery it establishes. (This latter cost would be partially prepaid via performance bonds refundable upon satisfactory compliance.)

138 Precise quantification of the likely impact of these twin cost elements is of course impossible. But examination of their relation to present and prospective coal prices can indicate an "order of magnitude" or scale against which to assess their importance. Combining a 35~/ton reclamation fund payment with 85~/ton for conformance with mandated standards (Cost of Permit, Steep Slope, and Impoundment requirements, all surface mines, from recently presented Interior Department estimates) we obtain a burden of about \$1.20 per ton of stripped coal.

138 Against this deliberately generous calculation of reclamation costs we have the following price data for delivered coal:

138 According to the Federal Power Commission, October 1974 coal prices averaged \$17.58 per ton.

138 Also from FPC data, spot coal prices in October averaged \$3 0.67 per ton, contract coal stood at \$13.30 per ton for the same months.

138 The Wholesale Price Index reports a 72.0% advance in coal prices from January 1974 to January 1975.

138 Comparison of the above figures establishes two basic points: reclamation costs are both small when matched with prevailing market prices and these market prices are themselves registering dramatic gains that are mainly

unrelated to increased costs, reclamation or otherwise. The link between coal prices and a cartel-dominated petroleum market is probably sufficiently understood to require little elaboration. With delivered residual oil selling at twelve dollars a barrel, a "BTU parity" price for coal could range up to \$50/ton. Given coal's disadvantages in emission control, ease and cheapness of use, a figure of \$40/ton may seem more reasonable and recent press reports have indicated substantial selling at or near this level. In any case, spot coal sales and, eventually, contract coal must tend toward a basic equivalency with prices set in the overall energy market. Long-term coal contracts with escalator clauses based on certain classes of cost increases may accelerate the achievement of this parity given boosts in industry expenses from reclamation, labor payments and safety goals, but none of these factors can significantly alter the fundamental trend. Indeed, the present disequilibrium condition of energy markets - with prices bearing little relation to total cost and normal profit levels - ironically provides the one situation in which increased industry costs would not expectantly affect prices. The expense of enhanced environmental standards would not compel a net addition to consumers' energy costs until traditional relationships between production costs and market prices are restored - not a likely prospect for several years. And this observation leads to one further, vital point: increases in the price of one commodity are not commonly understood to boost general price levels within an efficiently operating market system. During the relative price stability of the 1950's and the early 1960's, for example, coal prices fluctuated by substantially wider margins than that represented by reclamation costs as a proportion of present coal prices. Inflation in the price of one commodity or commodity group becomes a plausible cause of general inflation only when the increase is so substantial, and so sudden, as to frustrate the stabilizing mechanisms of free markets. Such is obviously the case during the past two years for agriculture and petroleum - two of the largest economic sectors whose price levels, at the raw stage, more than doubled within an extremely brief timespan. There is no reasonable way of concluding that these reclamation expenses, marginal when compared to prevailing prices and gradual in their direct impact on a disordered market, could play a similar role in the future.

139 CHANGES IN EXISTING LAW

139 In compliance with clause 3 of Rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which no change is proposed is shown in roman):

139 SECTION 1114, TITLE 18, UNITED STATES CODE

139 @ 1114. Protection of Officers and employees of the United States

139 Whoever kills any judge of the United States, any United States Attorney, any Assistant United States Attorney, or any United States marshal or deputy marshal or person employed to assist such marshal or deputy marshal, any officer or employee of the Federal Bureau of Investigation of the Department of Justice, any officer or employee of the Postal Service, any officer or employee of the secret service or of the Bureau of Narcotics and Dangerous Drugs, any officer or enlisted man of the Coast Guard, any officer or employee of any United States penal or correctional institution, any officer, employee or agent of the customs or of the internal revenue or any person assisting him in the execution of his duties, any immigration officer, any officer or employee of the Department of Agriculture or of the Department of the Interior designated by the Secretary of Agriculture or the Secretary of the Interior to enforce any Act of Congress for the protection, preservation, or restoration of game and other wild birds and animals, any employee of the Department of Agriculture designated by the Secretary of Agriculture to carry out any law or regulation, or to perform any function in connection with any Federal or State program or any program of Puerto Rico, Guam, the Virgin Islands of the United States, or the District of Columbia, for the control or eradication or prevention of the introduction or dissemination of animal diseases, any officer or employee of the National Park Service, any officer or employee of, or assigned to duty, in the field service of the Bureau of Land Management, any employee of the Bureau of Animal Industry of the Department of Agriculture, or any officer or employee of the Indian field service of the United States, or any officer or employee of the National Aeronautics and Space Administration directed to guard and protect property of the United States under the administration and control of the National Aeronautics and Space Administration, any security officer of the Department of State or the Foreign Service, or any officer or employee of the Department of Health, Education, and Welfare or of the Department of Labor or the Department of the Interior assigned to perform investigative, inspection, or law enforcement functions, while engaged in the performance of his official duties, or an account of the performance of his official duties, shall be punished as

provided under sections 1111 and 1112 of this title, (June 25, 1958, ch. 645, 62 Stat. 756; May 24, 1949, ch. 139, @ 24, 63 Stat. 93; Oct. 31, 1951, ch. 655, @ 28, 65 Stat. 721; June 27, 1952, ch. 477, title IV, @ 402(c), 66 Stat. 276; July 29, 1958, Pub.L. 85-568, title III, @ 304(d), 72 Stat. 434; July 2, 1962, Pub.L. 87-518, @ 10, 76 Stat. 132; Aug. 27, 1964, Pub.L. 88-493, @ 3, 78 Stat. 610; July 15, 1965, Pub.L. 89-74, @ 8(b), 79 Stat. 234; Aug. 2, 1968, Pub.L. 90-449, @ 2, 82 Stat. 611; Aug. 12, 1970, Pub.L. 91-375, @ 6(j)(9), 84 Stat. 777; Oct. 27, 1970, Pub.L. 91-513, title II, @ 701(i)(1), 84 Stat. 1282; Dec. 29, 1970, Pub.L. 91-596, @ 17(h)(1), 84 Stat. 1607.)

140 COMMITTEE RECOMMENDATION

140 The Committee on Interior and Insular Affairs recommends the enactment of H.R. 25 as amended. The motion ordering the bill reported favorably was adopted by a roll call vote February 27, 1975, with 29 votes cast for and 11 votes cast against.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 SHORT TITLE

187 The short title of the Act is the "Surface Mining Control and Reclamation Act of 1975".

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE I STATEMENT ON FINDINGS AND POLICY

187 Section 101. Findings

187 This section sets out congressional findings relating to surface mining of coal and other minerals. These include the fact that (1) surface mining is only one of various methods of mining; (2) surface mining is a significant activity in our national economy; (3) surface mining has numerous adverse economic environmental and social effects; and (4) surface mining and reclamation technology are developing so that effective and reasonable regulation of surface coal mining is appropriate and necessary to minimize these adverse effects.

187 These findings conclude that (1) because of the diversity of terrain, climate, biologic, chemical, and other physical conditions the States should have the primary responsibility for regulating surface mining and reclamation; that (2) while there is a need to regulate surface mining operations for minerals other than coal, more data and analyses are needed to provide a basis for effective and reasonable regulation; that (3) surface and underground coal mining should be conducted in an environmentally sound manner through a cooperative effort established by this Act.

187 Section 102. Purposes

187 This section states that the purpose of Congress in passing this Act is to establish a nationwide program to protect society and the environment from adverse effects resulting from surface coal mining operations as well as the surface impact of underground coal mining operations. Guidelines are provided in the method of implementing that goal. These recognize that, while all adverse effects of surface mining cannot be prevented immediately and that coal is an essential source of energy, a strong nationwide regulatory program based on minimum Federal standards should be implemented rapidly. This program would assure that coal surface mining operations are not conducted where reclamation which meets these minimum standards is not feasible. The Federal Government would assist the States in developing and implementing such a program. If and when a State manifests a lack of desire or an inability to participate in or implement that program and to meet the requirements of the Act, the Federal Government is to exercise the full reach of Federal constitutional powers to insure the effectiveness of that program.

188 Another significant purpose of the Act is to provide a means for supplementing existing programs for conducting research in production of minerals and for training manpower through the establishment of appropriate centers in various States.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE II RECLAMATION AND ENFORCEMENT

188 Section 201. Creation of Office

188 This title creates in the Department of the Interior a new office, the Office of Surface Mining Reclamation and Enforcement.

188 The Director of the Office is to be appointed by the President, confirmed by the Senate, and compensated at a salary rate for Level V of the Executive Schedule.

188 The staff of the office is to be recruited on a basis of professional competence and capability in objectively administering provisions of the Act. In addition, program responsibilities directed at the development or use of coal or other mineral resources, are not to be assigned to the office.

188 The title also lists the chief functions of the office which include: the administration of all programs for controlling surface mining operations required by this Act; review, approval, or disapproval of State programs for the control of surface mining operations; implementation of the initial regulatory

program and the Federal enforcement activities required by this Act;
providing
assistance to States and Indian tribes for the development of programs to
assure
adequate control of surface mining operations; developing and maintaining an
information and data center on surface mining, reclamation, and surface
impacts
of underground mining and assuring that such information is made available to
State and local agencies conducting land use planning and groups concerned
with
surface and underground mining operations; assisting the States in developing
appropriate standards and procedures for determining those areas of a State
to
be designated unsuitable for all or certain types of mining; monitoring
Federal
or State research programs concerning mining and reclamation, and
administering
the program for acquisition and reclamation of abandoned and unreclaimed
mined
lands.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE III STATE MINING AND MINERAL
RESOURCES AND RESEARCH INSTITUTE

188 Section 301. Authorization of State Allotments to Institutes

188 This Section authorizes appropriations to assist States in carrying
on
the work of mineral resources research institutes. Funds are to be
distributed
by the Secretary of Interior at the rate of \$200,000 for fiscal year 1975, \$3
00,000 for fiscal year 1976, and \$40 00,000 for each fiscal year thereafter
for
five years, to a public college or university in each participating State.

188 An advisory Committee created under this title will determine the
eligibility of colleges or universities under guidelines requiring that the
public college or university have a school, division or department conducting
a
program of substantial instruction and research in mining or minerals
extraction
or beneficiation engineering which must have been in existence for at least
two
years and must have at least five fulltime faculty members. Matching
non-Federal funds must be available on a dollar for dollar basis, with the
Governor of the State deciding between qualifying colleges or universities
within a State, and the Advisory Committee selecting an eligible private
college
or university in a State which has no qualifying public college or
university.

189 Research carried out at qualifying institutes will cover a wide range
of
investigations, demonstrations and experiments in mining and mineral
resources
problems and will promote the training of mineral engineers and scientists.

189 Section 302. Research Funds to Institutes

189 This section authorizes an annual appropriation of \$1 5,000,000 to the Secretary of Interior for fiscal year 1975 and increasing by \$2 ,000,000 each fiscal year for six fiscal years thereafter, to assist institutes in carrying out projects of industrywide application which could not otherwise be undertaken. Grants must be approved by the Secretary under criteria which incorporate a prohibition against the use of grant money for the acquisition of land or the rental, purchase, construction or upkeep of buildings.

189 Section 303. Funding Criteria

189 This section requires that each institute designated to receive funds under sections 301 and 302 must set forth a plan showing its curriculum, its policies and procedures and its fiscal responsibility for ensuring that purposes of this title are implemented. If the Secretary finds that Federal monies received by an institute are improperly diminished, lost or misapplied, further allotments to the State concerned will be suspended until such funds have been replaced. Cooperative endeavors between institutes and other agencies and individuals are encouraged.

189 Section 304. Duties of the Secretary

189 This section charges the Secretary of Interior with administering the title, prescribing rules and regulations, consulting with, assisting and coordinating research with other Federal agencies. In his annual report to Congress, the Secretary will indicate whether the allotment to any State has been withheld, based on a determination as to compliance with provisions of section 303, made by him on or before July 1 of each year following enactment of the title.

189 Section 305. Autonomy

189 This section disclaims any intent to interfere with the legal relationship between participating colleges and universities and related State governments, or to authorize Federal control of education at such colleges and universities.

189 Section 306. Miscellaneous Provisions

189 This section instructs the Secretary of Interior to cooperate with other Federal agencies, private institutions and individuals in order to avoid duplication of effort and to stimulate research in otherwise neglected areas as part of a comprehensive nationwide program of mining and mineral research. He is to make available information on projects planned, in progress, or completed.

The Secretary at the same time is specifically barred from assuming any authority over mining and mineral research or related responsibilities of other Federal agencies.

190 Provisions of section 3684 of the Revised Statutes may be waived by the Secretary in arranging for mining and mineral resources research work under this title. No appropriated funds may be expended unless all information, patents and other developments resulting from the activity will be made public. However, the existing rights of patent owners will be protected.

190 The section contains authorization for appropriation of necessary funds for publishing results of activities carried out by the institutes and for administrative functions, not to exceed \$1, ,000,000 in any fiscal year.

190 Section 307. Center for Cataloging

190 This section directs the Secretary of Interior to establish a center for cataloging current and projected scientific research in all fields of mining and mineral resources which will classify for public use such information as is provided by all Federal and non-Federal agencies, colleges, universities, private institutions, firms and individuals. Federal agencies are required to cooperate

190 Section 308. Interagency Cooperation

190 This section authorizes the President to clarify agency responsibility and foster interagency coordination in mining and mineral resources research, including review of Governmentwide research, elimination of duplication, identification of technical needs, recommendations as to allocation of technical effort, review of manpower needs and actions to facilitate interagency communication.

190 Section 309. Advisory Committee

190 This section provides for the appointment of an Advisory Committee on Mining and Mineral Research by the Secretary of Interior, to be composed of the Director of the Bureau of Mines, the Director of the National Science Foundation, the President of the National Academy of Sciences, the President of the National Academy of Engineering, the Director of the United States Geological Survey, and not more than four other persons knowledgeable in the field of mining and mineral resources research. The Chairman will be designated by the Secretary, who will consult with and consider recommendations of the Committee in conducting research and making grants under this title. Members of the Committee will be compensated at a rate fixed by the Secretary but not to exceed maximum rate of pay under pay grade GS-18 for time spent on committee

business or travel time, unless they are Federal, State, or local government employees or officers.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE IV ABANDONED MINE RECLAMATION

190 Section 401. Abandoned Mine Reclamation Fund

190 This section establishes in the U.S. Treasury an Abandoned Mine Reclamation Fund which derives its dollars from: appropriations authorized by this Act; funds from the lease, sale, rental of lands reclaimed under this Act; user charges on reclaimed lands; and from a reclamation fee of thirty-five cents per ton of coal produced by surface mining and ten cents per ton of coal produced by underground mining, or ten per cent of the value of the coal at the mine, whichever is less, effective for ten years from date of enactment of the Act. The Secretary is to adjust the fee after each three-year period to reflect any change in the cost of living index. Fifty percent of the revenues derived from a State or Indian reservation is to be returned to that State or Indian reservation to be expended by the Secretary to accomplish the purposes of the title.

191 Section 402. Objectives of Fund

191 According to this section, the Fund is for the reclamation of previously mined areas. Reclamation projects are to be given a priority on the following basis: (1) protection of health or safety of the public; (2) protection of the environment from continuing degradation and conservation of land and water; (3) the protection, construction, or enhancement of public facilities and their use; (4) improvement of lands and waters to a suitable condition useful in the economic and social development of the area affected; and (5) research and demonstration projects relating to reclamation and water quality control programs.

191 Section 403. Eligible Lands

191 This section specifies that only those lands which were mined for coal or affected by such mining, waste banks, coal processing, or other mining processes and abandoned or left in an inadequate reclamation condition prior to the enactment of this Act are eligible for expenditures under the Fund. In addition, there must be no continuing responsibility for reclamation under State or other Federal laws for such lands to be eligible.

191 Section 404. Reclamation of Rural Lands

191 This section establishes a program to provide small rural landowners technical and financial resources to reclaim lands affected by coal surface mining operations which were left unreclaimed or inadequately reclaimed.

191 Any one landowner (including owner of water rights), resident, or tenant is limited to a total of 160 acres of land on which reclamation can be conducted under this section, and the Federal share of such work shall not exceed 80% of the costs, but may vary at the discretion of the Secretary, according to the productivity of the land.

191 This program is administered by the Secretary of Agriculture and the reclamation work is to be accomplished according to a mutually-agreed-upon plan through contracts with the landowner or owner of water rights, resident or tenant for periods of not more than ten years, to accomplish the land stabilization conservation work required in order to reclaim the affected lands.

191 Up to one-fifth of the money available in the Abandoned Mine Reclamation Fund during any one year would be made available to the Secretary of Agriculture for the purposes of this section.

192 Section 405. Acquisition and Reclamation of Abandoned and Unreclaimed Mined Lands

192 This section establishes a program administered by the Secretary of Interior for the reclamation of abandoned mine lands or lands affected by surface coal mining operations which are large tracts or lands to be developed for specific purposes such as commercial, industrial, residential, and other intensive land uses. This program complements the rural lands program provided in Section 404.

192 Four basic steps are required under this program: land identification, land acquisition, land reclamation, and post-reclamation land use including disposition.

192 Prior to initiating reclamation programs on particular tracts of land, the Secretary shall make a thorough study of the areas involved, identifying those lands needing reclamation and establishing projects according to the priorities established in Section 402 above and with costs and benefits computed.

192 Land acquisitions for those parcels on which work will be done can be accomplished by either the Secretary of Interior or the States involved. If a State acquires such land and transfers it to the Federal Government, up to 90% of the acquisition costs may be federally funded. For those projects which

because of public health or safety or environmental damages require quick and easy acquisition, specific authority for condemnation is provided to the Secretary of Interior.

192 The reclamation of these acquired lands is to be conducted under Federal control. Costs of reclamation are to be borne entirely by the fund.

192 After reclamation, land may be retained in Federal ownership, made available to States or local governments, or disposed of to parties in the private sector. If such land was originally made available to the Federal Government through State acquisition, such State may have a preference to purchase lands after reclamation. The Secretary has the authority to sell land to State or local governments at a price less than fair market value, providing that it is used for valid public purpose and that the cost to the State and local governments shall be no less than the cost to the Fund for the purchase and reclamation of the land. Disposition of the land to the private sector is allowed in those instances for industrial, commercial, residential, or other intensive private uses. Such disposition shall be under a system of competitive bidding, accepting not less than fair market value of such lands and under other such regulations as the Secretary may require to assure lands are put to a proper use and that the reclamation work is not obviated. The Secretary is also authorized to acquire, develop and transfer land to any project, public or private, for housing sites for persons employed or disabled by mining or dislocated by natural disasters or catastrophic failures. Areas experiencing rapid development of coal reserves qualify for assistance of this type.

192 The Secretary is directed to hold a public hearing in each county in which lands be reclaimed are located in order to afford local citizens and governments the maximum opportunity to participate in decisions concerning the use of lands once reclaimed.

193 Section 406. Filling Voids and Sealing Tunnels

193 This section specifically establishes programs for subsidence control and sealing those tunnel shafts and entryways resulting from mining which constitute a hazard for public health or safety. The Secretary is to acquire such interest in lands as he determines necessary to carry out provisions of this section.

193 Section 407. Fund Report

193 This section requires the Secretary to make an annual report to Congress beginning in January 1976 on reclamation activities accomplished and underway which are supported by the Fund together with recommendations as to future uses of the Fund.

193 Section 408. Transfer of Funds

193 This section authorizes the Secretary to transfer funds to other appropriate Federal agencies in order to carry out the reclamation activities authorized by this title.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE V CONTROL OF ENVIRONMENTAL IMPACTS OF SURFACE MINING

193 Section 501. Environmental Protection Standards

193 This section grants the Secretary of Interior the authority necessary to promulgate regulations covering the full surface mining and reclamation control programs both state and federal established in the Act within 180 days after the date of enactment. Public review and public hearings are provided during this process and the Secretary must obtain written concurrence of the Administrator of the Environmental Protection Agency with respect to those regulations promulgated which relate to Federal air and water quality laws.

193 Section 502. Initial Regulatory Procedures

193 Since the Federal environmental protection standards and other provisions of the Act pertaining to coal surface mining operations will not come into full force until 34 months or more after the date of enactment of the Act, this section presents an initial regulatory program providing environmental protection standards for the most critical and damaging activities of surface mining with respect to environmental impacts and the health or safety of the public. The initial regulatory program also provides a transitional step toward the full-scale regulatory program, with which it will be integrated. In essence, the initial regulatory program consists of:

193 (a) a set of environmental protection standards;

193 (b) procedural requirements with respect to submitting permit applications;

193 (c) Federal enforcement and funding capable of backing up the States in their implementation of the initial program; and

193 (d) basic elements of public disclosure provisions contained in the bill.

193 Environmental protection standards incorporated into the initial regulatory program will require conformance with permanent environmental protection standards relating to:

194 (1) restoration of affected land to capability of uses higher or better than prior to mining;

194 (2) restoration of the mined site to its approximate original contour;

194 (3) separation and replacement of topsoil;

194 (4) minimizing the disturbance to the prevailing hydrologic balance on and off the mine site;

194 (5) establishing a permanent vegetative cover;

194 (6) special provisions relating to reclamation of mined areas on steep slopes; and

194 (7) placing mine waste banks and impoundments under supervision of the Army Corps of Engineers.

194 Variances to the standard for restoration of the approximate original contour are allowed in certain cases.

194 On and after the date of enactment of the Act, all new coal surface mining operations must comply and all new permits required from State regulatory authorities must contain terms requiring compliance with the initial environmental protection standards. Existing operations have 135 days from enactment within which to comply during which time the State regulatory authorities must amend existing permits. Operators who expect to surface mine for coal after a State program has been approved pursuant to section 503, must file an application for a permit not later than 20 months from the date of enactment which must be in full compliance with the Act.

194 In recognition of the possibility that unforeseen delays may occur in the transition from the initial regulatory program to the approved State or Federal program, the section provides that an operator with a valid permit may continue to operate beyond the date of expiration of his permit, while awaiting administrative action on his application for a new permit during the period prior to approval or disapproval of a State program and thereafter. Existing operations on State lands may continue coal surface mining after disapproval of a State program if they comply with the environmental protection standards.

194 Within one hundred and thirty-five days after the date of enactment, the Secretary of the Interior is required to issue rules and regulations for implementing the Federal enforcement program, which will remain in effect in each state where there is surface coal mining until a state or federal program has been approved. The Secretary, who is empowered to draw on personnel of other Federal agencies for his inspection force, must provide on Federal

inspection of each mine site every three months on a random basis. He must also inspect any operation found to be in violation of the environmental protection standards during two consecutive State inspections, and must take necessary enforcement actions.

194 The section assures citizens access at centrally located Federal offices to all inspection reports submitted by State regulatory agencies, and enables citizens to provide the Secretary with information which could lead him to believe that environmental standards are not being enforced. This information must trigger Federal inspection of the operation in question, with the complainant being given the opportunity of accompanying the Federal inspector onto this site.

195 Section 503. State Programs

195 In order for any State to assume its primary role in administering surface mining regulation, this section requires submission to the Secretary of Interior, within 18 months after the passage of the Act, of a State program which demonstrates that the State has legal, financial, and administrative capability for carrying out the provisions of the Act.

195 The State program must specifically show that the State has a law providing for the regulation of surface mining and reclamation in accordance with all provisions of the Act and subsequent regulations. The State program must provide for sanctions or penalties for all violations of State laws, regulations, or conditions of permits concerning surface mining, must meet the minimum requirements of this Act, must provide sufficient administrative and technical personnel with funding to fully implement and enforce provisions of this Act, must show that a process for designating areas unsuitable for surface coal mining has been established and that a process exists for coordinating review of any mine permit with any other Federal or State permit issued under this Act.

195 The Secretary of the Interior is directed to approve or disapprove each State program in whole or in part within 6 months after submission. Prior to such decision he must hold at least one public hearing within the State on the program, disclose views of all Federal agencies having special expertise pertinent to the proposed State program, obtain the written concurrence of the Administrator of the Environmental Protection Agency for those aspects of the State program relating to federal air and water quality laws.

195 If the Secretary disapproves a State program in whole or in part, the State shall have sixty days to resubmit a revised State program or appropriate portion thereof. The Secretary must approve or disapprove a resubmitted State program within 60 days of its resubmittal.

195 Where a State is unable to prepare its program because of a court injunction, its eligibility for financial assistance under the Act is not affected, and interim regulatory provisions will remain in force during the period of injunction.

195 Section 504. Federal Programs

195 This section grants authority to the Secretary to establish a Federal program for the permanent regulation of surface mining in any State which fails

to: (1) obtain complete approval of its program, or (2) resubmit its program if

disapproved, or (3) adequately enforce, maintain, or implement this program once

approved. Authority is also granted the Secretary to provide Federal enforcement of any or all parts of the approved State program on any or all mines pursuant to the enforcement authority in Section 521 of the Act.

195 Where an act of the State legislature is required extension of six months beyond the 18 month period for submission of program may be granted. Permits issued under an approved State program shall be valid but reviewable under a Federal program and vice versa. Implementation of a Federal program does not preclude the State from resubmitting its program for approval at any time.

196 Section 505. State Laws

196 This section stipulates that existing State laws and regulations shall

remain in effect unless inconsistent with provisions of the Act. Any provision

of State law or program which provides more stringent environmental protection

from surface coal mining than do the provisions of this Act is not be to construed as inconsistent with this Act. This provides the Secretary of Interior with the legal basis to approve State regulatory programs with more stringent controls. The right of any person to fully protect his interest in water resources as affected by the surface coal mining operation is also protected.

196 Section 506. Permits

196 This section stipulates that after six months from the Federal approval

of a State program or the implementation of a Federal program in a State, no person shall conduct surface coal mining unless a permit is obtained in full compliance with this Act except where administrative delay has prevented issuance of a permit for an operation existing on the date of enactment which is

in good faith compliance with all other requirements. The duration of such permit is not to exceed five years, and is nontransferable, except to a successor in interest who applies within 30 days after succeeding to such interest and is able to obtain a bond.

196 A permit will automatically terminate if no surface coal mining operations or reclamation commences within 3 years. Renewal of a permit is

provided for, but may not exceed the original permit period nor include areas beyond the boundaries of the original permit.

196 Section 507. Application Requirements

196 This section lists basic data necessary for development of the mining reclamation plan which must be submitted along with the permit application. The information required here is a key element of the operator's affirmative demonstration that the environmental protection provisions of the Act can be met as stipulated in section 510 and includes:

196 (1) identification of all parties, corporations, and officials involved to allow identification of parties ultimately responsible for and most directly affected by the operation as well as to cross-check the mining application with other applications in the same State and other States;

196 (2) description of method of mining, starting dates, location, termination dates and schedule of activities;

196 (3) summary listing of past mining and reclamation permits including those suspended or revoked;

196 (4) maps and data sufficient to fully describe the surface and subsurface features of the area to be mined, the chemical and physical properties and geologic setting, so that basic information is available to the regulatory authority in order to determine the impact of the mining operation and to be able to replicate the conclusions reached by the operator with respect to the environmental protection measures proposed in the mining and reclamation plan. Such information shall also include all relevant legal documents, test borings, keyed to the appropriate maps (with certain data regarding the coal seam to be held confidential); and

197 (5) a full description of the on-and off-site hydrologic consequences of mining and reclamation, including the impact on the quality and quantity of water in ground and surface water systems.

197 The applicant must file a complete copy of the application with the local court house of the county in which mining is proposed at the time of submission to the State, so that this application will be available for public review. A reclamation plan must be filed with the permit application.

197 The application to the regulatory authority is to be accompanied by a fee sufficient to cover the costs to the regulatory authority of administering and enforcing the permit and by a certificate of insurance indicating the operator has sufficient liability protection for on-and off-site personal injury

and property damage.

197 Section 508. Reclamation Plan Requirements

197 This section specifies that a mining and reclamation plan be part of the application and include, among other items, the following major points:

197 (1) a plan for the entire mining operation for the life of the mine including identification of the subareas anticipated to be included on a permit by permit basis, their sequencing, and mining and reclamation activities;

197 (2) an identification and description of the land use setting of the area to be affected prior to mining and its proposed postmining land use, its configuration, drainage plans, including specific evidence that the proposed land use is reasonable with respect to its practicality and if additional resources are necessary that they will be available on a timely and adequate basis; and

197 (3) a detailed description of all schedules and methods for complying with environmental standards.

197 Section 509. Performance Bond

197 With respect to posting a permit bond, this section includes specific requirements that:

197 (1) the bond is to be filed with the regulatory authority after the mining and reclamation plan is approved but before the permit to mine is issued;

197 (2) the bond is to be payable to the regulatory authority and conditioned upon the operator's meeting all applicable requirements under the Act;

197 (3) the amount is to be sufficient to assure that all reclamation will be accomplished by a third party in the event of default or forfeiture by the mining operator, and it is not to be less than \$10,000;

197 (4) the bond shall cover part or all of the area under permit, and must cover that land on which the operator is conducting coal surface mining operations. If the bond is for only part of the permit area, it must be adjusted and increased as new portions of the permit area are disturbed or affected;

197 (5) liability under bond is for the duration of the surface mining and reclamation operation, including the full period of the operator's responsibility for revegetation requirements; and

197 (6) the bond can be (1) a surety issued by a company licensed in the State of operation, (2) cash, (3) negotiable bonds of the U.S. Government or such State, or (4) negotiable certificates of deposit in any bank. Cash deposit

or the market value of negotiable bonds or certificates shall be equal to or exceed the amount of the bond required.

198 The amounts of the initial and subsequent bonds are to be determined by the regulatory authority. In all cases the amount must be sufficient to cover the full cost of reclamation.

198 The section also establishes guidelines by which cash or securities deposited for bonding purposes can be placed under responsible financial management on behalf of the operator in order to protect their value and utility to both the regulatory authority and the operator.

198 Section 510. Permit Approval or Denial

198 This section establishes general and specific criteria which must be met if a mining permit or permit renewal is to be approved. Generally, in order to approve a mining permit application, the regulatory authority must find in writing that: (a) all requirements of this Act have been met; (b) there is assurance that reclamation can be achieved; and (c) the proposed area is not included in an area designated as unsuitable for surface coal mining.

198 Specifically, the regulatory authority cannot approve a mining permit application and issue a permit unless the permit application affirmatively demonstrates that, and the regulatory authority makes specific written findings to the effect that:

198 (1) reclamation of land to be affected will be done in accordance with the Act;

198 (2) assessment of probable cumulative impacts of all anticipated mining on the area and design of the operation been made so as to prevent irreparable offsite adverse impacts;

198 (3) proposed mining area is not in an area designated unsuitable for surface coal mining or in an area under study for a designation, unless there has been substantial legal and financial commitment prior to date of enactment;

198 (4) alluvial valley floors will be protected from substantial adverse effects;

198 (5) the impacts of the mining operation on the hydrologic balance on and off the permit area are minimized; and

198 (6) the operator is not currently in violation of the Act or other Federal environmental laws and regulations.

198 Section 511. Revision of Permits

198 This section establishes a process for the revision of a permit during its term as well as review by either a State regulatory authority or the Secretary of existing permits issued prior to the assumption of regulatory jurisdiction by the current regulatory authority.

198 An operator may submit an application for a permit revision to the regulatory authority and within a period of time established by that agency, the application shall be approved or disapproved. The regulatory authority is to establish guidelines for procedures which may vary depending upon the scale and extent of the proposed revision. In all events, however, the process will be subject to the Act's notice and hearing requirements and a proposed revision which would extend the area covered by existing permit (other than incidental boundary revision) is to be made through the normal permit application process.

199 The regulatory authority may require revision of a permit during its term provided that it follows the State or Federal program's notice and hearing requirements.

199 No transfer, assignment or sale of rights under a permit may be made without the written approval of the regulatory authority.

199 Section 512. Coal Exploration Permits

199 This section requires State and Federal programs to establish procedures for issuing permits where coal exploration operations will substantially disturb the natural land surface. In addition to the permit fee, the permit application will include certain data relating to location, description of area, planned activities, ownership and reclamation program.

199 Section 513. Public Notice and Public Hearings

199 This section assigns the responsibility for giving public notice, holding hearings and submitting comments to the mining permit applicant, the regulatory authority, and interested third parties.

199 The applicant is required to -

199 (a) place an advertisement identifying the ownership, precise location, and boundaries of the land to be affected in a local newspaper of general circulation in the locality of the proposed new surface mine. This advertisement must appear at least once a week for four consecutive weeks;

199 (b) submit, along with the mining permit application, a copy of this advertisement; and

199 (c) assume, if a public hearing is held, the burden of proving that the application is in compliance with State and Federal laws (including provisions of this Act).

199 The regulatory authority must:

199 (a) receive, and make available to the public comments on the application from local agencies, in the same manner and at the same location as are copies of the mining application;

199 (b) provide for public hearings upon request and place notice of such hearings, including date, time, and location, in a newspaper of general circulation in the locality at least once a week for three consecutive weeks prior to the scheduled hearing date;

199 (c) respond in writing to written objections on the mining application received from any party not less than ten days prior to any proposed hearing. Such response shall include (1) the regulatory authority's preliminary assessment of the mining application; (2) proposals as to the terms and conditions of the permit to mine; (3) the amount of bond to be set for the operation; and (4) answers to material factual questions presented in the written objections; and

199 (d) notify various local governmental bodies of the intention to surface mine and allow opportunity for assessment by these agencies.

199 For the purpose of such hearings, the regulatory authority may administer oaths; subpoena witnesses and written or printed materials; compel attendance of witnesses or production of materials; take evidence, including site inspection of the land to be affected or other mining operations carried on by the applicant; and keep a complete record of each public hearing.

200 Section 514. Decisions of the Regulatory Authority and Appeals

200 Under the administrative procedure established in this section, if hearings on the mining application have been held within 30 days after their completion, the regulatory authority shall provide to the applicant and all parties to the administrative proceeding its written findings granting or denying the permit in whole or in part and stating its reasons.

200 In instances where no hearings have been held, the regulatory authority is to notify the applicant in writing of its decision. If the application has been denied in whole or in part, specific reasons for denial must be included. This response must be given within a reasonable time after submission of the permit application.

200 Approval of the application results in the issuance of the mining

permit. If, however, the permit is denied, then: (a) within 30 days of denial the applicant may request a hearing on the disapproval; (b) upon such a request the regulatory authority will hold the hearing within 30 days, notifying all interested parties and following the procedure outlined above.

200 Any person who has participated in the administrative proceeding shall have the right of judicial review by the appropriate court in accordance with State and Federal law.

200 Section 515. Environmental Protection Performance Standards

200 Environmental protection performance standards set forth in this section are the heart of the bill. The operator will be required to:

200 (a) maximize utilization and conservation of the coal being mined;

200 (b) restore the land to a condition at least fully capable of supporting uses it was able to support prior to mining;

200 (c) protect off-site areas from damage occurring during mining and reclamation operations;

200 (d) limit the amount of area disturbed at any one time and keep current with the reclamation schedule;

200 (e) separate topsoil and protect it from deterioration, or segregate and protect a more suitable subsoil if available;

200 (f) stabilize and protect all surface areas including spoil piles to control air and water pollution;

200 (g) separate and promptly bury toxic materials;

200 (h) backfill, compact and grade to restore the approximate original contour with all highwalls, spoil piles and depressions eliminated, unless the operator can demonstrate that waste material from the entire permit area is insufficient or excessive in which case less stringent regrading requirements are allowable;

200 (i) create impoundments under the approved reclamation plan, only if such factors as size, stability, water quality and level, access, and effect on adjacent landowners are acceptable;

200 (j) refrain from constructing roads in or near streams or drainage channels;

200 (k) replace topsoil or best available subsoil on regraded areas;

200 (l) establish on the regraded areas a diverse vegetative cover native to the area and capable of self-regeneration, with introduced species allowable in accordance with approved postmining land use;

200 (m) assume responsibility for successful revegetation for five years after the last year of augmented seeding, fertilizing, irrigation or other work to assure adequate survival and plant density, except in regions having an annual average precipitation of 26 inches or less when the operator's period of responsibility is extended to ten years;

201 (n) minimize disturbances to the hydrologic balance onsite and on associated offsite areas by avoiding toxic drainage, preventing offsite flows of suspended solids by using the best available technology, restoring recharge capabilities of minesites, preserving alluvial valley floors in arid and semi-arid areas, and avoiding channel deepening and enlargement in operations discharging water from mines;

201 (o) prevent offsite damages and immediately correct such conditions;

201 (p) construct water retention facilities by incorporating the best available engineering practices in order to achieve necessary stability and safety to protect the health or safety of the public and at a minimum be compatible with the design, engineering and construction standards used for structures built under PL 83-566, and regarding mine waste impoundments, place the construction, maintenance and abandonment of such impoundments under supervision of the Army Corps of Engineers;

201 (q) stabilize and revegetate all mine wastes deposited on the surface;

201 (r) in using explosives, give advance written notice to local governments and adjacent affected residents and limit type and equipment and other factors so as to prevent injury to persons, property, underground mines and ground or surface waters;

201 (s) refrain from surface coal mining within 500 feet of an underground mine unless mining through an abandoned mine;

201 (t) fill all auger holes; and

201 (u) construct access roads, haul roads, or haulageways with appropriate limits applied to grade, width, surface materials, spacing, and size of culverts, and avoid stream beds and channels.

201 In addition, this section sets forth certain other performance standards designed to protect the environment, and applying only to steep slope surface coal mining (which term is not to include mining operations on flat or gently

rolling terrain which will leave a plain or predominantly flat area) as follows:

201 (1) spoil or waste materials may not be placed on the slope below the bench or cut, except where temporarily necessary to gain access to the coal seam and then only under specified conditions to prevent slides, erosion and water pollution;

201 (2) the site must be returned to the approximate original contour by covering highwalls completely and limiting disturbance above the highwall; and

201 (3) "steep slope" is defined as any slope above 20 degrees or a lesser slope as determined by the regulatory authority after due consideration of the soil, climate and other environmental characteristics of a region or State;

201 Variances may be granted from performance standards which require the restoration of the approximate original contour, the covering of all highwalls, the prohibition against placement of spoil on steep slopes, and liability for establishing revegetation, only in cases of mountaintop removal where industrial, commercial, residential, or public facility development is proposed for post-mining land use and where the regulatory authority, after public notice and public hearing, issues a written finding that the proposed use is a higher or better economic or public use which can only be obtained if one or more of the variances are granted. However, no such variance is to be effective for more than three years, unless substantial progress toward completion of the development is underway according to the schedule shown in the approved mining and reclamation plan.

202 Section 516. Surface Effects of Underground Mining Operations

202 Certain environmental protection standards for surface coal mining operations also apply to underground mines. In this section, the Secretary is required to incorporate in his regulations the following key provisions concerning the control of surface effects from underground mining:

202 (1) Underground mining is to be conducted in such a way as to assure appropriate permanent support to prevent surface subsidence of land, except in those instances where the mining technology approved by the regulatory authority at the outset results in planned subsidence.

202 (2) Portals, entryways, shafts, exploratory holes or accidental breakthroughs between the surface and underground mine workings must be sealed when they are no longer needed for the conduct of the mining operation.

202 Environmental standards for minimizing disturbance to the hydrologic balance at the mine site and for surface disposal of mine wastes are the same as those discussed in the previous section (Section 515).

202 After surface operations or other mining impacts are complete at a particular site, the area must be regraded and a diverse and permanent vegetative cover established.

202 In order to prevent the creation of additional subsidence hazards from underground mining in developing areas, permissive authority is provided to the regulatory agency to prohibit underground coal mining in urbanized areas, cities, towns, and communities and under and adjacent to industrial buildings, major impoundments, or permanent streams.

202 Provisions of the Act and regulations pertaining to State and Federal programs, permits, bonds, inspection and enforcement, public review and administrative and judicial review are applicable with such modifications to the application requirements, permit approval and denial procedures and bond requirements, permit approval and Secretary in order to accommodate differences between surface and underground mines.

202 Section 517. Inspections and Monitoring

202 This section instructs the regulatory authority to carry out inspection of each mining operation according to the following criteria:

202 (1) irregular and averaging not less than one per month for each operation;

202 (2) occurring without prior notice to the operator;

202 (3) including filing of reports adequate to insure the enforcement of the requirements under this Act; and

202 (4) rotating inspectors at adequate intervals.

202 After each inspection, the inspector shall notify the operator and the regulatory authority of each violation of any requirement of the Act. Copies of all inspection reports are to be made available to the public at central locations and at Washington, D.C.

203 For the purpose of administering and enforcing any approved State or Federal program under this Act, every permittee must establish and maintain appropriate records, make monthly reports to the regulatory authority, install, use and maintain any necessary monitoring equipment or method, evaluate the results of such monitoring in accordance with the procedures established by the

regulatory authority, and provide such other information relative to surface mining as the regulatory authority deems reasonable and necessary.

203 Special additional monitoring and data analysis are specified for those mining and reclamation operations which remove or disturb strata that serve as aquifers which significantly insure the hydrologic balance or water use either on or off the mining site. Access to the mine site, monitoring equipment, areas of monitoring, and records of such monitoring and analysis must be provided promptly to authorized representatives of the regulatory authority without advance notice and upon request.

203 A clearly visible sign must be maintained at the mine entrance.

203 Section 518. Penalties

203 Any permittee who violates any permit condition or who violates any other provisions of this title may be assessed a civil penalty by the Secretary not to exceed \$5,000 for each violation according to this section.

203 A civil penalty shall be assessed only after an opportunity for a public hearing has been afforded the person charged with a violation.

203 Any person who willfully and knowingly violates a condition of a permit, or fails or refuses to comply with an order issued by the Secretary under this Act, shall be fined not more than \$1 0,000, or imprisoned for not longer than one year, or both.

203 Any person who knowingly makes a false statement, representation, or certification with respect to any application, record, report, plan or other document filed or required to be maintained under this Act shall be fined not more than \$1 0,000, or imprisoned for not longer than one year, or both.

203 Section 519. Release of Performance Bonds or Deposits

203 Under this section, the release of the operator from financial obligations under bond may be done in two stages depending on the amount of reclamation accomplished.

203 The operator may request that up to 60% of the bond for any area may be released after completion of backfilling, regrading, and drainage control for a bonded area in accordance with the approved mining and reclamation plan. The decision is to be made based on the regulatory authority's inspection and assessment of: (a) conformance with the requirements of the Act; and (b) an assessment of the significance of residual problems of surface and ground water pollution, and the cost of completing reclamation and abating pollution.

203 The second bond release step is after completion of the revegetation requirement including the operator's responsibility for the time-period specified in section 515. On request for such final bond release by the operator, the regulatory authority must inspect and evaluate the reclamation work within a reasonable time prior to responding. Denial of the request requires the regulatory authority to set forth reasons for unacceptability and recommend actions for correcting the deficiencies. The amount of bond retained must be sufficient to cover the cost of a third party re-establishing vegetation for the period of liability.

204 For any bond release request, public notice must be given on a substantive basis equivalent to public notice for mining applications. The advertisement in newspapers is for five successive days. In addition, letters substantively stating the release request must be sent to public agencies or local government bodies which are potentially affected by release of the bond and operator's responsibility for the work covered by the bond.

204 Provisions for written comments, objections, and requests for hearings by interested parties and government agencies or bodies and the responsibility of the regulatory authority to answer in writing and hold such hearings are similar to those regarding the application for mining permits.

204 Section 520. Citizen Suits

204 This section provides standing to any person to commence a civil action in a U.S. district court against (1) any person alleged to be in violation of any provision of this Act or (2) a regulatory authority where there is a failure to perform any act or duty under this Act excepting discretionary actions, including the Secretary.

204 Any resident of the United States injured in any manner through failure of any operator to comply with the provisions of this Act, regulations issued thereto, orders, permits issued by the Secretary, may bring action for damages in U.S. district court.

204 Citizens suits in some instances may not be commenced before the or, if the Secretary or State has commenced and is diligently prosecuting a civil or criminal action to require compliance with a mining permit, orders, or provisions of the Act. However, in such instances, the person may intervene as a matter of right.

204 The court in issuing any final order may award litigation (including reasonable attorney and expert witness fees) to any party whenever appropriate.

The court may also require filing a bond or equivalent security if request for temporary restraining orders or injunctions is sought.

204 Section 521.Enforcement

204 The Federal enforcement system contained in this section while predicated upon the States taking the lead with respect to program enforcement, at the same time provides sufficient Federal backup to reinforce and strengthen State regulation as necessary. Federal standards are to be enforced by the Secretary on a mine-by-mine basis for all or part of the State as necessary without a finding that the State regulatory program should be superceded by a Federal permit and enforcement program.

204 The provisions for Federal enforcement have a number of specific characteristics.

204 (1) The Secretary may receive information with respect to violations of provisions of this Act from any source, such as State inspection reports filed with the Secretary, or information from interested citizens.

205 (2) Upon receiving such information, the Secretary must notify the State of such violations and within ten days the State must take action to have the violations corrected. If this does not occur, the Secretary shall order Federal inspection of the operation. If the inspection is based on data from a third party, that party shall be afforded the opportunity to accompany the Federal inspector.

205 (3) If on the basis of inspection, the Secretary determines that a violation has occurred, which creates an imminent danger to public health or safety or can cause significant imminent irreparable environmental harm, he shall immediately order cessation of the operation or a relevant portion thereof, until the violation is abated or the order modified by the Secretary.

205 In the case of a violation which does not cause such imminent danger, the Secretary must issue a notice setting a period of no more than 90 days for abatement of the violation. A pattern of violations caused by unwarranted or willful failure to comply with provisions of the Act requires the Secretary to order the permittee to show cause why his permit should not be suspended or revoked.

205 All orders issued by the Secretary take effect immediately and all orders shall be specific and substantive with respect to the nature of the violation, the remedial action required, time for compliance and seriousness of the violation.

205 If violations occurring under an approved State program appear to result from the failure of the State to enforce the program effectively, the Secretary shall so inform the State. If the problems extend beyond thirty days, the Secretary shall give public notice of his finding with respect to the State program. After public notice, and until the State satisfies the Secretary that it will enforce any permit condition required by this Act, shall issue new or renewed permits for surface mining operations, and issue other orders as necessary for compliance with the provisions of this Act. Upon request of the Secretary, the Attorney General of the U.S. may enforce such Secretarial orders for various actions in a district court of the U.S.

205 The Secretary may request the Attorney General to apply for injunctive relief whenever a permittee violates an order of the Secretary, hinders implementation of the Act, refuses to permit inspection of the mine, or refuses to furnish information.

205 Section 522. Designating Areas Unsuitable for Surface Coal Mining

205 As a condition of having a State program approved by the Secretary of Interior, this section requires States to establish a planning process enabling decisions on the unsuitability of lands for all or any type of surface coal mining.

205 Lands must be so designated if reclamation as required by this Act is not feasible.

205 Lands may be so designated if: (1) Surface coal mining would be incompatible with Federal, State, or local plans to achieve essential government objectives; (2) the area is a fragile or historic land area; (3) the area is in "natural hazard lands" - those lands where development could endanger life and property, such as unstable geological areas; (4) the area is in "renewable resource lands" - those lands where uncontrolled or incompatible development could result in loss or reduction of long-range productivity, and could include watershed lands, aquifer recharge areas, significant agricultural or grazing areas. In complying with this section, a State must have established an appropriate agency, data base and inventory system, and methods for implementing land use planning decisions and affording adequate public review.

206 The Secretary of Interior is to review Federal lands and make some determinations based on the standards set forth above. Any person having an interest which may be adversely affected may petition either the State or Federal Government to have an area so designated based on the above criteria or to have a designation terminated. Public hearings on any area to be so

designated must be held.

206 Land upon which surface coal mining operations are being conducted on the date of enactment, or for which there is substantial legal and financial commitment prior to September 1, 1974 are not to be so designated. Subject to valid existing rights and excepting operations existing on date of enactment, no surface coal mining operations shall be permitted:

206 (1) if located in the National Park System, National Wilderness System, National Wildlife Refuge System, or Wild and Scenic Rivers System;

206 (2) on any Federal lands within the boundaries of any national forest;

206 (3) which will adversely affect lands and waters used by the public unless appropriate screening is approved;

206 (4) within one hundred feet of any public road, (except at the junctions of haulage roads); and

206 (5) within three hundred feet of any occupied building or public facility.

206 In addition, prior to the designation of any area as unsuitable for mining, the regulatory authority must prepare from existing and available information a statement on the potential coal resources in the area affected, the overall demand for coal, and the impact of the designation on the environment, the area's economy and the supply of coal.

206 Section 523. Federal Lands

206 This section requires the Secretary of Interior to implement Federal lands program regulating coal surface mining operations which at a minimum meets all the requirements of this Act.

206 Within 6 months after enactment the Secretary shall promulgate and implement a Federal lands program and all provisions of this Act are to be incorporated by reference or otherwise in any Federal lease, permit, contract, issued by the Secretary which may involve surface coal mining and reclamation operations or surface impacts of underground coal mine operations. With regard to coal owned by the United States, the Secretary shall develop a program to assure that no class of purchasers of mined coal will be unreasonably denied purchase of such coal.

206 The Secretary may arrange with a State to have the checkerboard-Federal and non-Federal lands jointly managed under a State mining regulatory program or accept such authority from a State for non-Federal lands. Such agreements must

at a minimum include all requirements of this Act.

207 This section does not authorize the Secretary to delegate to any State or any authority jurisdiction over mining activities taking place on Federal or Indian lands or to delegate to the States trustee responsibilities toward Indians and Indian lands.

207 Section 524. Public Agencies, Public Utilities and Public Corporations

207 This section requires all agencies, units or instrumentalities of Federal, State or local government which propose to engage in surface coal mining operations subject to the requirements of the Act to comply with provisions of Title V.

207 Section 525. Review by the Secretary

207 This section provides that any permittee who has had his permit revoked or suspended, and any person adversely affected by such revocation or suspension, may apply to the Secretary for review of such revocation or suspension within 30 days after such revocation or suspension upon receipt of an application the Secretary shall conduct an appropriate investigation, including public hearings.

207 Section 526. Judicial Review

207 Any decision of the Secretary approving or disapproving a State program under section 503 or preparing and promulgating a Federal program under section 504 may be reviewed in an appropriate United States Court of Appeals by a petition filed within 60 days of such decision by a person who participated in the administrative proceedings and who was aggrieved by such decision according to this section.

207 All other decisions or orders of the Secretary shall be reviewable in the appropriate United States District Court for the locality in which the surface coal mining operation is located. Commencement of a proceeding under this section shall not operate as a stay of action by the Secretary unless so ordered by the court.

207 Section 527. Special Bituminous Coal Mines

207 This section authorizes the regulatory authority to issue separate regulations for special bituminous coal mines located west of the one hundredth meridian west longitude and meeting various criteria and existing on the date of enactment. Such alternative regulations shall pertain only to the standards

governing on-site handling of spoil, elimination of depressions, creation of impoundments and regarding to approximate original contour, shall specify that remaining highwalls are to be stable, and that all other environmental protection standards in the Act shall apply along with the other provisions.

207 Section 528. Surface Mining Operations Not Subject to this Act

207 This section removes application of the provisions of this Act from situations where a landowner extracts coal for non-commercial use from his own land, and where commercial coal mining operations affect two acres or less.

207 Section 529. Anthracite Coal Mines

207 This section requires the Secretary to issue separate regulations for anthracite coal surface mines, adopting the State environmental protection provisions applying to anthracite surface coal mines and surface effects of underground coal mines. With the exception of bond limits and periods of revegetation liability, all other provisions of the Act shall be reflected in the Secretary's regulations.

208 The Secretary is to report to Congress biennially, beginning on December 31, 1975, concerning the effectiveness of State anthracite regulatory programs operating in conjunction with the Act, with recommendations for program changes.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE VI DESIGNATION OF LANDS UNSUITABLE FOR NONCOAL MINING

208 Section 601. Designation Procedures

208 Under this title, for Federal lands within a State the Secretary may, and if requested by a Governor, shall review any such lands to determine if they are unsuitable for mining or minerals other than coal. Federal lands may be so designated if they are -

208 (1) predominantly urban or suburban land and the mineral estate remains in the public domain; or

208 (2) lands used primarily for residential purposes where mining could result in adverse impacts; and

208 (3) lands where such mining operations could result in irreversible damage to cultural, scientific or esthetic values or natural systems, or endanger human life and property.

208 Any person shall have the right to petition the Secretary to seek exclusion of an area from mining. Such person shall obtain a hearing within a reasonable time. The Secretary may withdraw the land to be reviewed temporarily, not to exceed 2 years, from mineral entry or leasing.

208 No lands may be designated unsuitable for mining operations under this section if there are mining operations being conducted thereon on the date of enactment of this Act.

208 Prior to any designation under this section the Secretary shall prepare a statement on -

208 (1) the potential mineral resources of the lands in question;

208 (2) the demand for such minerals; and

208 (3) impact of the designation or failure to designate on the environment, economy, and supply of such minerals.

208 Any person with a valid legal interest who participated in proceedings under this section, and who is aggrieved by a decision of the Secretary under this section, shall have the right to appeal to the appropriate United States District Court.

SECTION-BY-SECTION ANALYSIS OF H.R. 25 TITLE VII ADMINISTRATIVE AND GENERAL PROVISIONS

208 Section 701. Definitions

208 The following terms are defined in this section: Secretary; State; Office; commerce; surface coal mining operations; surface coal mining and reclamation operations; lands within any State; Federal lands; Indian lands; Indian Tribe; State program; Federal program; Federal lands program; reclamation plan; State regulatory authority; regulatory authority; person; permit; permit applicant; permittee; fund; approximate original contour; other minerals; operator; permit area; unwarranted failure to comply; alluvial valley floors; and imminent danger to the health or safety of the public.

209 Section 702. Other Federal Laws

209 Section 702 disclaims any conflict between the Act or any State regulations approved pursuant to it, and the Mining and Minerals Policy Act, the National Environmental Policy Act, Mine Health and Safety Act, the Federal Water Pollution Control Act, the Clean Air Act as amended, the Solid Waste Disposal Act, the Refuse Act, and the Fish and Wildlife Coordination Act.

209 This section also authorizes the Secretary and other Federal agency heads to modify licenses, leases, contracts as appropriate to regulate surface coal mining.

209 Section 703. Employee Protection

209 Section 703 makes unlawful the firing or discrimination against any

person who has filed a suit or testified under provisions of the Act, and gives such person recourse to review by the Secretary. After opportunity for public hearing, the Secretary is to make findings of fact and issue orders where a violation has occurred, for reinstatement of the employee with compensation. The Secretary's orders are subject to judicial review. The applicant in a successful pleading is to be reimbursed for his costs, including attorney fees. The Secretary is required to evaluate the effects of enforcement of the Act on employment, to investigate complaints, and hold public hearings concerning alleged discharges and layoffs. His subsequent report and any recommendations are to be made public.

209 Section 704. Protection of Government Employees

209 This section amends the United States Code in compliance with authority granted the Secretary of the Interior in section 703.

209 Section 705. Grants to the States

209 This section authorizes the Secretary to cooperate with and to make annual grants to States for administering State programs under the Act, disbursed at the rate of 80% of total costs the first year, 60% the second year, and 40% during the third and fourth years. Technical assistance, training, instructional material and a continuing inventory of information for evaluating the effectiveness of State programs are among the types of assistance to be rendered by the Secretary. All Federal departments and agencies having relevant data are to assist as well.

209 Section 706. Annual Report

209 This section requires the Secretary to submit an annual report on Federal and State activities pursuant to the Act and recommendations for appropriate administrative or legislative action.

209 Section 707. Severability

209 Section 707 establishes that the application of the remainder of the Act is not to be affected by invalidation of any of its parts.

209 Section 708. Alaskan Surface Coal Mine Study

209 This section instructs the Secretary to suspend application of provisions of the Act to surface coal mining operations in Alaska up to three years from the date of enactment if, in his judgment, it is necessary to insure continued operation of such mines. In such cases, public notice and public hearings are prerequisites. Only mines existing on the date of enactment are eligible for such suspension, and eligibility is stipulated as an operation

which produced coal during the calendar year preceding date of enactment.
New
operations in Alaska must comply with the interim standards of the Act.

210 An in-depth study of surface mining conditions in Alaska is to be initiated by the Secretary to determine which, if any, provisions of the Act should be modified as applied to Alaska surface coal mining. Within two years from date of enactment, the Secretary is to report back to Congress with his recommendations.

210 Section 709. Study of Reclamation Standards for Surface Mining of Other Minerals

210 This section mandates a study to be submitted to Congress and the President within 18 months from the date of enactment concerning surface and open pit mining and reclamation technologies for minerals other than coal.

210 Principal emphasis is given to oil shale and tar sands which occur primarily in the States of Utah, Wyoming, and Colorado. The large fuel reserve of these resources and their potential role in energy development in the coming years, along with the early indications that significant environmental impacts could occur with their development, mandate immediate attention in a study to identify what additional reclamation standards are required.

210 Section 710. Indian Lands

210 This section requires a study of the regulation of surface mining on Indian lands by the Secretary in consultation with Indian tribes, to be submitted not later than January 1, 1976 to Congress.

210 All coal surface mines on Indian lands shall comply with the interim environmental protection standards of the Act within 135 days after enactment. Within 30 months of enactment the permanent environmental protection standards are to be incorporated by the Secretary into all existing and new leases. Additional requirements as set forth by the Indian tribes are to be made a further condition of the leases issued by the Secretary.

210 \$7 00,000 will be earmarked for assisting the Indian tribes to participate in the study.

210 Section 711. Experimental Practices

210 This section allows the regulatory authority to authorize deviations from the required environmental protection standard of sections 515 and 516 on an experimental basis, so long as the level of protection afforded environment and public is no less than that intended by the standards and so long as the scope of operation is no greater than necessary.

210 Section 712. Authorization of Appropriations

210 This section authorizes appropriations to the Secretary in the following categories:

210 (1) through contract authority to the Secretary of Interior, \$10,000,000 available upon enactment and \$1 0,000,000 for each of the two succeeding years, to implement sections 502, 522, 405(b) (3) and 712, having to do with initial regulatory programs, designating areas unsuitable for surface mining, abandoned mined lands reclamation and Indian lands. This assures the availability of funds upon enactment.

211 (2) \$10,000,000 for the fiscal year ending June 30, 1975, \$2 0,000,000 for each of the two succeeding fiscal years, and \$3 0,000,000 for each fiscal year thereafter, for administrative and other purposes of the Act.

211 Section 713. Research and Demonstration Projects on Alternative Coal Mining Technologies

211 This section authorizes the Secretary to conduct research and training, enter into contracts and make grants to qualified institutions, agencies and persons, in addition to contracting and making grants for demonstration projects and training relating to developing alternative coal mining technologies to reduce surface disturbance, maximize resource recovery and improve health and safety.

211 Section 714. Surface Owner Protection

211 This section applies only to coal owned by the United States under surface to which the rights are owned by a surface owner as defined, where surface mining is contemplated under a lease issued by the Secretary. The written consent of the surface owner is necessary before the Secretary may lease the coal.

211 Surface owner is defined so as to require that a person must not only hold title to the land but also for at least 3 years before granting consent to the surface mining operation, must have his principal place of residence on the land or personally farm or ranch or receive a significant portion of his income from the land. A schedule of compensation to the surface owner is set forth in the section, based on the fair market value of the property and on costs of dislocation, relocation, loss of income and other values.

211 The surface owner is to deal only with the Secretary in granting of withholding his consent. Penalties would be assessed to discourage the making

of "side deals" in order to avoid this requirement.

211 As a further criterion for the leasing of Federal coal, the Secretary is instructed to refrain from leasing such split-ownership coal lands to the maximum extent practicable. Furthermore, the provisions of this section will not become effective until February, 1976. Until that time, the Secretary is not to lease any split-fee coal deposits unless he has possession of a document attesting to the surface owner having given his consent prior to December 3, 1974, to the surface mining of coal.

211 Section 715. Federal Lessee Protection

211 This section concerns surface mining of coal owned by the Federal Government under surface subject to lease or permit, where in the alternative the surface coal mining permit applicant must either obtain the written consent of the lessee or give evidence of having executed a bond to secure payment of damages to the surface estate as determined by the parties involved.

211 Sec. 716. Water Rights

211 This section specifies that no provision of the Act shall be construed as affecting in any way the right of any person to enforce or protect, under applicable State law, his interest in water resources affected by surface coal mining.

MELCHER

RISENHOOVER

SKUBITZ

RUPPE, CLAUSEN, LAGOMARSINO

STEIGER, YOUNG, BAUMAN, SYMMS

KETCHUM

SUPP-VIEW: ADDITIONAL VIEWS OF HON. JOHN MELCHER

Last year the Coal Strip Mine Reclamation Bill passed the House with a provision which I had drafted giving the landowner over federally-owned coal the right to say "yes" or "no" to the strip mining of the federal coal. It did recognize prior agreements made between the landowner and a coal company as a valid and binding contract.

This House-passed provision was unsatisfactory to the Senate conferees and it became a strongly-contested issue between the conferees of the two bodies before final agreement was reached in conference. That conference agreement still retains the right of the landowner over federally-owned coal to say "no" to

strip mining the coal. If the landowner says "yes", or even "maybe", the conference agreement provides a mechanism for determining fair market value for the loss of the use of the land, loss of income and other costs to the landowner, plus a bonus of up to \$100 per acre. The method is cumbersome and vulnerable to inequities if the landowner is not diligent in protecting his rights. However, it is an agreement that was hard to attain in conference and it retains the principle of the landowners' rights being dominant.

I reluctantly accepted this version in the conference committee last year. While I would now very much like to improve on it and simplify it, I believe it is essential to pass a bill quickly in the House. I would hope that the House and Senate conferees can then adopt better language

With that in mind, I have refrained from delaying the committee's actions in this regard, realizing that if there can be improvement it will have to be done with the concurrence of Senate conferees, and that there will be opportunity for this.

JOHN MELCHER.

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RONCALIO

ADDITIONAL VIEWS OF TENO RONCALIO TO H.R. 25

This marks the third year our Committee has devoted its main effort to surface mining legislation. In the 92nd Congress the Mines and Mining Subcommittee, under the aegis of Chairman Ed Edmondson of Oklahoma, reported out and passed a relatively simple bill. It died in the Senate.

In the 93rd Congress, after enduring some of the most ingenious delaying tactics ever devised within or without Jefferson's Manual or Robert's Rules of Order, your Committee reported out S. 425, which passed both Houses only to be pocket vetoed by the President in December 1974.

In January of this year we received a request from the Administration to modify eight points in S. 425 to thus render it acceptable to the President. We have responded by easing language in at least four instances in the hope that it may win his signature and avoid a vetooverride confrontation. Thanks to the genuine hope for compromise on the part of our Colleagues Morris Udall and Patsy Mink, additional adjustments were made in many instances in favor of the industry position, thus giving us a brightening hope that the Administration is

about to decide that it can no longer afford a nation without federal laws to govern the surface mining of coal.

WYOMING

My State of Wyoming is about to have over 21 energy companies move to enlarge plans for surface mining of coal. By company estimates, Wyoming alone can be producing, by strip mining, over 200 million tons of coal per year by 1985. In five short years - in 1980 - Wyoming production may well reach 100 million tons per year. No doubt when coal leasing is resumed on the federal domain in Wyoming and other Western states, these projections will be increased. Approximately 200,000 acres of strippable coal is already under lease on the federal lands in Wyoming.

Wyoming contains 545 billion tons of coal within 6,000 feet of its surface. Of that total, 23.7 billion tons is considered strippable. If the 39 times more deep minable coal than strippable is ever to be put to public use, I believe this legislation must have amendments in the Session to follow that would compel all surface mining companies to go deep for a proportionate share of its tonnage. As an example, any company that surface mines 100,000 tons in Wyoming should be required to deep mine 10,000 tons - without this requirement in the law, we let vast reserves lie dormant at the risk of destroying a limited surface.

Beyond the enormity of the surface mining operations which these figures suggest, we must consider the relatively short time in which this development will take place. We are told that - within 20 to 25 years we must expect this intense strip mining, construction of mine mouth coal fired power plants throughout the State, coal gasification plants, water storage facilities, transbasin diversion structures, slurry pipelines, power transmission lines and railroads, as well as a massive population influx, wrenching demands on scarce water resources, attempts to divert further lands from agricultural production, and a dramatic and shocking change to Wyoming lifestyles. It is therefore imperative that Congress recognize the need for this legislation now and prepare to insure its passage even if this means a second vote to override another Presidential veto.

SURFACE OWNER CONSENT

While this section is essential, I do not believe it can long remain on the statute books without amendment. It is restrictive and a few valid surface owners will actually be denied protection under the narrow definitions in this bill. I oppose the fact that there should be punishment for enterprising

surface owners who have looked to executory contracts with potential successful bidders upon the federal coal deposits under their land. I doubt very much if this provision will be upheld in a court test, but I do not feel this objection is sufficient to oppose the legislation.

Although I am not fully satisfied with the surface owner protection provisions in H.R. 25, this is generally a good bill and a strong bill. It is a bill we need and I lend it my full support.

TENO RONCALIO.

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DISSENTING VIEWS OF MR. RISENHOOVER OF OKLAHOMA

I take a position in opposition to H.R. 25, the "Surface Mining Control and Reclamation Act of 1975," as amended and reported by the Committee on Interior and Insular Affairs.

I fully support the need for responsible reclamation efforts. Such efforts are already being made by the 32 states which have enacted laws for this purpose. In my own state of Oklahoma, responsible reclamation is taking place under Oklahoma law, and I have yet to see evidence that we need 170 pages of Federal legislation to help us carry out these responsibilities.

The nation is now facing a serious crisis in terms of recession, inflation and energy shortages. I certainly do not have all the answers to solve these problems, but it is clear that we need to increase our production of coal - the one energy source we have in abundance. The question then, it what is the effect of the bill on this need?

There have been various estimates of potential high coal production losses, but only the strong proponents of the bill claim that either there will be no production losses or that they will be minimal. Now, who is right? The answer is not easy.

What will the bill accomplish? Basically, reclamation standards would be uniform but at what cost? Again, no one really seems to know, but it is also very clear as to who will pay these costs - the taxpayer and the utility ratepayer.

I am concerned about the federal government intruding into an area where States seem to be acting responsibly. In Oklahoma, the Democratic-controlled Legislature has taken exception to H.R. 25 and wants to be exempted from its provisions.

Furthermore, in my own examination of the bill, I am concerned about provisions for so-called "citizens suits." On the surface, it seems to me that any competing interest - other fuel suppliers - could effectively stop mining in the United States by having such suits filed through friendly "citizens." I can see where the Oil Producing-Exporting Countries would benefit most if coal mining is stopped in the United States. Their lack of responsibility - seen in quadrupled prices of crude oil - towers in the recent history of world commerce. They have demonstrated the poorest attitude toward international economics and, I suggest, they have the money to encourage citizens suits which would prevent this country from mining coal. Some say there are provisions in H.R. 25 which open that door. I want to know the degree of danger this presents to the United States.

I am deeply suspicious of the motives of OPEC members. During a floor speech March 12, 1962, our colleague, Tom Steed, warned:

We need no longer indulge in conjecture as to whether another Middle East incident will deny essential oil supplies to the free world. We need only speculate as to when this might occur.

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The most disruptive actions came last year - but this country had been warned. Again, I fear that the citizens' suits provisions of H.R. 25 opens this country to additional vulnerability to irresponsible interests.

I have also received a copy of "Coal News," a publication of the National Coal Association which says:

The Department of the Interior made plain this week the possible price of the Jackson-Udall surface mining bill:

- 48 to 141 million tons of coal production per year.
- imports of an additional 1.3 million barrels of oil per day, which at present prices of \$11 per barrel, would entail . . .
- \$5.4 billion additional balance of payments deficit.
- loss of 46,980 jobs.
- loss of \$2.1 billion in purchasing power in the gross national product.

These charges need to be answered. They must be answered before I support any such bill.

In my district, two large coal-fired electric generating plants are planned for 1977 and 1978 at a cost of approximately \$250 million.

Under the present state reclamation law, the plants can reasonably project their fuel costs. Under H.R. 25, the owners say this kind of planning is impossible. If the increased costs of this legislation are close to what I expect, I fear the ratepayers will revolt. It is simply unfair to ask ratepayers to assume added and, in my opinion, unnecessary costs.

I was elected to this Congress to represent the people and I have yet to see evidence that this bill is in their best interests.

It was disconcerting to me that, when I arrived in Congress and was assigned to this distinguished and important committee, that I was presented a 170-page bill and told there would be no hearings.

While I am grateful to the professional staff for offering to brief me on the bill, I believe I have a responsibility to hear witnesses who mine coal in Oklahoma and who understand the demands of mining and the need for reclamation. I want to hear from miners and mine owners. I want to know about jobs and producing energy.

Certainly, we have past examples of poor reclamation in Oklahoma. In fact, I learned to swim in a strip pit - and it wasn't pretty. In recent years, because of the courage of the Oklahoma Legislature, reclamation standards were imposed and the mining companies included the cost in the price of their coal.

The Oklahoma Legislature recently passed a resolution calling on Congress to exempt Oklahoma - and other members of the Interstate Mining Compact - from the federal law if they have "Mining Lands Reclamation Act." By a vote of 22-16, the committee rejected my amendment to that end. I want my colleagues to know that, if allowed, I hope to present a similar amendment on the floor of the House.

Some members of the compact have expressed support of federal mining lands reclamation laws. However, I believe that all States are concerned about Title IV of the bill - and I wish they had had a chance to testify on that title before this committee. I have talked to Kenes Bowling, the executive director of the Commission, and he said it is something that needs to be ironed out. Perhaps that, too, will be taken up on the floor. I believe this committee should have considered the issue in hearings before mark-up.

Since the federal government owns about one-third of the land in the United States, I did a little independent checking on how the United States - as a landlord - is doing on reclamation.

The Bureau of Land Management, with 450 million acres to oversee, has about 86 million acres of coal bearing land with 533 existing leases affecting 783,000 acres. About 4,396 acres of BLM land has been mined - or is being mined. BLM admits there are some areas which were mined and abandoned. That is tragic. But 2,241 acres - about 52 per cent - has been reclaimed so the surface is again useable. The remaining 48 per cent includes active mines and, I believe, hearings could have drawn out details about past abuses.

The U.S. Forest Service has just issued a report entitled "Mining In National Forests" which concerns regulations to protect surface resources. The 187 million acres of National Forests include about 6.5 million acres with underlying coal resources. The report said, in part: ". . . the Forest Service is faced with a double national economy and, at the same time, to minimize the adverse impacts of mining activities on the renewable and non-renewable forest and grassland resources."

I would have liked to have heard the Forest Service explain how it is carrying out that dual responsibility - because those goals are what I think we should be attempting to achieve on all private and public lands.

In conclusion, I respect the hard work that the 93rd Congress and members of this Committee have exerted on this bill. I regret that the 94th Congress and the current members of this committee have not been given a greater opportunity to weigh the bill so that, after hearing witnesses, we could have made judgments based on evidence and made conclusions weighed with factual hearings. Thank you.

TED RISENHOOVER.

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SEPARATE VIEWS OF REPRESENTATIVE JOE SKUBITZ

I voted to favorably report H.R. 25. I did so because on balance I believe the bill's assets outweigh its liabilities. It's like a fine steak with the wrong seasonings. H.R. 25 is peppered with sections I hope can be altered or deleted on the House Floor.

Two of the sections which should be amended are #401 and #520, dealing with the Reclamation Fee and Citizens Suits. The Committee bill provides for a 35~ per ton fee on strip mined coal and a 10~ per ton fee on deep mined coal. The fee is too high and - will contribute to higher consumer costs for energy as well as national inflation. The high fee will bring in more revenue than is needed to reclaim orphaned lands, thus the bill authorizes socio-economic benefits for mine impact areas. If the socio-economic benefits are retained in the bill, then the fee should be cut to 25~ per ton. This extra-curricular authorization is entirely unnecessary. Reclamation fees should be used for reclaiming lands, not for the construction of roads, schools and other public facilities.

I recommend a start-up reclamation fee of 25~ per ton on strip mined coal and 10~ per ton on deep mined coal which would be gradually reduced to a 10~ across-the-board fee at the end of ten years. This fee should be sufficient to reclaim abandoned lands without generating excess revenues.

The sections on Citizen Suits creates the possibility of damaging individual rights when such a result is not needed to properly enforce the bill. As reported, H.R. 25 permits citizen suits against mine operators even though the operator is in full compliance with a permit issued by the regulatory authority pursuant to the Act. The result is liability without fault.

Such a result is not necessary. The Act can be fully enforced through actions against the regulatory authority. The defense of sovereign immunity is not permitted the regulatory authority in these actions. Thus, a citizen who feels the Act is being violated even though the mine operator is in compliance with his permit, must charge the regulatory agency for an improperly issued permit. The liability springs from the fault.

The language suggested by the Administration eliminates the potential for liability without fault. It does not shield the mine operator from actions properly arising from a violation of his permit. It allows for the proper enforcement of the Act without disruption of the limitations on personal liability. I hope the language is adopted on the Floor.

Finally, I would like to commend the Committee for deleting the section providing for special unemployment compensation beyond the generous benefits already allowed by law. The Committee properly recognized the section was discriminatory in that it created a "special" category of unemployed. The section would have been impossible to administer.

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I trust the House will insist on the deletion of this language should the

other body offer it in conference. It is a dangerous precedent for the Interior Committee to write unemployment compensation law when we have so little expertise in the area.

JOE SKUBITZ.

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ADDITIONAL VIEWS OF PHILIP RUPPE, DON CLAUSEN, ROBERT LAGOMARSINO

We support the report of the Committee recommending enactment of H.R. 25. Surface coal mining legislation was a major issue during the life of the 93rd Congress. The House Committee on the Interior and Insular Affairs conducted nearly fifty, often stormy, mark-up sessions; the full House spent six days considering the legislation in great depth; and, the Conference Committee labored for almost three months to reconcile the differences between the bills passed by the House and the Senate.

In our years of experience as Members of Congress, we can think of no issue more controversial, more bruising, and more polarizing than the issue presented by this legislation. At this critical stage of our nation's history, our energy needs simply do not permit us to abolish surface coal mining as some would wish. Yet, on the other hand, we cannot afford to allow the kinds of mining practices to continue which have resulted in nearly a million acres of unreclaimed, and in some cases totally useless, lands.

In our view, H.R. 25 will establish a regulatory framework that will enable surface coal mining to fully contribute to the resolution of our energy problems and, at the same time, will require that the surface coal mining industry conduct its business in an environmentally and socially acceptable manner. This does not mean, however, that we are completely in accord with all provisions of the bill, or that we shall not be open to amendments to it. The work of the Committee, while admirable and worthy of praise, is, to our minds, capable of improvement, particularly in the complex area of regulatory procedure (as opposed to environmental standards). In these additional views, we should like to outline some of our feelings regarding a few of the major concepts on which we worked in some detail and which are embodied in the legislation and to share our reservations about some sections in the bill.

A. APPROXIMATE ORIGINAL CONTOUR

One of the key environmental protection standards of H.R. 25 is the

requirement to return a mined site to its "approximate original contour". There has been so much misunderstanding of this concept that I believe it important to explain precisely the meaning and application of this requirement.

Coal industry concern seems to be focused on two aspects of the definition:

(1) the need to regrade the mined site so that it "closely resembles" prior surface configuration and "blends into" surrounding terrain; and (2) the need to generally "eliminate depressions." Confusion has existed as to whether or not it will be possible under this definition of approximate original contour to conduct area mining of thick seams of coal covered by a relatively thin layer of overburden.

The removal of a thick seam of coal covered by a relatively thin stratum of overburden will create a depression which can not be filled in so as to obtain the original elevation of the land - that is, without hauling an enormous amount of materials from some other location, thereby creating a depression or at least a disturbance elsewhere. Thus it has been argued that H.R. 25's requirement to return to approximate original contour makes western thick seam coal surface mining physically and/or economically possible. This, however, is an erroneous interpretation of the concept of approximate original contour.

First, approximate original contour as it applies to thick seam area mining in the West is not intended to require that the mined site be returned to its original elevation. Original elevation simply often cannot be obtained. A large depression will remain after such mining. What is required is that the coal operator regrade the mined area inside and around the perimeter of the mined area so that the depression blends into the surrounding terrain and that, within the mined area, the surface of the land "closely resembles" its premining configuration. Final highwalls will have to be regraded in order that such blending may be accomplished as well as to comply with the requirement that highwalls be eliminated. It must be emphasized that the requirement to return to approximate original contour does not necessarily mandate the attainment of original elevation.

Second, the requirement that depressions be "eliminated" is not intended to refer to large depressions created by the entire mining operation itself but to smaller scale depressions created within the mined area. In other words, it is

these smaller scaled depressions which must be eliminated, except where water impoundments are allowed, not the depression created by the entire mining operation.

B. ENFORCEMENT

H.R. 25 contains comprehensive provisions for inspections, enforcement notices and orders, administrative and judicial review, and penalties. These requirements are of equal importance to the provisions of the bill regarding mining and reclamation performance standards since experience with state surface mining reclamation laws has amply demonstrated that the most effective reclamation occurs when sound performance standards go hand-in-hand with strong, equitable enforcement mechanisms.

Generally the enforcement provisions of this bill have been modeled after the similar provisions of the Federal Coal Mine Health and Safety Act of 1969. Where the enforcement provisions of this bill depart from the 1969 Health and Safety Law, they do so to accommodate the fact that this bill encourages the states to retain or develop regulatory authority over surface coal mining and reclamation operations, and seeks to protect the environment and the public health and safety as opposed to the protection afforded the coal miner on coal mine property by the Coal Mine Health and Safety Act. Other departures, particularly in regard to the issue of civil penalties represent an effort to prevent deficiencies in the model structure from carrying over to this bill.

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(1) INSPECTIONS AND ENFORCEMENT: FEDERAL-STATE RELATIONSHIPS

The role of the Federal Government has been carefully delineated in this bill, particularly in regard to its activities in those situations where the State is the prime regulatory authority. During the interim period section 501(f) provides that beginning no later than one hundred and thirty-five days from the date of enactment, and continuing until a State program has been approved or a federal program has been implemented, the Secretary is required to carry out a federal enforcement program which includes inspections and enforcement actions in accordance with the provisions of section 521. The intent of this provision is to place the Secretary in the role of assuring compliance with the interim standards during the time of the initial regulatory procedure. This may to some extent duplicate State activity; however, this sort of federal presence at the most crucial time of the administration of this Act will result in uniform, equitable enforcement of the interim standards and will assure that the requirements of the Act get off to a good start.

Since practically all surface coal mining operations covered by the initial regulatory procedure are presently regulated by existing State regulatory authorities (the major exception being operations on federal and Indian lands), it is not the purpose of this interim federal enforcement program to place the Secretary of the Interior in the business of issuing mining permits for operations on lands within the jurisdiction of the States. The bill imposes a duty upon the States to review and revise existing permits to insure compliance with the interim standards of section 501, and obliges the States to issue new permits in accordance with those standards. It is our view, however, that the Secretary would be required to assure State performance of these duties and obligations, pursuant to the federal inspection and enforcement provisions of section 501(f).

Once State programs or Federal programs replace the initial regulatory procedure, section 517 requires that federal inspections must be made for purposes of developing, administering, or enforcing any Federal program, and assisting or evaluating the development, administration, or enforcement of any State program.

In those situations in which the Secretary is the regulatory authority, federal inspections must occur on an irregular basis averaging not less than one inspection per month for the operations covered by each permit. In those situations where the State is the regulatory authority and the Secretary carries out inspections for assistance and evaluation purposes, federal inspections should take place in sufficient number to carry out properly these backup and monitoring functions. In addition to normally programmed inspections, section 521(a)(1) of the bill also provides for special inspections when the Secretary receives information giving him reason to believe that violations of the Act or permit have occurred. Of course any inspection, federal or State, must occur without prior notice to the permittee or his agents or employees.

By mandating primary enforcement authority to field inspectors, this bill recognizes, as does federal mine health and safety legislation, that inspectors are in the best position to recognize and control compliance problems. The bill establishes three strong but flexible enforcement mechanisms which provide inspectors with the tools necessary to respond to the most minor and the most serious violations.

(A) Cessation Order (section 521(a)(2)). - During any federal inspection if the inspector determines that any violation of the Act or permit condition or

any other condition or practice exists which creates an imminent danger to the health or safety of the public, or is causing or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources, the inspector must order a cessation of the mining operation causing or contributing to the danger or harm. The cessation order may apply to all or a portion of the surface coal mining or reclamation operation in question. The imminent danger or environmental harm closure provision is so critical that it is the only place in the bill where the federal inspector is required to take direct enforcement action even if the inspection is being made for the purposes of monitoring a State regulatory authority's performance. To provide otherwise would be to perpetuate the possibility of tragedies such as the Buffalo Creek Flood, which can be at least partially attributed to the sad fact that Government regulation of the collapsed mine waste banks fell between the cracks of the not quite meshed functions of various State and federal agencies.

Two other points are necessary to fully explain this provision. Since neither the Congress or any regulatory authority can totally predict the public and environmental hazards arising from such a complex endeavor as surface coal mining, the bill does not restrict the closure authority of section 521(a)(2) to violations of the Act or permit. Instead any condition or practice giving rise to imminent danger or environmental harm is sufficient to invoke the authority. Lastly while section 701(28) provides a definition of "imminent danger to the health or safety of the public," there is no definition in the bill for the phrase "significant, imminent environmental harm to land, air, or water resources." This phrase may be undefinable in the abstract, although relatively easy to identify in the concrete; however it is crucial to point out that not only must the environmental harm be imminent but it must also be significant. Since the surface coal mining operations by their very nature cause some degree of environmental harm to land, air, or water resources, even when in full compliance with standards such as are contained in this bill, the immediate cessation order based on significant, imminent environmental harm must not be invoked in cases where only permissive, controlled, or temporary environmental harm is occurring.

(B) Notice of Violation (section 521(a)(3)). - Where the Secretary is the regulatory authority and a federal inspector determines that a permittee is violating the Act or his permit but that the violation is not causing imminent danger to the health or safety of the public or significant, imminent environmental harm, then the inspector must issue a notice to the permittee setting a time within which to correct the violation. If the violation has

not been corrected, in the opinion of the inspector, within the established time, the inspector must immediately order a cessation of the mining operation relevant to the violation. The enforcement mechanism of section 520(a)(3) will be utilized by the inspector in the great majority of compliance problems. It not only enables the inspector to gain immediate control of the problem, but also provides him with essential flexibility to appropriately deal with minor as well as major violations.

In order to prevent federal-state overlap, the federal inspector is only to use his authority under section 521(a)(3) where the Secretary is the regulatory authority. However in other circumstances the Secretary must insure, in accordance with the provisions of section 521(a)(1), that the State is notified of the compliance problem so that it may act under the terms of the approved state program.

(C) Whow Cause Order (section 521(a)(4)). - Where the Secretary is the regulatory authority and a federal inspector determines that a pattern of violations of the Act or permit exists or has existed and that such violations are caused by the unwarranted failure of the permittee to comply or are willfully caused by the permittee, the inspector must issue an order to the permittee to show cause as to why his permit should not be suspended or revoked. If the permittee fails to show cause as to why the permit should not be suspended or revoked, the inspector must immediately suspend or revoke the permit.

This provision requires that suspension or revocation of a mining permit be preconditioned upon conduct which demonstrably fails to meet the standards of care and diligence which are to be expected of permittees who seek to comply with the law. This is a sound approach particularly in light of the stringency of the closure authority previously discussed.

While the bill grants a great deal of authority to federal inspectors, it is important to remember that adequate protection must be afforded the regulated parties against the possibility of abuse of this authority. To this end, formal internal administrative review and judicial review of inspectors' decisions are permitted by sections 525 and 526 respectively. Furthermore section 521(a)(5) insures that due process will begin at the field level and provides the opportunity to modify, vacate, or terminate a clearly erroneous notice or order without the burden of more formal administrative review.

Finally it should be noted that while section 521 speaks in terms of federal enforcement, section 521(d) provides that as a condition of approval of any state program submitted pursuant to section 503 of this Act, the enforcement provisions thereof shall at a minimum incorporate sanctions no less stringent than those set forth in section 521 and shall contain the same or similar procedural requirements relating thereto. The Secretary must use the format of section 521 as the basis for measuring whether state enforcement mechanisms are sufficiently strong and flexible to warrant approval of that portion of submitted state programs.

(2) ADMINISTRATIVE REVIEW

In order to assure expeditious review and due process for persons seeking administrative relief of enforcement decisions of Federal inspectors under the provisions of section 521, section 525 of the bill establishes clear, definitive administrative review procedures. Those persons having standing to request such administrative review include permittees against whom section 521 notices and orders have been issued and persons having an interest which is or may be adversely affected by such notice or order. Any person with standing may request a public hearing which must be of record and subject to the Administrative Procedure Act. Pending review the order or notice complained of will remain in effect, except that in narrowly prescribed circumstances temporary relief may be granted from a notice or order issued under section 521(a)(3). In no case, however, will temporary relief be granted if the health or safety of the public will be adversely affected or if significant, imminent environmental harm will be caused. This provision will insure that the mining and reclamation performance standards will continue to protect the public health and safety or the environment during any administrative proceeding in which their validity is challenged, until the issue is determined on the merits.

In all cases where a section 521(a)(4) show cause order has been issued a public hearing must be held. The Secretary must issue a decision within sixty days following the completion of the hearing as to whether or not to suspend or revoke the permit. Pending this decision, the permittee may continue to operate if he is otherwise in compliance with the Act or his permit. The alternatives of suspension or revocation are within the discretion of the Secretary. It is expected that the degree of seriousness of the types of violations and kinds of conduct giving rise to the show cause order will be the dominant factor

considered by the Secretary in making his decision. These factors should also be considered by the Secretary in his determination of the lengths of suspension periods. On the other hand, in determining the period following revocation within which reclamation must be completed, weight should also be given to the practicalities of the reclamation which needs to be performed. The Secretary should give highest priority to administrative review of section 521(a)(4) show cause orders.

(3) JUDICIAL REVIEW

Section 526 of the bill establishes specific provisions for judicial review of Secretarial actions. Because of the thoroughness and degree of due process afforded judicially reviewable actions by the Secretary, judicial review is to be based on the record made before the Secretary. The courts should render their decisions on the basis of whether or not the Secretary's decision was arbitrary and capricious or supported by the record. Temporary relief from Secretarial decisions may be granted only under the same kind of narrowly prescribed circumstances as discussed above in the context of administrative review.

(4) PENALTIES

Where the Secretary is the regulatory authority, section 518 of the bill provides that civil penalties will be mandatory for violations leading to a cessation order under section 521. The Secretary has discretionary authority to assess civil penalties for other violations. The Secretary is required to make findings of fact and issue a written decision as to the occurrence of a violation and the amount of the penalty which is warranted only where the person charged has availed himself of the opportunity for a public hearing and the hearing has, in fact, been held. The bill also provides that approved State programs must contain criminal and civil penalties no less stringent than the Federal provisions with the same or similar procedural requirements relating thereto. Aside from the aforementioned points, the civil and criminal penalty provisions of the bill are generally identical to those of the Federal Coal Mine Health and Safety Act of 1969.

C. PERMIT APPROVAL OR DENIAL (SECTION 510(c))

It should be noted that section 510(c) prohibits issuance of a mining permit if the application indicated the applicant to be in violation of the Act or a wide range of other environmental requirements. It is not intended that an operator who is charged with the types of violations described in section 510(c) be collaterally penalized through denial of a mining permit if he is availing

himself, in good faith, of whatever administrative and judicial remedies may be available to him for the purpose of challenging the validity of violations charged against him. However, the Committee also does not intend that a permit applicant can avoid the purpose of section 510(c) simply by filing an administrative or judicial appeal. It is expected that the regulatory authority will carefully examine those situations where an administrative or judicial appeal is pending in order to ensure to the fullest extent possible that such appeals are not merely frivolous efforts to avoid the requirements of section 510(c).

D. APPLICABILITY OF SECTION 502

All surface coal mining operations, which include, by definition, impacts incident to underground coal mines, are subject to the initial regulation procedures of section 502 of this bill, but only to the extent that they are located on lands on which operations are regulated by a State. This means that surface coal mining operations located in those few States which presently have no regulatory programs directed towards the environmental control of surface coal mining operations are not subject to section 502. Neither are the surface effects of underground coal mining operations subject to section 502, unless the existing State regulatory program is directed at the effects of these operations. This policy is entirely consistent with the State-led philosophy of this legislation. However, it should be noted that States which do not have a regulatory program established by statute may still participate in the interim program through administrative action of a suitable State agency. Certification of this fact by the Governor of a State to the Secretary of the Interior is sufficient to qualify that State for the interim funding provided in section 502.

E. SURFACE OWNER PROTECTION - PROSPECTING PERMITS

Section 716(b) requires coal deposits subject to the provisions of the section be offered for lease only by competitive bidding. To the extent that holders of existing Federal coal prospecting permits have an interest vesting them with preferential rights to lease coal subject to the permit, it is not the intention of the Committee to deprive such holders of their property, thus creating a taking. The language of section 716(i) specifically states that nothing in section 716 is to be construed as increasing or diminishing any property rights held by the United States or any other land owner.

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F. CITIZEN SUITS, ABANDONED MINE RECLAMATION FUND, AND TERMINATION OF PERMIT IN THREE YEARS IF NO COMMENCEMENT OF MINING

We wish to now comment on three areas of H.R. 25 which give me concern and which we think should be dealt with by way of amendment on the Floor of the House.

CITIZEN SUITS

We are in accordance with the Majority on the importance of citizen suits. As has been pointed out, citizen participation will help insure that the regulatory agencies, on both State and Federal levels, make their decisions and conduct their investigations in accordance with the provisions of the Act. H.R. 25 rightly provides numerous opportunities for such participation. When a prospective operator files with the regulatory authority for a permit, citizens may make official comments. Once a determination is made, appeals can be taken in the agencies. After the administrative procedures have been exhausted, the matter can be taken to the courts for further review. Also, similar citizen intervention is allowed in both the rule making process and in the bond release provisions. This is as it should be.

However, we cannot join with the Majority's opinion that citizens should be allowed to bring suit against an operator who is acting in accordance with his permit, where it is alleged that the regulations and permits under which he is mining are in violation of the Act. Section 520 allows such suit against the operator "who is alleged to be in violation of the provisions of this Act or the regulations promulgated thereunder, or order issued by the regulatory authority."

Granted, it can be argued that every operator is on notice of all provisions of this Act. With that line of reasoning, we cannot really argue. It is a standard principle that "Ignorance of the law is no excuse." However, when an operator is issued a permit by the regulatory authority, it is my fervent belief that that operator should be able to feel confident that the regulatory authority is completely cognizant of all the provisions of the Act and that a permit would not be issued in violation thereof. To allow this provision to stand as written would hit especially hard at the relatively small operator who does not have a large legal staff at his disposal.

We intend to offer, or support, an amendment which would allow a suit against a mine operator when it is alleged that there is a "violation of any rule, regulation, order or permit issued pursuant to this Act." When a valid permit has been issued, the suit should be against the regulatory authority, to require it to perform its duties in conformance with the Act. This will not undercut

citizen enforcement suits where the operator is not complying with applicable rules, regulations, permits or orders. These are valid suits which must be maintained.

We would further point out that the proposed amendment will do nothing to interfere with Section 520(f) which expressly retains the right of a citizen who is personally damaged by a mining operation due to failure of compliance with the "Act, or of any regulation, order, permit, or plan of reclamation issued by the Secretary."

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Should the amendment fail and Section 520 is allowed to stand as presently written, we would hope that courts would require realistic bonds where temporary injunctive relief is to be awarded. In the past, courts have often allowed nominal bonds to cover the defendant's damages should the plaintiff's suit fail. To minimize the possibility that Section 520 might be subject to misuse by the commencement of frivolous suits, it is my belief that the courts should carefully examine the peculiar facts of each case, and place a realistic bond in light of the circumstances.

(2) ABANDONED MINE RECLAMATION FUND

We are in complete agreement with the establishment of a fund for the purposes of reclaiming previously stripped lands which were left abandoned with little or no attempt to reclaim them. It was these eyesores throughout Appalachia left by unthinking coal operators which provided the impetus for this legislation. We have an obligation to return these lands to a condition in which they can serve a useful purpose.

However, the Committee has provided in Section 401(d) a reclamation fund of thirty-five cents per ton of coal produced by surface mining and ten cents per ton of coal produced by underground mining. It is our thinking that this fee is too high - that ten cents per ton regardless of mining method will be adequate to do the job. Our feelings are reinforced by the fact that coal prices today are multiplying, and we think we must also keep in mind the present consumers of coal on to whom these fees will be passed.

We would add that if, in the future, it appears that a straight ten cents per ton is not sufficient to adequately reclaim the lands, the Congress can always amend the Act to provide higher fees.

(3) TERMINATION OF PERMIT IN THREE YEARS IF NO COMMENCEMENT OF MINING

As presently drafted, Section 506(c) of H.R. 25 requires that if no surface mining and reclamation operations have commenced within three years from the issuance of a permit, the permit shall terminate. We are in complete agreement with the rationale behind this provision. We cannot allow valuable coal to be locked up if it is needed to meet our energy needs. However, we think that the rigidity of this provision could, in very limited instances, work to the contrary and rob the nation of needed supplemental energy projects such as coal gasification.

We know that any coal gasification project will be very expensive (approximately \$1 billion) and will require a long lead time to build (five to six years). But before construction could commence, such a project will require (1) long-term financing commitments under which bonds would be issued at periodic "take-downs" to provide construction money, (2) Federal Power Commission approval of the related pipeline facilities, and (3) other various Federal and State approvals including, but not limited to, the necessary permit under this Act.

Since potential bond purchasers would insist upon examining the mining permit before executing their commitment agreement, and the project engineers will need to know what conditions, if any, will be

attached to it, there is little question that the permit will have to be issued "on the front end".

This being the case, the three year limit simply will not leave sufficient time to complete construction of the mining and gasification facilities. This is especially true when a coal gasification complex plans to utilize western lignite as the plant feedstock. In this case, mining operations cannot begin until the final year of plant construction because of the physical and chemical makeup of the coal. For example, lignite does not store well, and begins to deteriorate in heating value and chemical makeup almost immediately after mining. There is also a very great danger of spontaneous combustion if lignite is stored in great quantities or handled improperly.

In such limited instances such as herein described, we feel we should allow some flexibility in the application of Section 506(c), and suggest that the Section be amended to read, "Unless otherwise provided in the permit,". We are confident that such proviso would not be abused, but would only be reverted to

in those cases in which rigid compliance would work to the disadvantage of the nation's energy needs.

CONCLUSION

The coal industry stands at the brink of an era in which it can and must make significant contributions to the nation's energy supply picture than it has ever made before. But in this new age of environmental awareness and respect for what we now understand to be dwindling natural resources, the industry should not and does not have to make such a contribution at the expense of the environment. We must set the environmental groundrules for coal industry expansion now. These groundrules should assure that the natural environment is protected to the greatest extent feasible without cramping unjustifiably such expansion. We think that H.R. 25 performs the task of setting the groundrules fairly and equitably. It is not perfect legislation and should be amended, in limited instances, on the Floor of the House. However, it is workable legislation. It is not, as some have alleged, the product of "environmental extremism." Nor is it an "industry bill." It is the Committee's best effort in a complex subject area. We urge support for its passage and enactment into law.

PHILIP E. RUPPE.

DON H. CLAUSEN.

ROBERT LAGOMARSINO.

DISSENTING VIEWS

We oppose the passage of H.R. 25, the "Surface Mining Control and Reclamation Act of 1975", as amended and reported by the Committee on Interior and Insular Affairs.

Our opposition is founded on the principles of preserving States' rights and encouraging small businesses and individual initiative in a free enterprise system to meet the increasing demands for power. These principles did not survive the Conference of the 93rd Congress which produced the text of H.R. 25; and they were not adopted through amendatory language offered in the Committee markup of this bill.

We fully recognize the need for strict and fair legislation to regulate surface coal mining to assure that environmental depredations of the past are never repeated. We believe that an essential and integral part of the surface mining process is the prompt and certain restoration of mined land to a decent and environmentally acceptable condition.

We also recognize that our complex industrial society is power dependent and that the availability of adequate energy from surface mined coal is a societal value in America deserving at least equal legislative consideration with environmental values.

We oppose H.R. 25 because the bill unwisely and unnecessarily discriminates against energy values in its single minded focus upon environmental values.

We oppose H.R. 25, because some of the major provisions of the bill, if passed and enacted will result in serious and lasting detriments to the nation.

H.R. 25 will:

(1) Impose arbitrary, confusing, unnecessary and unreasonable procedural requirements on the surface mining of coal. The results will be disastrous to consumers and small coal operators, making the bill anti-consumer and anti-small business legislation;

(2) Illogically require each State to designate areas unsuitable for surface coal mining based solely on some regulators arbitrary determination of whether reclamation is physically and economically possible. It allows no consideration of new mining and reclamation methods or other factors influencing a surface coal mine operator's economic ability to demonstrate that proper reclamation of such lands can be accomplished;

(3) Needlessly impose a costly, burdensome and onerous task upon any coal operator to submit detailed information with his permit application to surface mine coal. The economic impact of supplying such sophisticated and costly information will ultimately squeeze many small coal operators (whose contributions to the energy supply are essential) out of business;

(4) Needlessly impose arbitrary and unreasonable environmental protection performance standards by: (a) prohibiting the placement of spoil etc. on the downslope in contour (mountain) surface coal mining even though it is to be properly shaped, graded and revegetated.

162 This is an anti-small business provision since it is largely small operators who operate on steep slopes.

(b) requiring the restoration of the approximate original contour of the land after surface mining by backfilling, compacting and grading of the land with all highwalls, spoil piles and depressions eliminated. In many cases these steps may be unnecessary for putting the mined land in a responsible condition. When

they are not necessary this requirement imposes a very costly and often physically impossible burden of finding enough soil to fill in the area, replace the overburden and topsoil and restore the land to its "approximate original contour".

(c) requiring absolute preservation of the hydrologic integrity of alluvial valley floors and the restoration of the water recharge capacity of the minesite to approximate premining conditions as a prerequisite to obtaining a permit to surface mine coal. This assumes that nature's monetary hydrological conditions, which are sometimes sad, indeed, must be forever preserved and never improved, and to do all this would require the possession of the omnipotent powers of a deity.

(5) Regulate underground coal mining operations and the surface effects of underground coal mining by imposing arbitrary and unreasonable procedural and environmental standards. The regulation of underground mining is a separate subject and should not be confused with surface mining regulation.

(6) Require the enforcement of unreasonable permit provisions that are overly harsh and needlessly discourage mining. They include civil penalties of up to \$5,000 per day and criminal penalties of a \$10,000 fine and/or one year's imprisonment and authority to issue arbitrary "shutdown orders" by inspectors and individuals from various federal agencies as well as the States with limited and varying expertise or knowledge of surface mining operations and problems.

(7) Permits Citizen's suits, and public participation in all procedural matters and allows for almost constant intervention by third parties thus creating a level of litigious harassment which could lead to deliberate abuse of the legal process;

(8) Impose a reclamation fee of 35 cents per ton on surface-mined coal and 10 cents per ton on deep-mined coal. The proceeds will not only pay for land reclamation, but a plethora of socio-economic benefits. This anti-consumer provision will inequitably increase costs of electrical energy for citizens who buy from utilities burning strip mined coal. Any obligation here is a national one, not a haphazard local obligation.

(9) Grants veto power to surface owners over disposition of Federally owned coal where surface estate is a private ownership. The committee attempted to follow a rule which would avoid windfalls to speculators while at the same time preventing a lock-out by the landowners of the Federally owned coal, belonging

to all of the people. Unfortunately, the formula finally steeled upon accomplishes neither.

BACKGROUND

During the past few years there has been a growing and proper concern in Congress over the need to regulate and control the surface mining of coal in the United States. In the past some strip mine operators have obscenely scarred the natural landscape. There is obvious need to regulate and control strip mining. There is a legitimate and pressing need to protect and enhance our environment by requiring the certain reclamation of mined land. This is a need which past strip miners have largely ignored. They will continue their depredations unless they are stopped. To this end the Committee on Interior and Insular Affairs worked long and diligently to produce a bill to provide for the regulation of surface coal mining in the United States.

But the Committee's favorable reporting of H.R. 25 is unfortunate. It is an unbalanced bill which will do more harm of one kind than it does good of another kind. Its over-protective environmental posture sacrifices reasonable use of an abundant and essential natural resource. It ignores our energy shortage, contributing to the problem and offering no solutions.

H.R. 25 is couched in absolute terms. It carelessly and dangerously sets environmental standards which can never be met if the letter of the law is enforced. It invites endless litigation and disregards legal precedents by creating personal liability without fault.

These flaws were directly addressed in three days of mark-up sessions. But a reinforced Majority, anxious to flex its political muscle, paid little more than lip service to expressed consensus. The irresponsible hastiness is a matter of record: On the first day of the organizational meeting of the Interior Committee of the 94th Congress, a resolution was adopted by-passing subcommittee consideration, disallowing hearings with public witnesses, (the Administration was given two days to voice its objections), and requiring a vote to report the bill on a date certain notwithstanding its drafting status. These actions precluded any active meaningful participation by nearly one-third of the Committee membership who arrived new to the Committee with the 94th Congress. Had their views been sought in an atmosphere of discussion and negotiation, perhaps, this Committee could have produced a balanced bill recognizing the increased demand for energy through coal production without irreparably harming the environment.

ENERGY LOAD GROWTH

By 1990, the United States will probably double its present energy consumption. Domestic oil and natural gas which today accounts for two-thirds of the nation's energy supply will be able to meet only forty percent of the 1990 demand. Nuclear, hydropower, solar, geothermal and other non-fossil fuels will be able to supply only another twenty percent of the demand. The remaining forty percent must be supplied by coal, which today provides only about twenty percent of the U.S. energy demand. Unless we make this growth in coal use possible we will be in the impossible situation of a continuously increasing reliance on foreign sources of oil and gas. In view of the Arab embargo which severely impacted our energy requirements across the country, the obvious logic is to turn to our vast coal reserves to meet the near-term energy shortfall. Economic reasons, based on the balance of payments and foreign exchange deficits also are compelling in this regard.

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Latest figures furnished by the U.S. Bureau of Mines indicate that there are approximately 434 billion tons of mineable coal in the United States. It is estimated that these known reserves, if tapped, will satisfy the nation's domestic energy requirement for 200 to 300 years. Distribution of known coal reserves are as follows:

*4*DEMONSTRATED
COAL RESERVE BASE
N1 OF THE UNITED
STATES ON JAN. 1,
1974, BY METHOD OF
MINING

4[Million short
tons]
State

	Potential mining method		Total
	Underground	Surface	
Alabama	1,798	1,184	2,982
Alaska	4,246	7,399	11,645
Arizona	350	350	
Arkansas	420	263	665
Colorado	14,000	870	14,870
Georgia	1	1	
Illinois	53,442	12,223	65,665
Indiana	8,949	1,674	10,623
Iowa	2,885	2,885	
Kansas	1,388	1,388	
Kentucky, east	9,467	3,450	12,917
Kentucky, west	8,720	3,904	12,624
Maryland	902	146	1,048
Michigan	118	1	119
Missouri	6,074	3,414	9,488

Montana	65,165	42,562	107,727
New Mexico	2,136	2,258	4,394
North Carolina	31	n(2)	31
North Dakota	16,003	16,003	
Ohio	17,423	3,654	21,077
Oklahoma	860	434	1,294
Oregon	1	nn(2)	1
Pennsylvania	29,819	1,181	31,000
South Dakota	428	428	
Tennessee	667	320	987
Texas	3,272	3,272	
Utah	3,780	262	4,042
Virginia	2,971	679	3,650
Washington	1,446	508	1,954
West Virginia	34,378	5,212	39,590
Wyoming	27,554	23,674	51,228
Total	297,235	136,713	433,948

n1 Includes measured and indicated categories as defined by the USBM and USGS and represents 100 percent of the coal in place.

n2 Less than 1,000,000 tons.

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[See Original]

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SHIFT FROM ENERGY SURPLUS TO SHORTAGE

The language of H.R. 25 was born in a climate of abundant energy supply. Alternatives to coal as an energy source were cheap and plentiful. Coal fired boilers were being switched to oil for environmental reasons. The situation changed drastically. Boilers are being switched back to coal again. The facts are that there no longer is an abundance of energy resources to meet U.S. requirements. There is a severe energy shortage in our country today. The need for access to our coal resources available by surface mining is now critical.

The present energy crisis will not soon disappear. It dictates that we not enact any bill which severely curtails the production of coal by imposing rigid and unnecessary regulations and unreasonable environmental standards on surface coal mining. H.R. 25 would do just that. It basically aims to reduce surface mine coal production by stringent regulations, and to make surface coal mining so difficult and costly that coal mining in the United States is driven underground.

When it is realized that approximately two-thirds of the nation's coal

production is used to produce electrical energy, the impact upon the national economy of the resultant curtailment of coal production which would be brought about by the enactment of H.R. 25 can better be understood.

Approximately 80% of the country's generating capacity in 1974 relied upon fossil fuels. Coal's contribution was 417.2 million tons. According to data supplied by the National Electric Reliability Council and that tonnage was expected to increase to 742.1 million tons in 1983. To produce that quantity of coal, many new mines will need to be opened and developed. The circumstances require that surface mines be opened, not closed. Sixty-five percent of all coal delivered to electric utilities in 1974 came from surface mines. The national fossil fueled electric generating capacity is expected to increase from a 1973 level of 331,900 megawatts to 560,300 megawatts in 1982. The accompanying tables provided by NERC clearly demonstrate the swiftly growing role coal must play if the nation's ever increasing electrical energy needs during this decade are to be met.

Another factor we must consider is the estimate by the Federal Power Commission that 161 of the coal-burning electric utility plants in the United States will have to close down in 1975 because of restrictions in the Clean Air Act and similar legislation. This would result in a loss of 70.4% of the nation's installed reserve generating capacity. According to the February 25, 1974, FPC staff study, the greatest impact of these electrical power plant shutdowns will be in the area served by the East Central Area Reliability Agreement. The States of Ohio, Indiana, West Virginia and Kentucky will feel the impact most intensely.

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TABLE 1. - ESTIMATE OF FOSSIL FUEL REQUIREMENTS
1973-82 - TOTAL NERC (UNITED STATES ONLY)

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In
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Year	Electrical energy			
	Fossil	All other	Gross total	Net total
1973	1,536.8	409.2	1,947.8	1,362.4
1974	1,665.8	565.1	2,130.9	2,022.7
197 5	1,716.9	583.9	2,300.8	2,146.6
1976	1,835.6	638.0	2,473.6	2,353.6
1977	1,943.4	720.3	2,663.7	2,536.7
1978	2,075.1	785.5	2,860.6	2,723.7
1979	2,200.7	880.5	3,081.2	2,932.5

1980	2,287.2	1,032.1	3,319.3	3,159.1
1981	2,370.1	1,203.9	3,574.0	3,395.5
1982	2,423.3	1,415.4	3,838.8	3,645.1

Source: National Electric Reliability Council, "Estimated Fossil Fuel Requirements for the Electric Utility Industry of the United States 1973-82."

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TABLE

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Year

Year	Electric generating capability					Grand
	Steam	Combustion turbine	Not classified n2	Total	All other	
total						
1973	297.8	34.1	0	331.9	83.6	416.5
1974	321.4	40.1	0	361.5	101.1	462.6
1975	343.6	44.0	0	387.6	115.9	503.5
1976	360.7	48.0	.1	408.8	131.0	539.8
1977	382.4	53.8	.2	436.4	140.3	576.7
1978	407.1	59.0	1.5	467.6	156.6	624.2
1979	428.1	62.7	3.2	494.0	177.6	671.6
1980	447.8	64.2	6.3	518.3	202.8	721.1

1981	463.3	66.4	11.4	541.1	233.4
774.5					
1982	475.9	67.3	17.1	560.3	271.2
831.5					

n1 Combustion turbine includes combined cycle capability.

n2 Fossil capability planned (type and fuel undecided).

Source: National Electric Reliability Council, "Estimated Fossil Fuel Requirements for the Electric Utility Industry of the United States 1973-82."

The next most heavily impacted region will be the service area encompassed by the Mid-America Interpool Network, with most of the reduced capacity in the States of Illinois and Missouri.

The third hardest hit area will be the Southeastern Area Reliability Council, with over 75 per cent of the affected generation in Tennessee, Alabama and Kentucky.

Of 103,891 megawatts of installed capacity affected, 70,250 megawatts will be subject to shutdown for non-compliance with the inflexible and unattainable air emission standards under the Clean Air Act in 1975.

H.R. 25 - THE COMMITTEE BILL

The Committee has chosen to draft legislation which, in effect, if not in bold language, will cripple much of the national capability to produce coal by surface methods. It has done so by giving lip service to reason but, in the final analysis, writing a bill which in many parts of the country will simply prohibit surface mining. Moreover, the Committee has gone beyond the question of surface mining and extended the purview of the bill to the underground sector as well.

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Surface mining occurs in practically every state where coal is mined. Kentucky leads in surface mining output in terms of tonnage but in many states such as Indiana, Arizona, Alaska, Montana, North Dakota, Texas, Kansas and Wyoming, surface mining accounts for virtually all the coal produced.

There does not appear to be any feasible way to replace surface mining tonnage with deep tonnage, especially in the short or mid-term. Indeed, to the extent that such a conversion would be forced, the cost may well be measured both in terms of human life as well as in dollars.

The proponents of H.R. 25 ignore a basic fact of life insofar as coal production is concerned and that fact is that America needs every pound of coal

our mines can produce. From surface and from underground, from east, mid-west and west, the major task of the American coal industry is to produce coal in ever increasing quantities. The objective of our legislation should be to insure that this surface mining is done properly and is followed by effective reclamation.

It will impose arbitrary and unreasonable restrictions and standards on the surface mining of coal. The result will be disastrous to every American since a full supply of energy is an integral part of our lifestyle.

Fewer than 5% of the surface coal mines in the United States produce as much as 200,000 tons of coal annually. This is an anti-small business bill as well because 65% of the 2,300 surface coal mines in the United States produce 50,000 tons or less a year. Such small operations could never afford to research and prepare the exaggerated and unreasonably detailed mining permit applications H.R. 25 requires.

The excessive costs of compliance with, and administration of its unnecessary requirements and overly restrictive standards of performance will hit hard at every consumer's pocketbook - not just in terms of his electric power bill, but also in the cost of every item he buys, because no product comes to the market today without a substantial component of energy cost. Thus H.R. 25 is also an anti-consumer bill.

H.R. 25 as introduced, on January 14, 1975 was identical to the Conference Report on S. 425 which was vetoed by the President, December 30, 1974. In a letter to the Speaker, the President authorized eight critical and nineteen important changes for H.R. 25. His recommendations were offered in amendment form by the Minority Members of the Committee. Only one critical and six of the important changes were passed. Nearly all of the crucial problem areas of the bill remain:

(1) Reclamation Program and Fee

We do not believe there is a proven need for the high 25~ and 35~ a ton reclamation fee that would be levied under H.R. 25 to reclaim orphan lands. We further believe that it is not good economic policy to extract unneeded cash from the consumer and the money supply, especially in times like the present.

The Bureau of Mines and the Department of Agriculture have conducted limited research on the need for reclamation of mined lands. While this research has not been extensive enough to make final estimates of the total cost it does provide a basis for estimating acreage requiring reclamation. The Bureau of

Mines estimates that approximately 1,000,000 acres of orphan lands surface mined for coal now exist, mostly in the Appalachian region. However, not all of these acres are in need of reclamation. Approximately half of these acres have already stabilized and have assumed a timber and vegetation cover that is compatible to that area. Disturbing this type of an acreage again would only generate erosion and aggravate siltation. These are largely mountainous areas that are adapted only for the production of timber and limited grazing.

Additional factors will reduce the total acreage which will have to be reclaimed. The practice of mountain top mining on abandoned contour mining sites is now expanding. Such operations are economically attractive because of (1) improved machinery which now makes it feasible to remove the greater overburden, and (2) the availability of benches upon which to commence operations. After the mountain top extraction process has been completed the abandoned high walls are eliminated and needed reclamation is accomplished in the process.

Based on estimates for 1975 production, 10¢ a ton could generate between \$60 and \$70 million dollars on an annualized basis. A doubling of production by 1985 will double receipts to this fund. To the extent that the amount of any such fee is passed on, it will increase the cost of energy and have at least a temporary inflationary effect. To the extent it is not passed on but absorbed by the producer, it will draw money from the economy and divert needed capital from needed future production. If experience establishes 10¢ does not generate a sufficient fund, Congress can subsequently increase the fee. During that interim period, a more accurate assessment of the acres to be reclaimed can also be made.

H.R. 25 not only authorizes the Secretary to provide public facilities to support new housing for miners, but also could be read to authorize the Secretary to construct public facilities such as hospitals, roads and schools. We believe that the need has not been established for Federal aid additional to those several programs in EPA, HUD, USDA and the sharing of revenues from the Minerals Leasing Act. In particular, there may be a "lead time" or "front end" financing problem in areas undergoing rapid development of coal resources. The rural development communities facilities loans, which are budgeted at \$200 million for both FY 75 and FY 76 - a four-fold increase over FY 74 - can be used for financing public facilities in communities of up to 50 thousand population. In addition, there is \$400 million of water and sewer loan funds and \$150 million of water and sewer grant funds available to communities of up to

thousand population.

(2) Citizen Suits

Potentially, one of the most dangerous sections of H.R. 25 is Section 520 known as "Citizen Suits." Its danger lies not in the ends it seeks to promote, but in its potential for disruption of individual rights. This nation's legal development has carefully limited personal liability to acts of personal fault; either directly caused by the individual, or attributable to that individual through his responsibility for the actions of others.

This section of H.R. 25 establishes liability without fault. A mine operator may be sued by an individual even though he was in complete compliance with the permit issued by the regulatory authority pursuant to this Act. If the permit allows actions inconsistent with the law, the liability should fall on the regulatory authority who interprets the law and issues the permit - not the operator who is in compliance with the permit.

There is no need to fear that a citizen suit would be disallowed against the regulatory agency claiming sovereign immunity. Such immunity would be waived under this section. The spirit of H.R. 25 would be preserved through actions against the regulatory authority. To go beyond this action and permit liability without fault against the mine operator is to do needless harm to the rights of individuals. The limitations on individual liability should not be carelessly struck down. Such a result is not necessary to enforce this Act.

We emphasize that Citizen Suits against mine operators are permitted when the mine operator is in direct violation of his permit. Thus, the mine operator is not allowed to hide behind the permit as some have charged. The language offered in Committee to amend this section was reasonable. It permitted actions against the regulatory authority without violating the limitations on individual liability. We regret the amendment was not adopted.

(3) Siltation and Release of Performance Bond

Section 519(c)(2) ignores the fact that siltation, the product of erosion, is a natural process which can be controlled but not eliminated. There is hardly a cultivated field in the country which can meet this requirement. It further ignores the fact that for many existing mines data on natural levels and seasonal flow conditions measure before any mining is non-existent. The impact

of this requirement is that many operators are encountering extreme difficulties in obtaining a total bond release, and it is possible that some may never receive a total bond release.

The inconsistency of the requirements of Section 519(c)(2) as compared to Sec. 515(b)(10)(B) and 516(b)(9)(B) will lead to confusion in administration and possible judicial interpretation. Subsections 515(b)(10)(B) and 516(b)(9)(B) were modified during the Committee mark-up to read "conducting surface coal mining operations so as to prevent to the fullest extent possible using the best technology available additional contribution of suspended solids to stream flow . . ." This requirement would seem to be achievable though difficult. On the other hand, subsection 519(c)(2), relating to bond release, was amended to provide that "no part of the bond or deposit be released under this paragraph (2) so long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area above natural levels and seasonal flow conditions as measured prior to any mining;". The impact of this subsection may be to prevent the release of 40% of the performance bond for an interminable period of time. Small operators will be especially hurt by such a lockup of case reserves or bonding capability. This is but another example of why this measure is antismall business. It should be noted that the Environmental Protection Agency permits levels of suspended solids above background levels in their water pollution control interim guidelines. Clearly, this requirement exceeds Environmental Protection Agency requirements.

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(4) Hydrologic Data

Under section 507 the application for a mining permit is required to include a long list of well defined data. While such data are essential to determine whether a permit should be issued, they are expensive to accumulate, especially those portions relating to the hydrologic consequences of the mining operations. Moreover, this requirement will be especially burdensome on the small operator, who in many instances makes application for only a small acreage annually. Accordingly, in those instances, where duplicative data are already on file, the regulatory authority should be permitted to waive some or all of the requirement.

(5) Variance Provisions

Section 515(c) of H.R. 25 allows procedures to permit variances from the requirement to return lands to their approximate original contour. This variance applies only with respect to operations where the postmining land use is deemed to constitute an equal or better economic or public use of the affected land, and is limited to mountain top mining. The variance provisions should, however, focus on the postmining land use, regardless of the form of mining employed, and provide the regulatory authority with the necessary flexibility to permit the best post-mining land use with the assurance that all other mining and reclamation performance standards would be met.

Additionally, provisions should be allowed for a variance from the requirement of a return to approximate original contour during the interim period if it is demonstrated to the satisfaction of the regulatory authority that the mine operator has not been able to obtain the equipment necessary to comply with such standards. This equipment variance would apply only to the relatively short duration of the interim period. Such an equipment shortage variance would not only be reasonable but would allow coal to be surface mined in an environmentally sound and approved manner while equipment is unavailable to the operator through no fault of his own. Currently, there are serious backlogs of orders for heavy earth-moving equipment, and not all coal is surface mined with the same equipment used in land reclamation. Often, coal is surface mined by draglines, shovels and trucks, whereas bulldozers are needed to return the land to approximate original contour.

Safeguards should be incorporated into H.R. 25, which would protect against variance abuses. For example, before a variance is issued, the regulatory authority would publish a notice and offer an opportunity for a public hearing. Moreover, any decision to grant or deny a variance would be subject to the strict standards of the Administrative Procedure Act. The operator would have to conduct his operation so as to meet all other interim standards, and the alternate surface configuration would have to be stable and in accordance with a mining and reclamation plan approved by the regulatory authority. Also, the operator would be required to demonstrate that the approved deviation from returning to approximate original contour, would not cause hazards to health and safety of the public or create significant environmental harm to land, air or water resources.

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(6) Ambiguous Terms

H.R. 25 does not specifically provide the Secretary of the Interior with the authority to define ambiguous terms in the Act. As such definitions are necessary in the course of implementing the Act and often are the focus of

litigation, there is, consequently, a great potential for delay, resulting in unnecessary production losses. H.R. 25 should precisely establish that the purpose of developing clarifying definitions is to provide greater certainty in implementing and administering the legislation. Moreover, such a provision would clearly indicate to the courts that the definitions and interpretations of the Secretary should be given great weight and that the judgment of the court should not be substituted for the Secretary's interpretation unless supported by substantial evidence.

(7) Mining in National Forests

Provisions should be made in H.R. 25 that would permit the Secretary of Agriculture to waive the surface coal mining ban in specific areas of the national forests if, after due consideration, he determines such action to be in the public interest. Of course, such waivers would be in full compliance with the high environmental standards for mining and reclamation already stipulated by the Act.

Without such a discretionary waiver, the absolute prohibition of surface coal mining in national forests is inconsistent with established multiple use principles already applicable to national forests; moreover, an estimated seven billion tons of coal reserves would unnecessarily be locked up for future use. Coal reserves in national forests constitute about 30% of the uncommitted Federal surfacemineable coal in the contiguous States and, consequently, should not be automatically excluded in meeting our national energy requirements. Although the Administration has no plans to lease surface mineable coal in the national forests at this time, it is imprudent to foreclose the possible development of such surface mineable coal resources when this coal could be mined in an environmentally sound manner.

(8) Waste Impoundments and Refuse Piles

Conflicts over design, construction and maintenance standards between State and Federal Agencies have already resulted in the shutdown of mines and the loss of coal production in a time when this nation can least afford the loss.

To add still another layer of enforcement and conflict is totally unwarranted. H.R. 25 compounds the situation by requiring the Corps of Engineers to assume and carry out the responsibilities of this section within 135 days after enactment on every waste impoundment and refuse storage area in the country. It is inconceivable, even if you assumed that the Corps of Engineers had the manpower to carry out such a massive program, that the Corps

could " . . . supervise the design, location, construction, operation, maintenance and abandonment of all existing and new coal mine waste embankments, dams, and refuse piles . . . " throughout the Nation within 135 days.

The requirement gives no consideration to the thousands of affected small operators who will somehow attempt to retain the needed and expensive engineering consulting services to design and construct those structures when and if the conflicts of design standards can be resolved among the various enforcement agencies involved.

With 65% of the surface mines producing less than 50,000 tons per year, and nearly 90% of the auger mines producing less than 50,000 tons per year, the economic impact upon these small operators to develop and submit to three different agencies having differing design standards is obvious. This is another example of how this bill will put the small mine operator out of business and his employees out of work.

(9) Federal Preemption of State role During Interim Program

It is generally agreed that the primary governmental responsibility for developing, authorizing, issuing, and enforcing a surface mining program should rest with the States and that the thrust of Federal surface mining legislation is to assist the States in developing and implementing a program which will achieve the purposes of the legislation. The States should be included in the regulatory and enforcement procedures at the earliest practical moment. A Federal interim enforcement program, such as that stipulated in H.R. 25 could lead to unnecessary Federal preemption, displacement or duplication of State regulatory activities, and discourage States from assuming an active permanent regulatory role, thus leaving such functions to the Federal government. During the past few years, nearly all major coal mining States have improved their surface mining laws, regulations and enforcement activities. Accordingly, the Federal enforcement role during the interim program should be limited to situations where a violation creates an imminent danger to public health and safety or significant environmental harm.

H.R. 25 unnecessarily requires periodic inspections for the purpose of ascertaining compliance with the interim performance standards and gives the Secretary direct enforcement authority during the interim period. Realistically the bill should provide for Federal inspections during the interim program, however, without a specific timetable for such inspections. The Secretary's immediate enforcement powers should be limited to imminent danger situations. For other violations, the Secretary should request the State regulatory authority to take the necessary enforcement actions. Only if the State fails to act within ten days, should the Secretary order the violations corrected. In this manner, the existing State regulatory systems would be utilized fully, eliminating overlapping and duplicative authority and encouraging the timely establishment of permanent State programs.

(10) Contract Authority

H.R. 25 provides the Secretary of the Interior with immediate contract authority of \$10,000,000, rather than authorizing appropriations, for each of the first three fiscal years following enactment for administering certain provisions of the legislation. Such contract authority is both unnecessary and inconsistent with Congressional Budget Reform and Impoundment Control Act. Such costs should be financed through direct appropriations and thus receive the full budget scrutiny that is necessary to assure the best use of Federal resources.

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(11) Permit Approval or Denial Alluvial Valley Floors

Section 510(b) (5) (Permit Approval or Denial) requires that surface coal mining operations will not have a substantial adverse effect on valley floors underlain by unconsolidated stream laid deposits where farming can be practiced in the form of flood irrigated or naturally subirrigated hay meadows or other crop lands (excluding undeveloped range lands), where such valley floors are significant to present or potential farming or ranching operations. First, this appears to apply to a broader area than in the definition since "holding streams" has been deleted. Secondly, it includes areas where farming can be protected and where it is significant to potential farming or ranching operations. This appears to have room for very broad application. The arguments supporting restrictions on mining in alluvial valleys centered around the protection of existing farming areas (hay meadows). However, the language in 510(b) (5) includes potential farming areas and does not recognize that potential farming could be carried out on reclaimed areas. This is a very dangerous provision and does not really address itself to the problem it supposedly was to have corrected. At the very least, this section should be changed to apply to existing significant farming operations.

(12) Exploration

During the conference on S. 425 in the 93rd Congress, a new section 512 providing for coal exploration permits was inserted. As a new section inserted in the bill at this stage of the legislative process, it was never subject to the public hearing process. Since section 523 (Federal Lands) requires that the Federal Lands program " . . . shall, at a minimum, incorporate all of the requirements of this Act . . . ", arguably, all of the provisions of section 512 would apply to Federally owned coal where the surface is privately owned.

Among the requirements for an application for a coal exploration permit is the written permission of the surface owner for exploration activities. Such a

requirement inappropriately interferes with property law governing the rights of surface owners vis-a-vis mineral owners. Such property rights are properly and traditionally a matter for State law. Besides destroying privately owned mineral estates, a matter for State law, the requirement would shackle Federal ownership of coal resources in that a prospecting permit under the Mineral Leasing Act could not be issued without the written consent of the surface owner. This would apply no matter whether the coal which might be discovered was surface mineable coal or mineable by underground methods. Such a result is intolerable.

Furthermore, competitive exploration has been an important element in coal production in the U.S. for many decades. The impact of such a requirement upon the future viability of competitive exploration and its ramifications requires a full and careful consideration before such a revolutionary concept is incorporated into law, especially Federal law. The section ought to be eliminated for these and other reasons until hearings can be held and a careful analysis of it can be responsibly made.

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(13) Secretarial and Judicial Review

In light of the potentially severe economic consequences of a shutdown order, fundamental fairness requires that review by the Secretary be accomplished expeditiously and that some provision be made for prompt judicial review.

Under section 525 mining operators who have been issued notices or orders to cease operations under section 521 are accorded an opportunity to seek review by the Secretary. No limits, however, are imposed on the amount of time the Secretary can take in making the required investigation and issuing a decision. Because of the hardship which a shut-down imposes on the mine operator, the Secretary should be required to issue a decision within thirty days of the receipt of an application for review. This requirement need not be imposed, however, where temporary relief from the order has been granted by either the Secretary or a court.

Section 525(c), which gives mining operators the opportunity to request temporary relief pending the Secretary's review of a shutdown order also imposes no time limits on the Secretary. If such decision were erroneous, the mine could be closed for a substantial period of time without access to the courts, since the court's review will be "solely upon the record made before the Secretary". To avoid undue delay and to permit the operator to seek judicial review and judicial relief where appropriate and as promptly as possible, a decision on a petition for temporary relief from a shut-down order should be issued within five days of its receipt.

(14) Areas Unsuitable for Mining

The bill sets up a mechanism whereby lands may be declared unsuitable for mining if they are "fragile" or "historic" (which includes cultural and aesthetic values and natural systems), renewable resource lands (lands which include aquifers and aquifer recharge areas), natural hazard areas which include areas of frequent flooding and areas of unstable geology), or if surface coal mining is incompatible with existing land use plans or programs. Such vague and subjective standards could apply to essentially any area in the United States. It could therefore lead to the designation of vast areas of the nation as being unsuitable for surface coal mining.

(15) Indian Lands

H.R. 25, section 701(9) is ambiguous and could be construed to require the Secretary of the Interior to regulate coal mining on non-Federal Indian lands. Consequently, the definition of Indian lands should be modified to include the word "Federal", thus eliminating such a possibility.

(16) Spoil on the Downslope

The prohibition against any spoil on the downslope " . . . except that necessary soil or spoil material from the initial block or short linear cut . . . to obtain initial access in . . . a new surface coal mining operation can be placed temporarily on the downslope . . . " is another anti-small business provision of H.R. 25. This provision alone will put most of the small operators out of business since it is largely small operators who operate on the steep slopes. It is an unnecessary and costly legislative provision because the true test of whether downslope spoil can be stabilized and revegetated to prevent slides and excessive erosion depends upon the particular soil and other conditions at each particular site. The decision relative to downslope spoil and its proper placement should be made on an individual basis with respect to each permit application and should not be based upon some sweeping legislative prohibition.

In 1973, 289.5 million tons of surface mined coal was produced in the United States. Of that total, 140 million tons (48.4 per cent) came from the Appalachian states.

Of the Appalachian production, 93.6 million tons (66.8 per cent) came from mines with a slope angle of 15 degrees or more, and 69.3 million tons (49.5 per cent) of Appalachian surface production came from mines on slopes of 20 degrees

or more.

For the Appalachian region, the larger total, 93.6 million tons, is in jeopardy because H.R. 25, section 515(d) (1) prohibits placing spoil on the outslope.

Proponents may argue that the full 93 million tons would not be lost, but the chances that it will be are large. The bill requires states to impose the step-slope sanctions. It even encourages them to impose it on slighter slopes. Therefore, as a consequence, H.R. 25 would have a crippling impact on mountain surface mining.

In many instances, outslope soil placed on extremely steep slopes cannot be stabilized over the long term to prevent slides, erosion and water pollution. Generally recognized principles of soil mechanics show this is impossible since the operator has no alternative to such a requirement - even if a potential alternative were better - he may well have to choose not to mine the reserve in question.

The one method mentioned most frequently as an alternative to conventional surface mining - the modified block cut method does not really provide a suitable substitute. It has several serious shortcomings. Because it forces operations into a short, crowded pit, the method allows, at best, only 50 per cent of the production possible for conventional mining methods utilizing the same amount of equipment and manpower. Thus, to keep the production of a given mine at previous levels, the operator would be forced to double his work and equipment force, and thus his costs per ton. Moreover, the modified block cut method is relatively untried in parts of the Appalachian region, especially in the southern area. There is no real assurance that the environmental problems resulting from it will not be as serious as those from conventional mining.

H.R. 25 would impose inordinate and unnecessary costs on mine operators and the end users of their products. For many operators in the Appalachian regions, such expense effectively prohibits any further surface mining. These Appalachian surface producers are little fellows. Bureau of Mines data shows 1,372 surface mine producers in southern Appalachia alone. Of that number 89.3 per cent produced less than 100 thousand tons a year, and 44.9 per cent produced between 10,000 and 50,000 tons per year. Obviously, producers of this size and financial support have minimum ability to make dramatic changes in mining practice.

A present lack of equipment in being effectively precludes the quick shift to alternative mining methods even if such methods were environmentally and technically sound. Equipment of the type required is in extremely heavy demand, not only for coal mining, but also in construction, metal mining and many other industries.

The impact on Appalachian surface coal production, of the imposition of the modified block cut, would be most severe in southern Appalachia. There, 59 million tons of surface coal was produced in 1973, 52 million of which came from slopes in excess of 20 degrees. Of the total production from surface mines, 57 million tons came from slopes of 15 degrees or more, so at least that much tonnage is in jeopardy by H.R. 25.

We must assume that the bulk of tonnage on slopes above 20 degrees will be lost and tonnage produced on slopes of 15 degrees or more will be placed in serious question. No doubt, some small part of this resource could be recovered by other mining methods or from less steep slopes. This, however, would be possible only in highly particular and unusual circumstances. For the most part, as nearly as we have been able to determine, one must be prepared to accept as part of the cost in the passage of H.R. 25 the elimination of all or the vast preponderance of the tonnage produced in southern Appalachia on slopes of 15 degrees or more.

What does this mean?

To the area involved, it means a potential job loss to more than 10,000 people, people who live and work in the relatively limited geographic area. It means a payroll loss in excess of 100 million dollars per year and all of the benefits which accrue from such a payroll, again in a relatively limited geographic area.

But to the country, it means a great deal more.

Approximately 24 million tons of high quality coal moves from the southern Appalachian coal fields to electric utilities each year. The reliability of these utility systems is based upon the continued ability of the southern Appalachian coal producers to continue to ship coal. Utilities ranging from Ohio south through Georgia need this southern Appalachian coal to meet current air quality standards. Thus, to deny it would worsen our current energy imbalance and make much more difficult our national effort to improve air pollution control.

Procedural requirements and time factors

A careful analysis of the various time factors in the bill will disclose a

disregard for the numerous difficulties inherent in a "start-up" regulatory program as complex as this. Delays in the opening of new mines are almost a certainty. The shutdown of some existing mines is more than likely.

Expansion

of existing mines will be delayed. The inevitable result will be a diminution of

coal production in the short-term. A delay in the expansion of coal production

in the middle-term.

And, possibly no long term future at all for the surface mining of coal. Some provisions of the bill seem purposely designed to shut down mines, especially small mines. With this in mind, the impact upon the nation's coal production is compounded.

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H.R. 25 provides for the following:

(a) One or after the date of enactment, new surface coal mining operations must have a permit in compliance with the interim requirements.

(b) Within 135 days after enactment, existing permits will be reviewed and the requirements of the interim program shall be incorporated into the permit.

(c) Within 135 days of enactment the Secretary shall implement a Federal enforcement program to be effective in each state.

The requirement for new permits to be in compliance with section 502(b) is upon enactment. Therefore, the state regulatory authority will require an instant and immediate interpretation of all of the "environmental protection standards" of that subsection for the issuance of a new permit. With respect to

existing operations, compliance is mandated within 135 days of enactment by incorporation of the requirements of the bill in each existing permit.

However,

no reasonable period is allowed for the operator to come into compliance with such requirements after incorporation. Immediately upon the incorporation of the interim requirements (135 days after enactment), Federal inspectors are to

be in the field issuing orders for compliance and taking "necessary enforcement

action" pursuant to the Federal enforcement provisions. Those Federal enforcement provisions include civil penalties of up to \$5,000 per day and criminal penalties of a \$10,000 fine and/or one year's imprisonment. Keep in mind that this Federal enforcement program is scheduled to go into effect 180 days after enactment and is to remain in effect until the state program has been

accepted. Thus the interpretation of the interim program requirements establishing the interim program becomes exceptionally important. Who will be

the inspectors and individuals who will make on-the-spot, in the field interpretations of those interim performance standards? Subsection 502(f)(3)

says that they will be personnel of the Office of Surface Mining Reclamation and Enforcement as well as personnel from the United States Geological Survey, the Bureau of Land Management, and the Mining Enforcement and Safety Administration, and may be from the Forest Service, the Soil Conservation Service, or the Agricultural Stabilization and Conservation Service. This is a blueprint for chaos.

The Secretary is to implement a Federal enforcement program and to promulgate regulations for a permanent regulatory procedure, which will be the basis upon which state regulatory programs will be approved or disapproved. At this point, it would be useful to review the multitude of other actions the Secretary must take prior to the promulgation of the regulations. And, with this in mind it becomes critical to ask, can he possibly meet that 180-day deadline to promulgate regulations?

The actions to be taken by the Secretary of the Interior within 180 days after enactment with respect to the permanent environmental protection standards are these:

(a) He must draft and publish proposed regulations pursuant to the requirements of the Act. Considering the internal review and approval procedure, probably the shortest period of time in which this could be accomplished would be 30 days, but since he will also have to comply with the National Environmental Policy Act and prepare and circulate an environmental impact statement, 90 days would be more realistic.

(b) Hold at least one public hearing on the proposed regulations. This would require a 30-day notice period subsequent to the publishing of the proposed regulations. Added to that period would be the actual hearing days.

(c) Provide at least 45 days for comments from State and local governments and interested persons. This could run concurrently with notice for a public hearing.

(d) Prepare and file an environmental impact statement. While it is possible it is difficult to envision this complex document being prepared in less than 90 days, and standard review period with the Council of Environmental Quality is another 90 days, for a total of 180 days for the environmental impact statement alone.

(e) Consider all comments and relevant data presented at the hearings and revise permanent environmental protection standards accordingly. Judging from the promulgation of other regulations, 30 to 60 days would be required.

(f) Obtain the written concurrence of the Administrator of the Environmental Protection Agency. It is difficult to anticipate what this time period would be, but it would not seem unrealistic to estimate 30 days.

(g) At this point the Secretary need only go through the final internal clearance procedures in preparation for promulgation of the permanent environmental protection standards. This could take 15 to 30 days if no difficulties were encountered.

At this point the permanent standards would be promulgated upon which the state might then design a state regulatory program to be submitted to the Secretary for approval. However, this assumes that no appeal to the courts involving the promulgation of the regulations themselves, or upon the environmental impact statement, is instituted and pursued. If such judicial proceedings are commenced, it is difficult to estimate when the regulations would indeed be promulgated.

Since it is not likely that the draft regulations would be published prior to the completion of the environmental impact statement, it is more likely that the draft regulations will not be published until 90 days after enactment. Added to that 90 days would be another 45 days for comments and another 30 days for notice of hearings (which could run concurrently). A lapse in time of 135 days to 165 days is inescapable. Consideration of comments could easily consume another 30 days. Added to that would be written concurrence of EPA - another 30 days - plus the review period of the Council on Environmental Quality - 90 days - plus internal clearance prior to promulgation of permanent environmental protection standards - another 15 to 30 days. It becomes clear that the 180-day deadline for the Secretary to promulgate the permanent environmental protection standards is unrealistic and cannot be achieved. A more realistic estimate would be in the neighborhood of from 12 to 18 months.

At this point the states are finally able to commence preparation of legislation to be presented to the state legislatures to comply with the regulations of the Secretary. The States must overcome the following hurdles:

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(a) Enact a state surface mining and reclamation law which is in accordance with all of the requirements of the Act and the regulations promulgated by the Secretary.

(b) Demonstrate that the state has adequate administrative and technical personnel and sufficient funding to carry out such a program.

(c) Establish a process for designating areas unsuitable for surface coal

mining (which would likely require an additional act in the State legislature).

(d) Establish a process for coordinating the review and issuance of a permit which other Federal and State permit processes applicable to the proposed operation.

If the 12-18 month estimate for the final promulgation of permanent environment protection standards is probable, and we believe it is, then the time period left to the State to win the enactment of its proposed program by the state legislatures, has been diminished to a mere 6 to 12 months.

Unless this bill is merely paying lip service to the concept of state regulatory programs, and we believe that to be the case, the time factors for preparation and submission of proposed state programs to the Secretary for approval should be based upon the point in time that the Secretary publishes final permanent protection standards. That is, the time for the states to submit a program for approval should be 18 to 24 months or such other period as is appropriate, after the adoption and publication of the permanent environmental protection standards and not based upon the date of enactment. There are no penalties against the Secretary should he fail to promulgate regulations by the end of the 180-day period specified in the bill - the penalties are against the state.

From the above it is clear that substantial dislocation of the nation's current coal production capacity will be inescapable if H.R. 25 were to be enacted.

(18) Surface Owner Protection

The Committee rejected the outright prohibition of the "Mansfield amendment" which would have prohibited the surface mining of federally owned coal under private surface. The compromise developed in the conference during the last Congress directs the Secretary, "in his discretion but, to the maximum extent practicable," to refrain from leasing such coal deposits for development by methods other than underground mining techniques. Since there are billions of tons of surface mineable coal in such deposits, this approach is, in effect, a prohibition against surface mining of these reserves which is simply achieved in another manner. We recognize that the surface owner must be "made whole", as this is just and appropriate. We recommend that the rights of the surface owner be protected by bonding requirements which places on the operator the responsibility for any damages to the surface, crops, improvements, and compensation for lost income. We would not oppose an additional settlement based on a fair formula to compensate the surface owner for intangible effects on his operations. Under other provisions of the bill the land will be reclaimed and can be returned to its previous use, but the nation needs the Federallyowned

low-sulfur western coal under such lands in this era of energy crisis. Further, any formula which can be used as a prohibition against its mining is not in the national interest. The formula should not be retroactive and therefore should only apply to arrangements entered into after the date of enactment. The committee attempted to follow a rule which would avoid windfalls to speculators while at the same time preventing a lock-out by the landowners of the Federally owned coal, belonging to all of the people. Unfortunately, the formula finally settled upon accomplishes neither.

(19) Hydrologic balance

Two provisions of H.R. 25 are very troublesome as they relate to maintaining the hydrologic balance. These provisions are: First, "restoring recharge capacity of the mine site to approximate premining conditions"; and, second, "preserving throughout the mining and reclamation process the hydrologic integrity of the alluvial valley floors in arid and semi-arid areas of the country".

The use of the words "restoring" and "preserving" are absolutes. The use of absolutes robs the administrator of reasonable discretion so that he is given no alternative but to deny a permit if the hydrologic integrity cannot be "strictly preserved" during the mining and reclamation process, or if the recharge capacity cannot be "restored" to approximate premining conditions. Reasonable deviations from those absolutes should be permitted and should be within the discretion of the regulatory authority because without the opportunity to use reasonable discretion, the regulatory authority may unreasonably and unwisely be required to deny a permit.

(20) Designation of Various Unsuitable for Mining of Minerals Other Than Coal

The bill is a coal surface mining reclamation measure and the definition of surface mining includes the word "coal". While section 711 authorizes a study of reclamation standards for surface mining of other minerals, nowhere in the bill are there requirements relating to mining of minerals other than coal, except in section 601. Section 601 provides for designating areas as being unsuitable for mining of minerals and materials other than coal, and does not limit it to surface mining. Clearly it is non-germane to the subject of the bill and should be eliminated. By authorizing the study in section 711 and by limiting all other regulatory provisions to coal, the Committee recognized that

mining for other minerals is non-germane to the basic purposes of the measure.

Just how rare in nature is the phenomenon of a commercially mineable concentration of many metals is little understood or realized by laymen. By retaining this section important concentrations of commercially mineable minerals may be foreclosed without an adequate and clear understanding of the importance of such mineable deposits to the continuation of our civilization as we know it. This is a matter which should be taken up in a separate measure after full and exhaustive hearings and when all of the facts are before the Committee. We recommend the deletion of Title VI from H.R. 25.

FUTURE DEMANDS FOR COAL AND THE IMPACT OF H.R. 25

Finally, the question of western coal development has raised the specter of competition between different sections of the country for a market share of the expanding coal demand. We regard this development as extremely unfortunate. The fact is that the United States needs the maximum production for all sectors of the country where coal can be produced. It is simply impossible to meet the coal demand from any one area of the country. The sheer magnitude of projected coal demand requires heavy investments in both surface and underground mining and the development of an infrastructure throughout the country to move that coal to market where it can be consumed. Appalachia, the Mid-West and the Far West all have a major role to play in the development of a coal industry responsive to the emerging national needs. Economics, geology and geography will determine the ultimate market share for each section of the country, but such market share will be set largely by supply constraints and not by those of the demand side.

The achievement of the national objective of doubling or possibly tripling our present coal production by 1985, as enunciated by Interior Secretary Morton, would be highly impossible should H.R. 25 be enacted.

In the attainment of the Nation's 1985 energy goal, as announced by Secretary of the Interior Rogers Morton, the Energy Task Force of the National Academy of Engineering predicts that domestic coal production could increase from 600 million tons per year in 1973 to a level of 1,260 million tons per year by 1985. In other words, the coal industry will have to bring into production one deep mine and one surface mine each month for the next 10 years, all of which must average 2 million tons per year, resulting in an expenditure of about \$21 billion, expressed in 1974 constant dollars. Regionally, this monumental expansion implies the following:

In the East, 140 new 2 million ton per year underground mines.

In the East, 30 new 2 million ton per year surface mines.

In the East, recruit and train 80,000 new coal miners.

In the West, 100 new 5 million ton per year surface mines.

In the West, recruit and train 45,000 new coal miners.

As for coal transportation requirements, the scope of the task ahead of us is even more staggering:

The coal carriers must:

In the East, construct 60 new 2 million tons per year railbarge systems of 100-500 miles each.

In the West, construct 70 new 3 million tons per year railbarge systems of 1000-1200 miles each.

Construct 4 new 25 million tons per year slurry pipelines of 1000 miles each.

Construct 2 new 2.5 billion cubic feet per day gas pipelines of 1000 miles each.

And the transportation equipment manufacturers must:

Design and build 8000 rail locomotives.

Manufacture 150,000 gondola and hopper cars of 100-ton capacity each.

Obviously, therefore, the excessive restrictions on coal production imposed by H.R. 25 will significantly hamper if not totally prevent the attainment of America's 1985 energy goal, and continue U.S. dependency on foreign energy sources inimical to our national interests.

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In response to questions posed by Members of the Interior and Insular Affairs Committee on Tuesday, February 18, 1975, Secretary of the Interior Rogers Morton submitted the following detrimental impacts in the event of passage of H.R. 25:

*2*Additional costs to producers as a result of H.R. 25

	Average cost per ton
Small surface mines:	
Permit costs	\$0.30
Steep slope costs	.55
Impoundment costs	.10
Reclamation fund fee	.35
Total (estimated annual output affected by 1976 - 40,000,000 tons)	1.30

All surface mines:
 Permit, steep slope, and impoundment costs .50
 Reclamation fund fee .35
 Total (estimated annual output affected by 1976 - 330,000,000 tons) .85
 All surface and underground mines:
 Permit, steep slope, and impoundment costs .24
 Reclamation fund fee .30
 Total (estimated annual output affected by 1976 - 684,000,000 tons) .54

NOTES. - These are intermediate cost estimates in 1975 dollars by 20-30 percent in either direction.

Additional costs, which are not included in the above figures because they are hard to qualify, for

Additional capitalization requirements;

Alluvial valley floor protection;

Aquifer restoration;

Citizen suits;

Designation of lands as unsuitable for surface coal mining;

Exploration permit costs;

Moratorium on coal leasing on Federal lands;

Removal of siltation structures;

Restrictions on mining in National Forests; and

Surface owner consent for exploration and mining.

could add an additional 25-50 percent to the cost estimates.

POTENTIAL IMPACTS AS A RESULT OF H.R. 25

*2*Potential reductions in output

	Millions of tons
During the transition period	15-50
Long run	48-141

POTENTIAL OIL IMPORTS

If 141 million tons of coal had to be replaced by imported oil, an additional 608 million barrels of oil per year or 1.7 million barrels a day would be needed. But not all coal can be replaced by oil. It is estimated that 80% would be replaced by oil and 20% by undergroundmined coal. On that basis the U.S. would need to import 485 million barrels of oil per year of 1.3 million barrels a day which, at a price of \$11 per barrel, would add \$5.4 billion per year to U.S. foreign exchange outflow.

POTENTIAL EMPLOYMENT IMPACT

If coal output were reduced by 141 million tons of coal, the first-year direct employment impact would be 26,100 jobs lost (based on 225 work days a year and an average daily output of 24 tons per miner). For each direct job lost in mining, .8 jobs or 20,880 additional jobs would be lost indirectly, resulting in a total employment impact of 46,980 jobs. This is a first-year impact and it can be expected that a large proportion of the unemployed would ultimately find jobs in other mines or other sectors of the economy.

FIRST-YEAR GNP IMPACT

If coal output were reduced by 141 million tons of coal, at an assumed average price of \$15 per ton, there would be a direct reduction of purchasing power of \$2.1 billion. There would also be additional ripple and spillover effects, although in the longrun the effect would be less as resources are employed in other parts of the economy.

A reduction in output of 141 million tons is estimated to impact on:

	Millions of tons
Small mines	52
Steep slope mining, siltation, aquifers	68
Other losses including alluvial valley floors	21
Total	141

CONCLUSION

For the reasons set forth in these dissenting views, we strongly oppose the favorable reporting of H.R. 25. It grossly oversteps the bounds of responsible legislative drafting. It meddles in areas unrelated to surface mining control and land reclamation. Its enactment into law would stifle energy production and seriously cripple our economy in the years ahead.

We had hoped the new 94th Congress would approach this legislation with a view toward negotiation and compromise. We feel our efforts to produce a responsible bill through the amendment process were at best patronized. The mood of the majority of the Committee was to "prove" an environmental point. And quickly at that. There was not sufficient time for responsible drafting. The Committee nearly closed its doors to debate.

Perhaps the clamor to capture the national political limelight has caused this rush to report the bill in the new Congress. But whatever the cause, the result is to rob new Members of the Committee of an opportunity to affect major legislation, as well as produce a bill with serious flaws.

SAM STEIGER.

DON YOUNG.

BOB BAUMAN.

STEVE SYMMS.

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SEPARATE VIEWS OF REPRESENTATIVE WILLIAM M. KETCHUM

I strongly oppose the passage of H.R. 25. Its thrust is not one whit different from the bill I voted against last year and which was properly vetoed by the President.

H.R. 25 would produce another elaborate network of Federal regulatory schemes. It is based on the ill-founded notion that regulation of strip mining could and should come from Washington, D.C. The track record for such Federal regulations is poor.

In my view, the several States are best suited to regulate strip mining within their borders. This is a diversified nation with the scope of strip-mined terrain ranging from the mountain regions of Appalachia to the plains of the mid-west. Most States affected by strip mining are now regulating the industry. Why permit the Federal bureaucracy to interfere? The States should continue to exercise a responsibility which is properly theirs - regulation of local strip mining.

WILLIAM M. KETCHUM.