

HOUSE REPORT NO. 94-896
Legislative History
House Report No. 94-896

Following is the March 12, 1976, Report from the Committee on Interior and Insular Affairs on H.R.13950. 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 1976,
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 Committee

HOUSE OF REPRESENTATIVES REPORT No. 94-896; 94th CONGRESS 2nd Session; H.R. 9725

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Preamble

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

REPORT

[To accompany H.R. 9725]

The Committee on Interior and Insular Affairs, to whom was referred the bill (H.R. 9725). 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, report favorably thereon with amendments and recommend that the bill as amended do pass.

INTRODUCTION

2 Three times in the past 22 months the Committee on Interior and Insular Affairs has reported legislation to regulate the surface mining of coal. The first two bills were vetoed. H.R. 9725 is the Committee's third effort and while it is based, in large part, on the previously passed-but-vetoed bills it also includes substantial changes which meet the major objections voiced by the bill's opponents.

2 The Committee finds that the major objections were not accurate and, as will be discussed in this introduction, the objections were in large part the product of misinterpretations of the bill's language as well as misrepresentation of the state of the coal industry and mining technology. Nevertheless, because the art of legislation is imperfect, and because the need to mine coal is vital to the national interest, the Committee has agreed to

adopt significant modifications to assure that implementation of the bill will not result in any interruption of coal supply.

2 The veto of H.R. 25 (the previous strip mining bill of this Congress) was based on the prediction of the Bureau of Mines and other agencies that enactment of the bill would result in a loss of production - from 40 to 162 million tons of coal, which would, in turn, cost the loss of thousands of jobs and drive up the cost of coal. According to Frank Zarb, Administrator of the Federal Energy Administration, if the loss of production predictions were inaccurate, the other projections would also be called into question. The validity of the dire projections turned, then, on the validity of the production loss estimates.

3 After scrutiny by the Committee, the record is now clear that the production losses were mostly fabrication and could not be justified.

3 A full analysis of the agencies' projections is found later in this report. n1 The major issues are addressed here. The bulk of the projected losses (143 million tons of the 166 tons upper limit) was attributed to the bill's effect on (1) small mines (52 million tons), (2) mines on steep slopes (25 million tons), and (3) operations on alluvial valley floors (66 million tons) in the first full year of operation. The fact that a significant percentage of small mines in Appalachia are on steep slopes and thus these figures represent double counting was never explained by the administration.

3 n1 See appendix 1.

3 Here are the arguments behind these projections and Committee action to assure that even though the arguments were highly questionable, the projected consequences will not occur.

3 Alluvial Valley Floors

3 Administration position. - According to projections of the Bureau of Mines, provisions of the bill relating to mining on the highly productive yet environmentally delicate alluvial valley floors of the West, was ambiguous and could have precluded production on a significant percentage of coal-bearing lands in the West and would have shut down existing mines.

3 Committee action. - The Committee approved a new alluvial valley floors section that grandfathers existing mines and tightens the definition to remove ambiguity. According to an analysis of the United States Geological Survey of the major Federal coal producing strip mines in the west only five are on alluvial valley floors and all are exempted from the effects of this section under the new language. The USGS study entitled Maps of Alluvial Valley Floors and Strippable Coal in 42 Quadrangles, Southeastern Montana [Open file report,

number 76-162 (February 1976)], indicates that of the 27.6 percent of the area of three mapped counties that contain strippable coal, only 2.7 percent is overlain by alluvial valley floors, and according to USGS the mapped area "is typical of the Powder River Basin as a whole." (See letter of March 3, 1976 from M. R. Klepper, Acting Director, USGS, in Appendix III.) So the major objection affecting western coal has been removed.

3 Small Mines

3 Administration position. - The Administration asserted that the small Eastern operations mining less than 50,000 tons are without the money or expertise to comply with the phasein requirements and procedures.

3 Committee action. - The Committee is aware of the fact that despite the Administration's hypothetical projections, small operations are flourishing in Pennsylvania (see discussion later in this introduction). Pennsylvania is a State whose standards are similar to those of H.R. 9725. Nevertheless, in an effort to facilitate compliance, the Committee delayed the application of the minimal interim standards from 135 days to 1 year. As the operator doesn't apply for a new permit until 20 months after enactment, surely he will be capable of addressing the new standards and procedures in that period.

4 Steep Slopes

4 Administration position. - According to agency projection, virtually all production on the steep slopes of mountain mining could be wiped out under the bill.

4 Committee action. - As is discussed later in this report, the bill does not ban mining on steep slopes, but merely requires the use of available technology that can be economically conducted. The problem here, if any, is really to give an operator sufficient time to change mining techniques to comply with the new requirements. The vetoed bill phased in this requirement, in 135 days and where noncompliance does not present imminent danger, the operator would have a "reasonable time" to comply. But the Committee took another step with H.R. 9725 by giving existing mines a full year before the new standards are imposed, and the "reasonable time" provision is still applicable after the standards are in place.

4 In addition to these changes, the Administration expressed concern about the imposition of a new fee on coal to pay for a program to clean up unreclaimed abandoned mines. The Committee agreed to delay collection of the fee to the end of the first quarter of 1977.

4 Although the Committee has taken the steps to assure enactment of H.R. 9725 will not result in any production loss, the record should be clear that the Administration's arguments were never really substantiated by the agencies responsible for their formulation. It is not unpredictable that Members of Congress, the press and citizens at large would be alarmed at such dire predictions as the loss of 36,000 jobs or up to 12 million tons of production when such numbers bearing the imprimatur of FEA or Department of Interior are issued by the White House. But at a hearing on the President's veto of H.R. 25, facts were elicited that clearly undercut the validity of the figures. The numbers were the result of double counting, interpretations of the bill the Administration's own experts admitted were "unreasonable" and the fundamental fallacy that even if the bill precluded the mining of a certain amount of coal reserves, the loss in reserves could be equalled with loss of production. Given the fact that by the most conservative estimate there are 136 billion tons of strippable coal and almost 300 billion tons of deep minable coal in this country, such an assumption defies logic. Moreover, the hearings established the point somewhat obscured in the Administration pronouncements, that the "lost" jobs were not jobs that currently exist but hypothetical jobs based on projected increases of production in the future. These alarming loss figures were grounded mainly on coal in a particular area that might never be strip mined because the land could not be reclaimed - despite the fact that billions of tons of other coal could be mined where the land could be reclaimed: the tonnage and job loss estimates and price projections were based on these assumptions.

4 Following the President's veto of H.R. 25, the Committee attempted to review the background data and studies upon which the projections were made. Frequent and specific requests were made, but the data was never forthcoming. It soon became apparent that the reason the data base or analysis were unavailable was because, in fact, no professional economic impact analysis, no properly designed site specific study was ever completed.

5 Instead, an investigation following the override veto by two Washington-based journalists uncovered the fact that "some of the material designed to substantiate the production losses was hastily assembled after the veto was announced, in preparation for a congressional hearing." This investigation produces a clear pattern. A systematic economic impact analysis was not attempted but, instead, the figures were based on nonscientific interviews, many by long-distance phone calls, to various operators and industry groups who had lobbied against the bill, "a lot of guessing," by Department employees, and, in some cases, on completely erroneous assumptions about the key provisions of the bill (e.g. Department of Interior officials were assuming the bill banned mining on steep slopes, when in fact, it did no such thing). But in the nature

of such debates, when such numbers as 162 million tons or 36,000 jobs enter the discussion, it's nearly impossible to exise them from the controversy even though they were based on analysis one Bureau of Mines employee called "mushy".

5 n2 See appendix 2.

5 For the Committee, a more reliable method to predict what is going to happen, is to look at what has happened in the past. In recent times where more stringent surface mining regulations have been imposed, production doesn't go down, it goes up. The most telling example is that of the State with one of the toughest surface mining laws, Pennsylvania.

5 In 1963, the Pennsylvania law was strengthened to include many of the environmental protection features now contained in H.R. 9725. Not only was there no significant impact on production in the years immediately following implementation of the new law, but also during the 10-year period since implementation overall production has increased 17 to 18 percent. Moreover, the Pennsylvania law has not had the effect of driving small operators out of business. Currently, approximately half of the operators in Pennsylvania mine less than 50,000 tons per year and the number of bituminous strip mining operations has increased from 542 in 1964 to 1,029 in 1974. It stands to reason, that despite the protestations of industry, enactment of Federal legislation similar to the Pennsylvania law would have the same result.

5 In testimony before the Committee, however, the Administration countered that the Federal bill and the Pennsylvania law were not analogous. According to John Hill, Deputy Administrator of the Federal Energy Administration, the Pennsylvania law is somehow riddled with variance procedures not found in the proposed Federal legislation. Mr. Hill testified that:

5 "The Pennsylvania law has a number of key provisions which allow the state regulatory authority to grant variances or exemptions, or requirements of the Act, particularly to small miners."

5 Upon learning of this assertion, Walter N. Heine, the person charged with administering the Pennsylvania law was moved to write the Committee. He labeled Hill's assertion as:

6 "[totally] incorrect. We diligently make every effort to treat coal operators equally regardless of size. There is no provision in our law or regulations, nor is it in our administrative policy to make special provisions for, or grant variances to, coal operators on the basis of their size of operation." n3

6 n3 Letter of Walter N. Heine, P.E., Associate Deputy Secretary for Mines and Land Protection, Department of Environmental Resources, Commonwealth of Pennsylvania (June 6, 1975)

6 In recent testimony before the Senate Committee on Interior and Insular Affairs, Mr. Heine discussed the Administration's characterization of Pennsylvania's law, and the justifications for vetoing H.R. 25.

6 "In further regard to the surface mining bill veto incident, the U.S. Bureau of Mines estimated that H.R. 25 would result in production losses from 40 to 162 million tons for the first full year of implementation. From one-third to one-half of that amount was attributed to the closing of small coal mines with production of less than fifty thousand tons per year located principally in the East.

6 Yet, environmental protection standards comparable to those in H.R. 25 are now in effect in Pennsylvania and have been for over ten years. A Pennsylvania surface mine industry spokesman recently informed me that half of Pennsylvania surface miners produce less than fifty thousand tons per year and our bituminous surface mine production has increased over 30% during the last three years. In other words, the Congress rightfully looked at the Pennsylvania experience in regulating small operations and concluded that H.R. 25 would not devastate small operators.

6 This type of information was never requested of us by the U.S. Bureau of Mines or the FEA nor were we asked by these agencies to substantiate our figures even after we supplied these data to the Congressional committees during the drafting of the bill. In fact, a check into my telephone log and notes and discussions with the technical staff of our surface mining control agency - does not reveal any substantive communications, oral or written, with Bureau of Mines or FEA officials concerning the probable impact of the Federal surface mining bill on Pennsylvania coal operators. On May 22, 1975, two days after President Ford announced his veto, I received calls from both FEA and Bureau of Mines requesting data on the effect of Pennsylvania law on operators. On May 27, 1975, I received another call concerning the number of small Pennsylvania operators mining areas where the ground slope exceeds 20 degrees. All of these calls preceded Congresswoman Mink's hearing on the veto of June 3, 1975."

6 Mr. Heine's statement accurately summarizes three key points:

6 (1) Based on experience, implementation of H.R. 9725 will not result in any serious disruption of coal supply from small mines;

6 (2) The agencies' conclusions regarding job and tonnage losses are

contrary to the history of strip mining legislation; and

7

7 (3) The data justifying the agencies' projections were based on informal, unscientific procedures, conducted, to a large extent, after the projections were issued.

7 Add the fact that the Committee has cleared up any ambiguities surrounding the alluvial valley floors section, has grandfathered existing operations on alluvial valley floors, and has extended the timeframe for a full year for existing operations thus giving steep slope operators ample opportunity to comply, it should be clear that whatever the validity of the Administration's arguments against the bill, their objections are no longer applicable. To be sure, enactment of H.R. 9725 should allow coal production to increase, particularly in the West where development is hampered by uncertainty and conflicting requirements.

7 After years of controversy, the reporting of H.R. 9725 gives the House the opportunity to enact a sound and workable bill that can be approved with the assurance that it will not interfere with meeting the Nation's energy needs.

THE PURPOSE OF H.R. 9725

7 The purpose of H.R. 9725 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 -

7 (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;

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

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

7 (4) applying Federal standards to operations on Indian lands and undertaking a study to develop a program under which Indian tribes may elect to assume full regulatory authority of coal mining operations on Indian lands;

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

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

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

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

7 (9) 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

7 (10) recognizing the rights of surface owners and off-site water users.

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

NEED

8 COAL AND OTHER ENERGY RESOURCES

8 Coal has always been a major contributor to the United States energy needs. For various reasons, the growth of the coal industry, as a portion of U.S. consumption per year, has been relatively stagnant, or even declining during past decade (see Table No. 1, p. 9). 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.

8 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. 9). 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. 9).

8 According to the latest Bureau of Mines figures, coal production in 1974 amounted to 601 million tons and coal production for the first ten months of 1975 was over 533 million tons. Total U.S. consumption was over 552 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. 11). 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.

8 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 the Bureau of Mines (Table No. 3(b), p. 10) 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. The value of the vast reserves of Appalachian low sulphur coal is enhanced by its contribution to air quality. This factor becomes increasingly important as a growing proportion of utility fuel needs are met by coal.

8 DISTURBED LANDS

8 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. The passage of laws regulating coal surface mining in some 34 States has proven to be generally ineffective in bringing about necessary reclamation of the disturbed land areas.

9

9 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. 12-13.) 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.

9 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 past years that rate has been exceeded by 35 percent.

9 "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. 14.)

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TABLE

1. -
Annua
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coal,
1963-
73

2(
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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	556,022
1974	552,709
	n1
1975	414,507

9 n1 Preliminary figures for the first 9 months of 1975.

9 Source: Bureau of Mines.

*4*TABLE 2. - TOTAL

U.S. HYDROCARBON
RECOVERABLE
RESERVES

	Number	Times 1015Btu	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

9 Source: Bureau of Mines.

*5*TABLE (3) (A). -
 COAL AS AN ENERGY
 SOURCE IN THE
 UNITED STATES,
 PROJECTED

Year	Total energy demand		Energy demand for coal	
	Trillion Btu	Percent increase	Trillion Btu	Percent increase
1974	73		13	
1980	87	19	17	31
1985	103	41	21	62
2000	163	123	35	169

13
 TABLE
 3 (B) .

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 ESTIM
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State	1977 sulfur levels of supply (percent by weight)				1980 sulfur levels of supply (percent by weight)				Total					
	0.6	0.7	1.1	1.6	0.6	0.7	1.1	1.6						
	and	to	0.9	to	and	to	0.9	to	and					
	under	0.8	to	1	1.5	over	Total	under	0.8	to	1	1.5	over	Total

Appal

achia												
n:												
Alaba			10,56			28,47			12,35		9,02	
ma	200	2,335	5	7,660	7,715	5	235	2,730	5	8,955	5	
33,300												
East												
Kentu	24,88	19,15	23,03	17,39		92,50	29,59	22,77	27,39	20,68	9,57	
cky	0	0	0	0	8,050	0	0	0	0	0	0	
110,000												
Maryl											1,67	
and		100	125	155	1,500	1,880		11k	140	170	5	
2,100												
					53,57	58,10					58,0	
Ohio				4,530	0	0				4,900	00	
62,900												
Penns												
ylvan				25,58	46,41	85,00	71,02	3,9		28,11	51,0	
ia	935	3,570	8,500	5	0	0	5	20	9,340	5	00	
93,400												
Tenne						10,27					6,51	
ssee	125	2,770	775	1,315	5,395	0	150	3,350	805	1,585	0	
12,400												
Virgi	13,47	15,83				42,90	15,70	18,45			1,60	
nia	0	0	7,120	5,105	1,375	0	0	0	8,300	5,950	0	
50,000												
West												
Virgi	19,75	47,28	17,00	12,97	47,15	144,1	22,19	53,13	19,11	14,58	52,9	
nia	0	0	0	0	0	50	5	5	5	0	75	
162,000												
Total	0	59,36	91,03	67,00	74,71	171,1	463,2	68,89	104,4	77,44	84,93	190,
526,100												355
Midwe												
stern												
:												
Arkan						600	600				800	
sas												
800												
Illin						62,58	73,20				67,5	
ois	2,415		2,710	5,490	5	0	2,605		2,925	5,925	45	
79,000												
India						29,	31,20				33,6	
na		10	5	1,285	900	0		15	10	1,440	35	
35,100												
											1,10	
Iowa						1,100	1,100				0	
1,100												
						1,300	1,300					
Kansa											1,60	
s						1,400	1,400				0	
1,600												
Misso											5,80	
uri						5,300	5,300				0	
5,800												
Oklah											2,20	
ome	90	270	455		1,985	2,800	100	300	500		0	
3,100												

Total

,

United

States

State	92,110	134,355	80,790	111,100	336,645	755,000	112,485	165,655	97,290	146,435	373,135
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9 Source: U.S. Bureau of Mines.

*2*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

9 n1 Preliminary figures. Source: Bureau of Mines.

\$5. - AMOUNT OF

TOTAL U.S. COAL

PRODUCTION PROVIDED

BY SURFACE MINING

Year	Total tonnage coal produced (in million short tons)	Percentage produced by surface mining
1974	603	n1 54.0
1973	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

9 n1 Preliminary figures reflect reduced productivity in eastern mines due to wildcat strikes. The percentage for 1975 is expected to be lower than that for 1974.

9 Source: Bureau of Mines.

*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	4,746	977	24	150	18:1
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			

9 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.

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

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

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

*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	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			

9 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.

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

9 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 strippable at this time.

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

*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]

by	State	Reclamation not required by law	Reclamation required 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	2 0,891
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

9 Source: U.S. Soil Conservation Service.

15 SOCIAL AND ENVIRONMENTAL IMPACTS

15 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.

15 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.

15 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 reestablishing vegetation in these circumstances:

15 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 geological 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.

15 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)

15 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)

16 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.

16 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.

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

16 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 .
.
.

16 Rullell Train (then Chairman, President's Council on Environmental Quality):

16 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.

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

16 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.

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

17 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.

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

17 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.

17 Ernest Preate (Attorney, Scranton, Pennsylvania):

17 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.

17 James L. Coen (Blacksburg, Virginia):

17 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.

17 Robert Handley (President, Coal River Improvement Association, West Virginia):

17 (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."

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

17 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.

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

18 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.

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

18 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.

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

18 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.

18 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.

18 A NATIONAL ISSUE

18 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.

18 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.

19 STATE REGULATION OF COAL SURFACE MINING

19 Thirty-four 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.

19 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. A recent survey of Selected State laws reveals why such legislation has failed to cure the environmental abuses associated with strip mining - the laws are, in many cases, simply inadequate.

19 The survey, compiled by John C. Doyle of the Environmental Policy Center (a Washington-based organization that favors enactment of a national strip mining legislation) demonstrates that even recently enacted or modified strip mining laws fail to measure up to industries claim that the States now provide adequate protections.

19 For example, in one State not only can revegetation be deferred until the "soil has become suitable" for planting (a sort of self-fulfilling prophecy as it is improper mining techniques that can make the soil unsuitable in the first place), but revegetation of current mining sites can be waived completely if the operator agrees to revegetate some other previously mined area. Of the other States examined in this report, many still fail to prohibit highwalls (leaving an inherently unstable and hazardous condition), allow the irresponsible placement of spoil on steep mountain slopes, fail to require sufficient information about the mining and reclamation proposal, fail to give interested citizens notice or access to the decisionmaking process, tie the hands of the regulatory authority with unreasonable burdens, and are otherwise inadequate.

19 Of course, there are strengths in many of these laws and some States have implemented tough mining reclamation standards. But, on the whole, it is still true that States are disinclined to impose tough standards on their own industry because this puts local business at a competitive disadvantage. State officials are not unconcerned about environmental preservation or the protection of human health and safety, but as State regulation tends to seek the lowest common denominator, the answer to this dilemma lies in the enactment of Federal standards applicable to all operations.

19 The reasons for the failure of State regulation vary from State to State. One factor in the disappointing record of State regulation is that the State regulatory machinery has been unable to keep pace with the rapidly growing

industry. Even where State law is strong and unambiguous enforcement agencies have often been under-staffed, under-equipped and under-financed. 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.

20 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:

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

20 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 . . .

20 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 . . . "

20 A second study, sponsored by the Appalachian Regional Commission and the Commonwealth of Kentucky, Department for National 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

21 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.

21 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.

21 The obvious inability of the States to develop any coherent, comprehensive national or regional policy covering the surface mining of Federally-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.

21 SURFACE MINING METHODS AND TECHNIQUES

21 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.

21 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.

22 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.

22 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.

22 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 term "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.

22 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.

22 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.

23 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.

23 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.

23 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.

23 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.

23 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.

23 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.

24 TIMELINESS OF FEDERAL REGULATION

24 A primary constrain upon the coal industry in discharging its reclamation responsibilities has been 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 Btu steam coal, and by rising demand of Canadian, Japanese, and other foreign steel mills for high Btu-low sulfur metallurgical coal.

24 This picture has altered radically since the onset of the national energy crisis precipitated by the Arab oil embargo. The Nation's dangerous overreliance 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 necessary to provide for economic and national security needs. The Federal Government has responded to the crisis with a series of proposals designed to insure a long-range, continuous demand for coal.

24 The Federal Energy Administration has instituted a program calling for the conversion, where possible, of electric power generating plants to coal consumption. And the Energy Conservation and Oil Policy Act of 1975 extends the FEA's mandate. In the 93d Congress, the Energy Research and Development Appropriations Act was approved. The ERDA budget for fiscal year 1977 includes \$4 05 million for coal research and development while the Department of Interior requested \$1 01 million for the coal programs in the Bureau of Mines and the U.S. Geological Survey (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.

24 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 f.o.b. price of coal for example, increase 85 percent from 1973 to 1974 while coal production increased percent during that period. 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. For although prices may fluctuate, the demand for coal will increase.

*2*TABLE No. 11. - Research and development funds for coal as

authorized in the Presidents budget for fiscal year 1977
Energy Research and Development Agency:

Liquefaction

\$73,900,000

High Btu gasification

42,200,000

Low Btu gasification

33,000,000

Advanced power system

22,500,000

Magnetohydrodynamics

37,400,000

Direct combustion

52,400,000

Advanced research and supporting technology

37,100,000

Demonstration plants

107,200,000

Total

405,700,000

Bureau of Mines:

Coal mining health and safety R. & D

29,601,000

Advanced coal mining technology

59,960,000

Mined land investigation and demonstrations (anthracite)

3,831,000

Drainage of anthracite mines

200,000

Total

93,592,000

U.S. Geological Survey:

Coal resource investigation

2,873,000

Federal coal hydrology program

3,174,000

Federal State cooperative coal

2,000,000

Hydrology program

8,047,000

25 Source: Department of the Interior and the Energy Research and Development Agency.

25 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 is now the cheapest of all of our energy resources. (See Table No. 13).

25 Thus the argument that reclamation is prohibitively expensive, if it was ever valid, is certainly no longer so. With respect 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.

25 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:

25 . . . 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.

26 (See Table No. 14).

26 The rise 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:

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

26 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."

26 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:

26 . . . 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.

27 [See Original]

28 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."

28 It therefore appears that the industry can absorb any increased costs of reclamation consistent with the standards of the Act. (See Tables No. 16(a) and (b).) When analyzing the price of reclamation one must consider the opportunity costs of surface mining incurred when arable land is rendered unusable and water resources are lost.

28 RESEARCH AND TRAINED TECHNICIANS

28 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.

28 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.

29

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

	Quantity delivered	Percent of total Btu's	Average price (cents per million 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
October 1975:			
Coal (thousand tons)	40,200	64.2	81.5
Oil (thousand barrels)	35,900	16.2	198.1
Gas (million cubic feet)	260,300	19.6	85.5

29 Source: Federal Power Commission.
 *6*TABLE 14. -
 ESTIMATED
 INCREMENTAL
 PRODUCTION COSTS
 FOR VARIOUS
 RECLAMATION COSTS

	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 per mined acre				
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				

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

29 n2 Montana entry changed to reflect mining of subbituminous coal in Power

River Basin.

29 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.

30

5
TABLE
15. -
AVERAGE
VALUE
OF
BITUMINOUS
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	5.3 3	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	3.2 5	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	3.7 5	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	5.95	6.95	10.67	8.53
1074	n2	n2	n2	15.75

30 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.

30 n2 Not available.

30 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	

30 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

30 Source: American Public Power Association.

30 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.

31 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.

31 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.

31 DATA ON COAL RESERVES AND LEASES

31 Tables presenting following data have been included at the conclusion of this section of the Report: Total coal reserves (see Table No. 17, p. 32); Federal coal leases (see Table No. 18, p. 32). Indian coal leases (see Table No. 19, p. 33).

32
 *8*TABLE
 17. -
 TOTAL
 ESTIMATED
 REMAINING
 MEASURED
 AND
 INDICATED
 COAL
 RESERVES
 OF THE
 UNITED
 STATES AS
 OF JAN.
 1, 1970
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 acite,
 and 5 ft
 or more
 thick for
 subbitumi
 nous and
 lignite
 beds -
 Million
 tons]

Remaining measured and indicated reserves

Total -
 All ranks

Measured

indicated percent State total	Bituminous Subbituminous Lignite			Anthracite	Total	more than 14 in and 3,000 ft overburden	and as of
	Reserves	Reserves	Reserves	Reserves	Reserves	Reserves	Reserves
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
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
Virginia	3,561	0	0	125	3,686	9,817	37.3
Washington West	312	1,188	0	0	1,500	6,183	24.3
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

32 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 bituminous and anthracite and 5 ft or more for subbituminous and lignite.

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

32 n3 Small reserves of lignite included with subbituminous reserved.

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

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

32 n6 Data not available to make estimate.

32 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	37,013.56
Oregon	3	5,403.18
Utah	194	266,632.49
Washington	2	521.09
Wyoming	89	199,701.04
Total	524	776,756.20

32 Source: U.S. Geological Survey.

33

TABLE 19. - Coal leases on Indian lands

Leases	Type of mining on producing leases
1. Peabody Coal co.:	
Hopi-Navajo (Arizona):	
(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	D Do.
3. Pittsburg & Midway Coal Mining Co.: Navajo (westtana), 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
Source: Bureau of Indian Affairs.

ISSUES

33 MINERAL COVERAGE

33 Like its predecessors S. 425 and H.R. 25, H.R. 9725 carries forth the decision of the 93rd Congress regarding mineral coverage.

33 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.

33 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.

33 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.

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

34 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 minerals owned by the Federal Government in residential or urban areas or other locations that are inappropriate from a rational land use planning viewpoint.

34 FLEXIBILITY

34 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.

34 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.

34 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.

35 STATE AND FEDERAL LAND PROGRAMS

35 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. Sec. 503(a). The Secretary shall not approve the State program until he has held at least one public hearing within the State, and 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 unless he has found that the State has the necessary legal authority and qualified personnel to enforce the Federal environmental protection standards and has otherwise complied with the requirements of the Act. Sec. 503(b).

35 Within six months after submission of the State program, the Secretary of Interior must either approve or disapprove it. Sec. 503(c). 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. Sec. 503(c).

35 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. Sec. 504(a). 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. Sec. 504(e). There is no limit placed on the number of times a State may resubmit its State plan under these circumstances.

36 The bill permits the Secretary to extend the date for the submission of a State program for 6 months if an act of the State legislature is required to

comply with the act. Sec. 504(a). Operators are required to obtain permits
6
months after approval of a State program of implementation of a Federal
program.

Sec. 506(a). Mines operating under existing permits may continue to mine
without a new permit, however, if an administrative decision has not been
rendered during that period. Id.

36 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.

36 Subject to valid existing rights the 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 coal 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.

37 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.

37 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.

37 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 first fiscal year and increasing to \$2 0 million for the next two years and \$3 0 million for each fiscal year thereafter are to be available to the Secretary for these and administrative purposes.

37 STATE MINING AND MINERAL RESEARCH INSTITUTES

37 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.

37 The rationale for establishing mining and 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	Manpower category	Number required	
		1970	year 1980
1985			
Metallurgical engineers		900	1,900
2,700			
Mining engineers		700	1,400
2,200			
Petroleum engineers		5,600	7,300
9,600			

38 By contract, 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:

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

Petroleum engineers
547

395 381 398

38 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.

38 A basic grant of \$2 00,000 for the first fiscal year, 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 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.

38 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 four 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.

38 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."

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

39 CITIZEN PARTICIPATION

39 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.

39 H.R. 9725 major citizen participation provisions are as follows:

39 REGULATORY PROGRAMS

39 (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)

39 (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)

39 PERMIT PROCESS

39 (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)

39 (b) Exceptions from general environmental performance standards - H.R. 9725 provides for exceptions to specific environmental performance standings

relating to spoil placement, backfiling, and other specific standards.
Notice
and a public hearing are required before such exceptions may be granted.
(Section 515(c)).

39 (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)

40 ENFORCEMENT

40 (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))

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

ELEMENTS OF MINE REGULATIONPROGRAM

40 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.

40 INTERIM PROGRAM

40 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.

40 In the two previous passed-but-vetoed bills, the Committee took pains to assure that the application of a new regulatory scheme would neither interrupt ongoing operations nor hinder the opening of new mines. This carefully designed scheme is described later in this section but it is important to note that in addition to the various mechanisms adopted to insure continuation of coal supply, H.R. 9725 contains the significant modification that no existing mine will have to comply with any new standard for 1 full year after the date of enactment and no new standard is applicable to any new operations for 6 full months after the date of enactment. After these periods, operators will be subject to only seven interim standards which control until the implementation of the full program well after 2 years from enactment.

40 In other respects, the interim program of H.R. 9725 is similar to that of the previously passed legislation as it is designed on the following principles:

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

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

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

41 (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).

41 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).

41 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.

41 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. In addition to the procedure noted at the beginning of their discussion, the Committee was also careful 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.

41 The Committee also recognizes however, 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. Thus 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.

42 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 (other than those which create an imminent danger to public health or safety or significant imminent environmental harm to land, air or water resources). 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.

42 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. 9725 sets no standards for the State agency during the interim period other than the requirements 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. 9725 during the interim period.

42 While State regulatory mechanisms remain operative and constitute the chief element of the interim program, H.R. 9725 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. 9725 requires federal inspection if State inspection reports indicate the occurrence of two consecutive violations of Federal standards as well as random federal inspections of mines sites. Thus the State machinery is preserved but the integrity of the Federal standards is assured through Federal oversight.

43 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.

43 H.R. 9725 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. 9725 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.

43 PERMIT SYSTEM

43 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.

43 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, development, 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 resident 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.

44 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.

44 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.

44 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 premining 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.

44 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.

44 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 not interrupt, discontinue, or prevent farming on alluvial valley floors nor adversely affect the quantity or quality of water in surface or underground water systems that serve the valley floor (unless the area is subject to one of the exceptions set forth in section

510(b)(5).

45 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.

45 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.

45 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.

45 The interim performance standards apply to all new permits issued by State agencies from six months date of enactment. One year 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.

45 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.

45 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.

46 LAND USE CONSIDERATION

46 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. 9725. 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.

46 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. 9725 that will assure the greatest possible minimization of the undesirable consequences of surface mining.

46 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.

46 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.

47 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.

47 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".

47 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."

47 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.

47 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 systems (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.

48 As subsection 522(e) prohibits surface coal mining on lands within the boundaries of national forests, subject to valid existing rights, it is not the intent, nor is it the effect of this provision to preclude surface coal mining on private inholdings within the national forests. The language "subject to

valid existing rights" in section 522(e) is intended, however, to make clear that the prohibition of strip mining on the national forests is subject to previous court interpretations of valid existing rights. For example, in West

Virginia's Monongahela National Forest, strip mining of privately owned coal underlying federally owned surface has been prohibited as a result of United States v. Polino, 133 F.Supp. 722, (1955). In this case the court held that "stripping was not authorized by mineral reservation in a deed executed before

the practice was adopted in the county where the land lies, unless the contract expressly grants stripping rights by use of direct or clearly equivalent words.

The party claiming such rights must show usage or custom at the time and place

where the contract is to be executed and must show that such rights were contemplated by the parties." The phrase "subject to existing rights" is thus in

no way intended to open up national forest lands to strip mining where previous

legal precedents have prohibited stripping.

ELEMENTS OF A MINE REGULATION PROGRAM

ENVIRONMENTAL PROTECTION STANDARDS

48 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.

48 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.)

49 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.

49 The following is a discussion of the key environmental performance standards of H.R. 9725.

49 RETURN TO APPROXIMATE ORIGINAL CONTOUR

49 H.R. 9725 requires that the mine site be regraded 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. 9725 was formulated to cover all types of mining operations under all conditions. Thus it is, of necessity, a flexible standard which contemplates 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. 9725 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.

49 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.

51 CONTOUR MINING

51 Contour mining operations operate on a portion of the local relief, a band on the mountainside or the top portion of a 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.

51 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 regrading.

51 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.

51 It has been argued that 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.

51 AREA TYPE MINING

51 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.

51 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).

51 A profile of a typical area mining operation where the volume of spoil equals or exceeds the volume of coal removed is shown schematically

52 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.

52 Two other conditions arise in the area mining situation. The first 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).

52 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 highwalls 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.

52 H.R. 9725 provides 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.

52 REVEGETATION

52 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.

53 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.

53 In recognition of such factors, H.R. 9725 sets forth the following criteria:

53 (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;

53 (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

53 (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.

53 The history of revegetation in Eastern and Central United States 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.

53 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.

53 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.)

54 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)

54 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)

54 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.

54 It is essential that regulations specify that an adequate seed bed be prepared 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.

54 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.

54 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.

55 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.

55 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.

55 The differential time limits for revegetation responsibility of H.R. 9725 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.

55 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.

55 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).

55 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.

56 Some concern has been expressed that where lands are reclaimed for extensive agricultural use such as grazing or pasture, such uses might be prohibited during the period of reclamation responsibility. This is not the Committee's intention. Grazing use of such lands during the period of operator responsibility is allowable, 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 A MINE REGULATION PROGRAM MINING IMPACTS ON HYDROLOGIC BALANCE

56 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.

56 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 sets standards that 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.

57 Concern has been expressed that the bill's hydrology provisions somehow require 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. Of course, the actual operating area of the mine is necessarily de-watered. The committee is concerned about how extensive the secondary effects could be - such as a drawdown 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.

57 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.

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

57 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.

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

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

Washington, 1961.

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

57 Decker: Hydrology of the Decker Coal Mine and Vicinity, Southeastern Montana, Preliminary Report, Montana, Bureau of Mines and Geology, 1974.

57 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).

57 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).

57 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).

58 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.

58 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).

58 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 (Trade-water, page 54).

58 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.

58 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).

58 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.

58 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).

59 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.

59 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.

59 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 ground-water 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.

59 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).

59 The purpose of the hydrologic balance provisions of H.R. 9725 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.

59 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.

59 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.

60 H.R. 9725 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 probable cumulative impacts of all anticipated mining in the area upon the hydrology and adjust its actions and recommendations accordingly.

60 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.

60 PERMIT APPROVAL AND DENIAL

60 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.

60 In addition to the Environmental Performance Standards of section 515(b), (see discussion later in this report) the bill addresses the alluvial valley floor issue in the permit approval and denial section. In response to criticism of this provision in H.R. 25, the Committee amended the section to clear up any possible ambiguity. It is the intention of the new section to make it certain that its provisions do not apply to -

60 (1) undeveloped range lands which are not significant to farming;

61 (2) lands that the regulatory authority finds that any interruption, discontinuation or prevention of farming will be of such small acreage as to be of negligible impact on the farms' agricultural production; or

61 (3) operations which in the year preceding enactment of this Act (a) produced coal in commercial quantities, and (b) were located within or adjacent to alluvial valley floors or had obtained specific permit approval by the State regulatory authority to conduct surface coal mining operations within said alluvial valley floors, or (c) had obtained specific permit approval by the State to conduct operations within such alluvial valley floors.

61 According to data compiled by the USGS of the 30 major coal producing western mines only five are within the scope of the provision, and these would be clearly exempted by the grandfather clause.

61 ENVIRONMENTAL STANDARDS

61 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.

61 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.

61 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.

62 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.

62 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/1	JTU's
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

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

62 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.

62 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.

62 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.

63 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.

63 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.

63 Avoidance of channel deepening and enlargement is also required 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.

63 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.

64 ALLUVIAL VALLEY FLOORS

64 Of special importance in the arid and semiarid 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 subirrigated and flood 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:

64 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.

64 H.R. 9725 specifies that the operator is to "preserve throughout the mining and reclamation process the essential hydrologic functions of alluvial valley floors in the arid and semiarid 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. Preserving the essential hydrologic functions during the mining process includes 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.

64 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.

65 Concern has been expressed as to the definition of alluvial valley floor - especially with respect to the scale and size of the deposit and the drainage area. Alluvial valley floors 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 or where flood stream flows can be diverted for flood irrigation. H.R. 9725 defines alluvial valley floors as, "the unconsolidated stream laid deposits holding streams where water availability is sufficient for subirrigation or flood irrigation agricultural activities". (Sec. 701(27)). In more technical terms, alluvial valley floors are the upper, near-horizontal surface of the unconsolidated stream-laid deposits which border perennial, intermittent, or ephemeral streams. The alluvium that makes up the stream-laid deposits is composed of clay, silt, sand,

gravel, or similar detrital material that has been, or is being, transported and deposited by streams. Alluvial valleys within this definition are traversed by perennial or intermittent streams or by ephemeral stream channels; are irrigated in most years by diversion of natural flow or ephemeral flood flow on the modern flood plain and adjacent low terraces, or by subirrigation of the flood plain by underflow; and are used for the production of hay and other crops that are an integral part of an agricultural operation. Excluded from the definition are the colluvial and other surficial deposits that normally occur along the valley margins, are higher than the modern flood plain and low terraces, are not irrigated by diversion of natural flow or by ephemeral flood flow, and are not subirrigated by underflow. It should also be noted that alluvial valley floors must be in integral part of a drainage network that transverses the area under consideration. These are part of through flowing stream (hydrologic) systems and are not small areas of isolated internal drainage.

65 Some criticism has been directed at the legislation by asserting that much of the western coal fields are entirely overlain by alluvial valley floors. This is simply not the case. In order to determine the geographic extend of alluvial valley floors, a study of 2,200 square miles in southeastern Montana in the Big Horn, Rosebud, and Powder River was made using aerial photographs provided by the Environmental Protection Agency, Forest Services, and Soil Conservation Service at scales of 1:40,000, 1:15,840, and 1:20,000 respectively. Alluvial valley floors - as that term is used in this legislation - were identified on these photos through extensive field mapping in each drainage area by USGS personnel during the summer of 1975. These field determinations were then transferred on to 42 separate 7 1/3 minute USGS topographic quadrangles (scale 1:24,000) for the entire area. Analysis of these maps then revealed that no alluvial valley floors existed in 5 of the quadrangles-270 square miles or 12 percent of the area. It was further determined that only 612.5 square miles or 28 percent of the area studies was underlain by strippable coal (coal overlain by 200 feet or less of overburden). Alluvial valley floors overlay only 16.4 square miles of the strippable coal area or only 2.67 percent the coal in that area. n3

66 n3 See letter from M. R. Klepper, Acting Director, USGS (March 3, 1976), in Appendix III, where Mr. Klepper states that the area mapped by USGS "is typical of the Powder River Basin as a whole." Copies of these maps have been provided to the Committee as well as being placed on open file for public availability by the U.S. Geological Survey. Measurements have been made by

using a planimeter, the most exact method available for measuring areas on a map.

66 The area studies in Montana is representative of the Eastern Powder River Basin which also includes the strippable coal area in Northeastern Wyoming. Therefore, it is expected that the Northeastern Wyoming area would have the same proportionate coverage of strippable coal deposits by alluvial valley floors as was found in Southeastern Montana study.

66 MONITORING HYDROLOGIC IMPACTS

66 H.R. 9725 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.

66 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.

66 STEEP SLOPE MINING

66 Surface coal mining on steep slopes requires special environmental protection provisions since such operations present special environmental

hazards. The provisions of H.R. 9725 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.

67 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.

67 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:

67 [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.

67 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

68 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. This 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.

68 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.

68 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.

68 The Committee expects that under most circumstances, only one initial cut will be needed on any coal seam beneath the common highpoint 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.

69 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.

69 ECONOMICS AND PRACTICALITY

69 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.

69 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:

69 [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.

70 The study concludes that:

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

70 This conclusion is expanded in the text:

70 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).

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

70 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.

70 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.

70 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.)

71 EXCEPTIONS-VARIANCES

71 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.

71 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.

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

71 (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.

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

71 (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.

71 SURFACE DISPOSAL OF MINE WASTES FROM PROCESSING PLANTS

71 With respect to surface disposal of mine wastes in dry wastebanks (not in embankments or impoundments), H.R. 9725 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.

72 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.

72 In order to assure that mine waste impoundments used for the disposal of liquid or solid waste material from coal mines are constructed or have been constructed so as to safeguard the health and welfare of downstream populations, H.R. 9725 gives the Army Corps of Engineers a role in determining the standards for construction, modification and abandonment of these impoundments.

72 Authority for the issuance of regulations and inspections of impoundments rests with the Secretary of Interior; however, such regulations should be developed by the Chief of Engineers. It is the intent of the conferees that the safety, engineering and design standards of the Corps of Engineers will apply, through the rules and regulations of the Secretary, to such structures and waste disposal banks which may serve as temporary or permanent impoundments. However, it is not the intent of the Chief of Engineers must therefore monitor or sign off on every such structure. That duty belongs to the Secretary of Interior, who may utilize appropriate skilled personnel from other Federal agencies as provided for in Title II. Concurrence of the Chief of Engineers is intended to also include his approval of the system of inspection and his participation in the training of inspectors to bring about competent and adequate enforcement of the standards.

72 All aspects of surveillance which do not require the actual physical inspection of individual sites would properly fall within the purview of the Chief of Engineers. Thus, the Corps' experience and expertise in the area of design, construction, maintenance, etc. which were utilized for carrying out the Congressionally authorized surveys of mine waste embankments in West Virginia

following the disastrous failure of the mine waste impoundments on Buffalo Creek, is to be applied in order to prevent similar accidents in the future. In so doing, however, an unnecessary duplication of effort by two Federal agencies and the costly drain upon available manpower is to be avoided.

73 SURFACE IMPACTS OF UNDERGROUND MINES

73 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.

73 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:

74 (1) leaving sufficient original mineral for support;

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

74 (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.

74 (4) Backstowing or returning mine wastes underground to provide some measure of direct roof support and shoring up pillars left for support.

74 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.

74 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.

74 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 polluttional discharges after mining has ceased.

75 SPECIAL BITUMINOUS COAL MINES

75 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.

75 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.

75 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.

75 COAL ACCESS AND HAUL ROADS

75 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.

75 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.

76 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 A MINE REGULATION PROGRAM

76 ENFORCEMENT

76 H.R. 9725 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.

76 INSPECTIONS AND ENFORCEMENT: FEDERAL-STATE RELATIONSHIP

76 Efficient enforcement is central to the success for the surface mining control program contemplated by H.R. 9725. 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.

76 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 six months 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.

77 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 evaluation the development, administration, or enforcement of any State program.

77 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.

77 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.

77 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.

77 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

78 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.

78 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.

78 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.

78 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 will fully 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).

78 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.

78 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.

79 ADMINISTRATIVE REVIEW

79 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.

79 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.

79 JUDICIAL REVIEW

79 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.

79 PENALTIES

79 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.

80 SURFACE OWNER PROTECTION

80 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. 9725 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.

80 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:

80 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.

80 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.)

80 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.

81 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.

81 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.

81 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.

81 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.

81 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.

81 ROLE OF THE SECRETARY OF THE INTERIOR

81 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.

82 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.

82 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.

82 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.

82 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.

82 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.

82 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.

83 DESIGNATION OF NONCOAL MINE LANDS

83 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. 9725, 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.

83 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 have an adverse impact on such lands. 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.

83 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.

83 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.

83 INDIAN LANDS PROGRAM

83 The committee approved, without amendment, the Indian Lands Section of H.R. 9725 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, 1977, 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.

84 REHABILITATION OF ABANDONED MINE LANDS

84 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.

84 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.

84 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.

84 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.

84 Contour surface mining has created thousands of miles of unstable outshelves 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.

85 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 and later the large thermal plants for the generation of electricity. The cost of rehabilitation is estimated at \$7 to \$10 billion.

85 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.

85 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		Millions
Environmental impact:		
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	

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

85 In 1974 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 1.4 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	

85 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.

85 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.

86 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.

86 ABANDONED MINE RECLAMATION PROGRAM

86 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.

86 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.

86 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.

86 RECLAMATION FEE AND FUND

86 The Committee decided to establish a fund for a period of fifteen 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.

86 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 percent of the sales price (whichever is greater), coal production continues to rise even though the surrounding states had either no or substantially lower fees.

87 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.

87 A differential fee was established, at 35¢ per ton for surface mined coal and 15¢ 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 percent of the value of the coal at the mine after extraction, 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. The fee for lignite is set at 5 percent of the value of the cost at the mine site after extraction, as determined by the Secretary, or 35%, whichever is less.

87 It is estimated that the reclamation fee adopted by the Committee would yield approximately \$140-160 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.

87 RURAL LANDS PROGRAM

87 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 percent of the total cost, and the landowner (or participant) can provide the matching amount through labor and equipment.

87 Under certain circumstances, the Secretary of Agriculture can reduce the non-Federal matching 20 percent cost share if he determines that the principal benefits from the reclamation accrue to improved off-site water quality, off-site impacts and if the 20 percent matching share requirement would place a sufficient burden on the landowner which would probably prevent him from participating in the program.

88 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 170 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.

88 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.

88 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.

88 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.

88 DEPARTMENT OF THE INTERIOR PROGRAM

88 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.

88 The program authorized for the Department of Interior to provide the mechanism for bringing lands into public ownership prior to reclamation and then utilizing such lands for various purposes which may require a change in ownership.

88 Specific provision is made for reclamation work to be conducted on private lands. However, in order to protect the public interest aspects of the Reclamation Fund and to prevent "windfall profits" from accruing to private landowners, a lien is to be placed on the property for the value of the work accomplished in those instances when the reclamation results in significant increases in the property values. In making such a determination of significant increase in property values, the Secretary shall assure the use the value of the

land in its unreclaimed condition and limit such a determination to only that land being reclaimed or the land being primarily benefited. In other words, if the land to be reclaimed is part of a larger property, it is not intended that a comparison be made between the increased value due to reclamation and the entire property, but only that land upon which the work is done, unless the benefits from the reclamation work (and a principle purpose of the project) improve the entire property as might be the case in reduction of acid flows or siltation into streams or correcting adverse aesthetic impacts. The Secretary of Interior has in some instances under the Appalachian Reclamation Program (pursuant to Sec. 205, PL 89-4, as amended), administratively determined that similar reclamation liens would be fully amortized over a 20-year period and at the end of that period would have no value. It is not intended that reclamation liens from this program be amortized.

89 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.

89 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 supplying 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.

89 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.

89 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.

90 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.

90 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.

90 ELIGIBLE LANDS

90 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.

90 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, Mont., 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

91 LEGISLATIVE HISTORY

91 As has been discussed in this report, H.R. 9725 is based on the previously passed-but-vetoed strip mining bills of this and the 93rd Congress. The legislative history of H.R. 9725 includes the history of H.R. 25, the Surface Mining Control and Reclamation Act of 1975 Report No. 94-45 and S. 425, the Surface Mining Control and Reclamation Act of 1974, report No. 93-1522, 93rd Congress - 2nd Session (December 5, 1974).

91 HISTORY OF S. 425 IN THE 93RD CONGRESS

91 Hearings:

91 House - Apr. 9, 10, 16 and 17 (H.R. 3) and May 14 and 15, 1973.

91 Serial No. 93-11.

91 Senate - March 13, 14, 15, and 16 (S. 425), 1973 . . . 93-2130.

91 Committee action:

91 House - Reported H.R. 11500, May 14, 1974. H.Rept. 93-1072.

91 Senate - Reported S. 425, Sept. 21, 1973.S.Rept. 93-402.

91 Floor action:

91 House - Floor debate: July 17, 18, 22, 24, and 25, 1974; S. 425 amended by substituting the text of H.R. 11500 as amended and passed July 25, 1974.

91 Senate - Floor debate: Oct. 8 and 9, 1973; S. 425 passed on Oct. 9, 1973.

91 Conference: Conference (after 18 meetings) agreed Dec. 3, 1974.

91 H.Rept. 93-1522.

91 Action on conference report:

91 House failed to pass conference report under suspension Dec. 9, 1974.

91 Passed House Dec. 13, 1974.

91 Passed Senate Dec. 16, 1974.

91 Presidential Action: S. 425 vetoed Dec. 30, 1974.

91 HISTORY OF H.R. 25 IN THE 94TH CONGRESS

91 Committee action:

91 House - Reported H.R. 25 March 6, 1975. H.Rept. 94-45.

91 Senate - Reported S. 7 March 5, 1975. S.Rept. 94-28.

91 Floor action:

91 House - Floor Debate March 14, 17, and 18, 1975, passed on March 18, 1975.

91 Senate - Floor Debate on S. 7, March 10, 11, and 12, 1975, H.R. 25 as amended by substituting the text of S. 7 as amended and passed Senate March 20, 1975.

91 Conference:

91 Conference Report filed the House May 2, 1975. No. 94-189.

91 Senate agreed to Conference Report May 5, 1975.

91 House agreed to Conference Report May 7, 1975.

91 Presidential Action: H.R. 25 vetoed May 20, 1975.

91 House sustained veto June 10, 1975.

92 RELATION OF H.R. 9725 TO OTHER LAWS

92 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.

92 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.

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

92 In several instances, H.R. 9725 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.

92 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. 9725 with those under the Coal Mine Health and Safety Act of 1969.

92 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.

92 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.

92 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.

93 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.

93 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.

93 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.

93 It is clear that broader authority, such as that proposed in H.R. 9725 is necessary to provide the needed authority and regulatory framework to minimize the adverse environmental effects of coal mining.

93 COST OF LEGISLATION

93 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. 9725.

*6*AUTHORIZATIONS FOR
 APPROPRIATIONS SET FORTH IN
 H.R. 9725

*6*A. REGULATIONS OF
 SURFACE COAL MINES
 6[In millions of dollars]

	Fiscal year -				
	1976	1977	1978	1979	1980 and thereafter
Interim program, Indian lands, etc., sec. 712(a) Administration of State programs, sec. 712(b)	10.0	10	10		
Specific studies, sec. 708(e), sec. 709(c)		7		20	20
Total	10.7	20	30	20	30

94 Fiscal year 1976. - It is estimated that about one quarter of the funds authorized for the initial fiscal year, by section 712(a) will be need for obligation during the balance of this fiscal year.

94 Fiscal years 1977 and 1978. - It is estimated that \$2 0 million and \$3 0 million will be needed for each of the first two 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) developing a capability within the States to meet the responsibilities under the designation of lands authority (section 522); and (3) meeting various planning requirements of other portions of the Act as referenced in section 712(a).

94 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.

94 Fiscal years 1980 and later. - H.R. 9725 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.

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

	Fiscal year -			
	1977	1978	1979	1980
1981				
R. & D. mine technology, sec. 713(c)	35	35	35	35
35				

94 Fiscal years 1977-80. - H.R. 9725 authorizes for each of these five fiscal years, \$3 5 million for research and demonstration of alternatives mining technologies which have lesser environmental impacts and increased resource recovery compared to existing surface coal mining operations.

*6*AUTHORIZATIONS FOR APPROPRIATIONS
 AS SET FORTH IN H.R. 9725

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

	Fiscal year -					
	1976	1977	1978	1979	1980	1981
1982						
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						

95 Fiscal year 1976. - In view of the short period of time remaining between the date of enactment and the close of the fiscal year 1976 it is anticipated that none of the funds authorized will be expended during the current fiscal year.

95 Fiscal year 1977. - 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.

95 Fiscal years 1978-82. - 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.

95 INFLATION IMPACT

95 Pursuant to clause 2(1)(4), Rule XI, of the House of Representatives, the Committee estimates that enactment of H.R. 9725 will have virtually no inflationary impact on the U.S. economy. The following analysis, provided by the Library of Congress for H.R. 25, passed in May of 1975, is still applicable.

The study 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.

95 FISCAL BURDEN

95 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.

95 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 0.4% 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 "demand-induced" inflation of about .026% per year.

96 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.

96 COST OF RECLAMATION TO PRODUCERS AND CONSUMERS

96 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 *;

96 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.)

97 * While the committee raised the deep mine fee to 15 cents per ton, this modification does not significantly alter the conclusions of the study. It should be noted that under H.R. 9725, the fee is not collectable until the first quarter of 1977.

97 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.

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

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

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

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

97 * The average price of coal in 1975 was over \$18.00 per ton.

97 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.

98 CHANGES IN EXISTING LAW

98 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):

98 SECTION 1114, TITLE 18, UNITED STATES CODE

98 @ 1114. Protection of Officers and employees of the United States

98 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.)

99 COMMITTEE RECOMMENDATION

99 The Committee on Interior and Insular Affairs recommends the enactment of H.R. 9725 as amended. The motion ordering the bill reported favorably was adopted by a roll call vote February 24, 1976, with 28 votes cast for and 11 votes cast against.

SECTION-BY-SECTION ANALYSIS OF H.R. 9725 SHORT TITLE

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

SECTION-BY-SECTION ANALYSIS OF H.R. 9725 TITLE I STATEMENT ON FINDINGS AND POLICY

101 Section 101. Findings

101 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.

101 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.

101 Section 102. Purposes

101 This section states that the purpose of Congress in passing the 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.

102 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. 9725 TITLE II RECLAMATION AND ENFORCEMENT

102 Section 201. Creation of Office

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

102 The Director of the Office shall report directly to the Secretary and is to be appointed by the President, confirmed by the Senate and compensated at a salary rate for Level IV of the Executive Schedule.

102 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 or the regulation of health and safety of miners

under provisions of the Federal Coal Mine Health and Safety Act of 1969, are not to be assigned to the office.

102 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 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.

102 In carrying out his duties under the Act, the Director shall not use on a permanent or temporary basis any person responsible for inspecting coal mines under the Federal Coal Mine Health and Safety Act of 1969, unless he finds and publishes in the Federal Register that use of such persons would not interfere with inspections under the 1969 Act.

102 The Office of Surface Mining Reclamation and Enforcement is to be considered an independent Federal agency for the purposes of section 3502 and 3512 of Title 44 of the U.S. Code, which require Federal agencies to place a minimum burden on business enterprises when obtaining needed information.

102 Finally, the Title stipulates that no employee of the Office or any other Federal employee performing duties under the Act will be allowed to have a direct or indirect financial interest in surface or underground coal mining operations. Knowing violators can be fined up to 500 or sentenced to not more than 1 year in prison, and the Director is required to establish procedures for enforcing these provisions, and reporting any actions or violations to Congress on an annual basis.

SECTION-BY-SECTION ANALYSIS OF H.R. 9725 TITLE III STATE MINING AND MINERAL RESOURCES AND RESEARCH INSTITUTE

103 Section 301. Authorization of State Allotments to Institutes

103 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 the Interior at the rate of \$200,000 for the first fiscal year, \$300,000 for the second fiscal year, and \$4 00,000 for each fiscal year thereafter for five years, to a public college or university in each participating State.

103 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 four 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.

103 Section 302. Research funds to Institutes

103 This section authorizes an annual appropriation of \$1 5,000,000 to the Secretary of Interior for fiscal year 1976 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.

103 Section 303. Funding Criteria

103 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.

103 Section 304. Duties of the Secretary

103 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.

104 Section 305. Autonomy

104 This section disclaims any 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.

104 Section 306. Miscellareous Provisions

104 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.

104 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.

104 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.

104 Section 307. Center for Cataloging

104 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 resource 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.

104 Section 308. Interagency Cooperation

104 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.

104 Section 309. Advisory Committee

104 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. 9725 TITLE IV ABANDONED MINE RECLAMATION

105 Section 401. Abandoned Mine Reclamation Fund

105 This section establishes in the U.S. Treasury an Abandoned Mine Reclamation Fund which derives its dollars from: 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 15 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. The reclamation fee for lignite coal shall be 5% of the value of the coal at the mine, or 35 cents per ton, whichever is less. The Secretary shall determine the value of the coal at the mine where the fee is based on a percentage of such value.

105 The reclamation fee is to be paid within 30 days after the end of each calendar quarter, beginning with the first calendar quarter occurring after January 1, 1977, and ending 15 years after enactment of the Act, unless extended by Act of Congress. Fifty percent of the revenues derived from a State or Indian reservation are to be returned to that State or Indian reservation to be expended by the Secretary, after considering the recommendations of the

appropriate state Governor or tribal governing body, to accomplish the purposes of the Title.

105 Section 402. Objectives of Fund

105 According to this Section, the primary objective of the Fund is the reclamation of previously mined areas. Other objectives are to be given a priority in the following order: (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.

105 Section 403. Eligible Lands

105 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.

106 Section 404. Reclamation of Rural Lands

106 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.

106 Any one landowner (including owner of water rights), resident, or tenant is limited to a total of 120 acres of land on which reclamation can be conducted under this section. The Federal share of such work shall be established by the Secretary of Agriculture in accordance with his determination of the public interest and the productivity potential of the land after reclamation. The Federal share shall not exceed 80 percent of the costs unless the Secretary finds that a greater share is justified to enhance off site water quality, esthetics or other off site benefits, or is necessary to enable participation in the program by a landowner for whom even a 20 percent matching share would be financially incapacitating.

106 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.

106 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.

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

106 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.

106 Four basic steps are required under this program: land identification, acquisition of the land or an appropriate interest therein, land reclamation, and post-reclamation land use including disposition.

106 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 to the public specifically computed.

106 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 percent of the acquisition costs may be federally funded. For those projects which because of public health or safety or environmental damages require quick action, specific authority for entry onto the land and corrective action is provided to the Secretary of Interior.

107 For reclamation performed on lands remaining in private ownership, a lien on the property shall exist after reclamation to the extent the reclamation has improved the market value of the land.

107 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.

107 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.

107 Section 406. Filling Voids and Sealing Tunnels

107 This section authorizes the Secretary to fill voids, seal tunnels, shafts and entryways and reclaim surface impacts of underground or surface mines, if he is requested to do so by a State Governor or Tribal chairman, and he determines that such action is necessary to prevent hazards to public health and safety or degradation to the environment. Funds for this purpose are to come only from moneys to be expended in States or Indian reservations under Section 401(e). Pursuant to a request by a Governor or Tribal chairman, the Secretary may carry out filling, sealing and reclamation activities under this section without regard to whether the hazards or environmental degradation were created by coal mining operations, as long as the reclamation activities are needed to protect the public health and safety.

107 The Secretary may acquire such interest in lands as he deems necessary to carry out the provisions of this section.

107 Section 407. Fund Report

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

107 Section 408. Transfer of Funds

107 This section authorizes the Secretary to transfer to other appropriate

Federal agencies in order to carry out the reclamation activities authorized by this title.

SECTION-BY-SECTION ANALYSIS OF H.R. 9725 TITLE V CONTROL OF ENVIRONMENTAL IMPACTS OF SURFACE MINING

108 Section 501. Environmental Protection Standards

108 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.

108 Section 502. Initial Regulatory Procedures

108 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 30 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:

108 (a) a set of environmental protection standards:

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

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

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

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

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

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

108 (2) separation and replacement of topsoil;

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

108 (5) establishing a permanent vegetativ cover;

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

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

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

108 On and after 6 months from 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 one year 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.

109 In recognition of the possibility that unforeseen delays may occur in the transition from the initial regulatory program to be 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.

109 Within six months 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 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.

109 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.

109 Section 503. State Programs

109 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 administration capability for carrying out the provisions of the Act.

109 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.

110 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.

110 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.

110 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.

110 Section 504. Federal Programs

110 This section directs the Secretary no later than 30 months after enactment of the Act, 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.

110 Where an act of the State legislature is required an extension of six months beyond the 18 month period for submission of the 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.

110 Section 505. State Laws

110 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 to be 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 effected by the surface coal mining operation is also protected.

110 Section 506. Permits

110 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.

111 A permit will automatically terminate if no surface coal mining operations or reclamation commences within 3 years. Where the coal is to be mined for use in a synthetic fuel facility, initiation of construction of the facility will be deemed to constitute the commencement of operations.
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.

111 Section 507. Application Requirements

111 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:

111 (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;

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

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

111 (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

111 (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.

111 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.

111 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.

111 Section 508. Reclamation Plan Requirements

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

112 (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;

112 (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

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

112 Section 509. Performance Bond

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

112 (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;

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

112 (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;

112 (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;

112 (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

112 (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.

112 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.

112 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.

112 Section 510. Permit Approval or Denial

112 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.

113 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:

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

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

113 (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;

113 (4) alluvial valley floors west of the one hundredth meridian will be protected from surface mining operations where such operations would either interrupt, discontinue or prevent farming on the alluvial valley floors, or adversely affect the quantity or quality of water systems supplying the floors. However, the alluvial valley floor provisions will not apply to undeveloped range lands which would not be significant to farming, small amounts of acreage,

which if disturbed by mining would not impact importantly on a farm's overall production, and ongoing mining operations which, in the year before enactment of this Act, produced coal in commercial quantities on or adjacent to alluvial valley floors or had obtained specific permit approval to do so from a state regulatory authority;

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

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

113 Section 511. Revision of Permits

113 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.

113 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 would extend the area covered by existing permit (other than incidental boundary revisions) is to be made through the normal permit application process.

113 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.

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

114 Section 512. Coal Exploration Permits

114 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, reclamation program, and notification to the surface owner of intent to mine.

114 Section 513. Public Notice and Public Hearings

114 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.

114 The applicant is required to -

114 (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;

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

114 (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).

114 The regulatory authority must:

114 (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;

114 (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;

114 (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

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

114 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.

114 Section 514. Decisions of the Regulatory Authority and Appeals

114 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.

115 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

115 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.

115 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.

115 Section 515. Environmental Protection Performance Standards

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

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

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

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

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

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

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

115 (g) separate and promptly bury toxic materials;

115 (h) bankfill, compact and grade to restore the approximate original contour with all highwalls, spoil piles and depressions eliminated, unless the

operator can demonstrate the waste material from the entire permit area is insufficient or excessive in which case less stringent regrading requirements are allowable;

115 (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;

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

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

115 (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;

115 (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;

115 (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 the mined area, replacing the water supply of those whose supply for domestic, agricultural or industrial uses has been adversely affected by the mining operation, preserving alluvial valley floors in arid and semi-arid areas, and avoiding channel deepening and enlargement in operations discharging water from mines;

116 (o) prevent offsite damages and immediately correct such conditions

116 (p) construct, operate, maintain and remove new or existing impoundments in accordance with standards to be promulgated by the Secretary (with written concurrence of the Corps of Engineers) within 135 days of enactment of this Act;

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

116 (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;

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

116 (t) fill all auger holes; and

116 (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.

116 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 plan or predominantly flat area) as follows:

116 (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;

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

116 (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;

116 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 case 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.

117 Section 516. Surface Effects of Underground Mining Operations

117 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:

117 (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.

117 (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.

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

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

117 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.

117 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 deemed necessary by the Secretary in order to accommodate differences between surface and underground mines.

117 Section 517. Inspections and Monitoring

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

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

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

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

117 (4) rotating inspectors at adequate intervals.

117 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.

117 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.

118 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.

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

118 This section further provides that no state employee performing any function or duties under this Act may have a direct or indirect interest in any underground or surface coal mining operations. Sanctions for violations, and reporting requirements are identical to those discussed for the Federal Office and employees in Section 201 of the Act.

118 Section 518. Penalties

118 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.

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

118 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.

118 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.

118 Section 519. Release of Performance Bonds or Deposits

118 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.

118 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.

118 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.

119 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.

119 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.

119 Section 520. Citizen Suits

119 This section provides standing to any person having an interest which is or may be adversely affected to commence a civil action in a United States

district court against (1) the United States, any other governmental instrumentality or agency alleged to be in violation of any provision of the Act or regulations promulgated thereunder or order issued by the regulatory authority or any other person who is alleged to be in violation of any rule, regulation, order or permit issued pursuant to the 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.

119 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.

119 Citizens suits in some instances may not be commenced before the expiration of 60 days after an operator is notified of the alleged violation, 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.

119 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.

119 Section 521. Enforcement

119 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 superseded by a Federal permit and enforcement program.

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

120 (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.

120 (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.

120 (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.

120 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.

120 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.

120 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.

120 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.

120 Section 522. Designating Areas Unsuitable for Surface Coal Mining

120 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.

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

120 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.

121 The Secretary of Interior is to review Federal lands to make determinations based on the standards set forth above, but he may permit surface coal mining on Federal lands prior to the completion of this review. 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 within 10 months of receipt of the petition.

121 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.

121 Subject to valid existing rights and excepting operations existing on date of enactment, no surface coal mining operations shall be permitted:

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

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

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

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

121 (5) within three hundred feet of any occupied building or public facility.

121 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.

121 Section 523. Federal Lands

121 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.

121 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.

122 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.

122 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.

122 Section 524. Public Agencies, Public Utilities and Public Corporations

122 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.

122 Section 525. Review by the Secretary

122 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 and grant or deny relief expeditiously.

122 Section 526. Judicial Review

122 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.

122 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.

122 Section 527. Special Bituminous Coal Mines

122 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.

122 Section 528. Surface Mining Operations Not Subject to this Act

122 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.

123 Section 529. Anthracite Coal Mines

123 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.

123 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. 9725 TITLE VI DESIGNATION OF LANDS UNSUITABLE FOR NONCOAL MINING

123 Section 601. Designation Procedures

123 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 -

123 (1) predominantly urban or suburban land and the mineral estate remains in the public domain; and

123 (2) lands used primarily for residential purposes where mining could result in adverse impacts.

123 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.

123 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.

123 Prior to any designation under this section the Secretary shall prepare a statement on -

123 (1) the potential mineral resources of the lands in question;

123 (2) the demand for such minerals; and

123 (3) impact of the designation or failure to designate on the environment, economy, and supply of such minerals.

123 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. 9725 TITLE VII ADMINISTRATIVE AND GENERAL PROVISIONS

123 Section 701. Definitions

123 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.

124 Section 702. Other Federal Laws

124 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.

124 This section also authorizes the Secretary and other Federal agency heads to modify licenses, leases, contracts as appropriate to regulate surface coal mining.

124 Section 703. Employee Protection

124 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.

124 Section 704. Protection of Government Employees

124 This section amends the United States Code in compliance with authority granted the Secretary of the Interior in section 703.

124 Section 705. Grants to the States

124 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.

124 Section 706. Annual Report

124 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.

124 Section 707. Severability

124 Section 707 establishes that the application of the remainder of the Act is not to be affected by invalidation of any of its parts.

125 Section 708. Alaskan Surface Coal Mine Study

125 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.

125 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.

125 Section 709. Study of Reclamation Standards for Surface Mining of Other Minerals

125 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.

125 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.

125 Section 710. Indian Lands

125 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.

125 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.

125 \$7 00,000 will be earmarked for assisting the Indian tribes to participate in the study.

125 Section 711. Experimental Practices

125 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.

126 Section 712. Authorization of Appropriations

126 This section authorizes appropriations to the Secretary in the following categories:

126 (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.

126 (2) \$10,000,000 for the first fiscal year \$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.

126 Section 713. Research and Demonstration Projects on Alternative Coal Mining Technologies

126 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.

126 Section 714. Surface Owner Protection

126 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.

126 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.

126 The surface owner is to deal only with the Secretary in granting or withholding his consent. Penalties would be assessed to discourage the making of "side deals" in order to avoid this requirement.

126 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.

126 Section 715. Federal Lessee Protection

126 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.

127 Section 716. Alaska Coal

127 This section establishes that nothing in the Act shall be construed as altering the rights of any owner of Alaska coal conveyed from the United States to the State of Alaska under the Alaska Water Claim Settlement Act to surface mine such coal so long as the operation meet the requirements of the Act.

127 Section 717. Water Rights

127 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.

Appendixes

143 APPENDIX I

143 ANALYSIS OF THE ADMINISTRATION'S JUSTIFICATION OF THE VETO OF H.R. 25 SUMMARY

143 When President Ford vetoed H.R. 25 on May 20 he claimed that it would restrict coal production, increase our dependence on Mid East oil, raise consumer prices and increase unemployment.

143 Analysis of the materials justifying this move prepared by the Administration after the President's veto and testimony at the June 3 hearing on the veto message revealed that these claims are false. The key points of this analysis are summarized as follows:

143 Federal Energy Administration and the Department of the Interior would recommend a veto of the President's own bill. They have apparently accepted the National Coal Association's position that we should rely on state laws for surface mining control. However, in the past enforcement of state laws has been notoriously lax, and in any event, they do not regulate the surface mining of 40% of the nation's coal, which is owned by the Federal government;

143 Production loss estimates are based on highly unlikely and admittedly unrealistic interpretations of H.R. 25. All other estimates, costs, job losses, oil imports, are based on these faulty production loss estimates; and

143 Despite widespread coal and utility industry propoganda to the contrary - propoganda echoed by the President - H.R. 25 will not cause any significant increase in electric bills.

143 At the June 3 hearings the Administration admitted that Congressional estimates of the cost of reclamation (including the reclamation fee) were correct. These costs will average about \$1.00 per ton.

143 In view of the fact that the average price of coal has doubled in the last 18 months, and coal industry profits have risen even faster, there is no reason why these costs should not be absorbed.

143 But even if the coal and utility industries insist on passing all the cost on the consumer, it will only be approximately 35¢ per month for the average user of surface-mined coal-fired electricity. And this is less than 30% of electricity.

143 The Administration refuses to assume that the coal industry can adjust by first full year of implementation (1978), despite a three year phase in period and the vast extent of U.S. coal reserves. This assumption runs counter to Administration testimony that small mines go in and out of production so rapidly that they were unable to furnish the Congress with a meaningful list of mines allegedly impacted by the bill. It also ignores the fact that there is considerable surge capacity within the industry.

143 All Administration feared losses - including jobs - are only during a three or four year period beginning in 1978, which is the first possible full year of implementation, and not 1977, as used by the Administration: According to FEA, the 1977 date used in May of 1975 assumed enactment in January 1975.

143 The Administration does not indicate in its methodology any netting out of production losses which overlap, as between small or steep slope mines, for example.

143 The Administration denies that additional jobs will be created by the reclamation programs provided in H.R. 25. The President claimed that enactment of H.R. 25 could result in loss of between 9,000 and 36,000 jobs. The Administration witnesses stated that a substantial portion of this estimate was based on studies done by Dr. William H. Miernyk, of West Virginia University. But, Dr. Miernyk, the only non-government expert cited by the Administration, has totally repudiated the Administration's claims of job losses. Dr. Miernyk has stated that H.R. 25 will not lead to any loss of jobs whatsoever. Furthermore, when compared to the unemployment projected under the President's energy program - 600,000 - any impact of H.R. 25 pales into insignificance.

144 The President focused heavily in his veto message on the notion that H.R. 25 would increase U.S. dependence on Mid East oil. Yet production losses due to the bill - if any - will affect utilities. These burn imported residual oil from Venezuela and the Caribbean - not Mid East crude.

144 DETAILED ANALYSIS

144 Total production loss estimates

144 The production losses projected by the Administration range from 6-24 percent of a projected total production in 1977 of 685 million tons. In one instance they estimate that 350 million tons of this is expected to be stripped; on another occasion, the estimate is 330 million. No explanation is given for this discrepancy. According to the Administration, those losses will occur because of provisions in the bill dealing with small mines, steep slopes,

siltation, aquifers and alluvial valley floors. The Administration claims there is no doublecounting between estimated production losses in each category.

144 One is lead initially to question the Administration's figures for a number of reasons. 1. The projected production figure they use is 685 million tons, which is 70 million tons lower than the base case, business-as-usual projection made in Project Independence, but no explanation is given for the discrepancy. 2. The projected losses are for 1977, while the first full year of implementation cannot possibly be until 1978, and more likely not until 1979, since there is a 36 month phase-in period for full implementation of the bill. Furthermore, losses are assumed to continue only for three years, and to disappear thereafter. Yet no estimates are given for losses in 1978-82. 3. No explanation has ever been given of the methodology used to avoid doublecounting production loss estimates between small mines and mines on steep slopes, although most small mines are on steep slopes; or between production losses projected due to protection of aquifers and alluvial valley floors, although again there is considerable overlap between the two.

144 4. The Administration's estimates are based on the assumption that through 1980, there will be no relocation of mines and that production lost because mining at one location becomes too costly or is prohibited under the Act, will not be replaced by production at a mine in a site more suitable to mining. (In earlier estimates, however, they assumed 20% of last surface production would be made up in deep mines.)

144 They further assume that no excess capacity will exist in the industry which could be used to maintain production by additional shifts or increasing working hours. Yet such capacity exists. As a case in point, prior to the national coal strikes called by the United Mine Workers when their contracts expire, production has increased markedly as consumers stockpile coal. For example, production increased approximately 10 million tons in October, 1974 over midsummer levels in anticipation of the November 1974 strike. In 1971, the same phenomenon was observed. It is thus unrealistic to assume that no production lost because of H.R. 25 could be replaced for three years.

144 5. The broad range of the Administration's loss estimates indicates a significant lack of certainty on the part of those making the estimates. The discrepancy of 400 percent between the low and high cost ends of the production loss estimates implies a methodology for quantification which is at best exceedingly imprecise. And, as was brought out in hearings before the House and Senate Interior Committees, such was indeed the case. The upper range of losses in particular is predicated on highly unlikely and admittedly totally unreasonable interpretations of the bill's provisions.

144 While the total impact of the bill is derived from the production loss estimates, these estimates themselves are based on the anticipated impact of certain provisions of the bill, listed above. Yet at no time has the Administration been willing (or able) to relate specific requirements of the bill to specific anticipated production losses. One would therefore infer that the estimates are not based on careful analysis.

144 Production losses from small mines

144 The Administration contends that implementation of H.R. 25 will reduce production from small mines by 40-100% in 1977 (although actually full implementation would not occur until 1 or 2 years later). They give no explanation of why this range was chosen or to what provision of the bill these losses were attributable. Nor, apparently, do their projections take account of the long and continuing decline in small mines' share of total production, which would reduce anticipated losses in this category in 1977. Again, these loss estimates, which range from 22-52 million tons, are predicated on the assumption that none of this production will be otherwise replaced. The Congress was initially informed that these estimates were based on a broad cross sectional analysis of small mines. Yet, further Congressional inquiry into the methodology used to derive these figures eventually resulted in the admission that a few mine operators, mine operator associations and inspectors in 6 states were asked by telephone what impact they thought the bill would have on small mines. The production loss estimates are apparently actually based on the casual responses to these inquiries.

145 Production losses from steep slopes

145 Although a large percent of small mines are located on steep slopes, the Administration's methodology does not net out the overlap between the two in making its production loss estimates. It is therefore virtually impossible to ascribe much validity to either figure. The Administration ascribes production losses on steep slopes to "some loss of productivity" ranging from 6-23%, but the reasons why a loss of productivity is assumed are never stated. Furthermore, numerous studies have been made available to the Congress which indicate that ongoing mining operations in W. Virginia, Pennsylvania and Kentucky, which are already meeting the steep slope reclamation standards of H.R. 25, have actually increased their productivity, largely by minimizing earth moving requirements. The Administration's analysis apparently took no notice of such studies. Finally, the Administration's estimates assume no relocation of mines to more suitable sites. Yet, when asked to furnish Congress with a list of small and steep slope mines, the Bureau of Mines said such mines were

constantly relocating and shifting their operations, and it was impossible to maintain an up-to-date list of them.

145 Siltation

145 The Administration estimates that up to 10 million tons could be lost because of siltation control requirements. However, since such provisions are already incorporated in most state laws, it is difficult to comprehend why production losses should be anticipated, if H.R. 25 is implemented, and the Administration does not elucidate.

145 They do say some areas perhaps could not be mined unless permanent siltation structures were built to prevent post mining sedimentation. This ignores the requirement in the bill that all disturbed areas must be stabilized and revegetated after mining, thus negating the need for retention of siltation structures. However, given their assumption that mine operations will not relocate elsewhere, this might contribute to the estimated production loss. But again, no explanation is given.

145 Aquifers

145 As in the case of small and steep slope mines, the Administration's methodology does not provide for netting out of their production loss estimates related to protection of aquifers and protection of alluvial valley floors, which contain aquifers. They estimate that up to 9 million tons of planned production near an aquifer-fed water source could be abandoned under extreme interpretations of the bill. However, the bill focuses on protecting the recharge capacity of aquifers and not aquifer-fed waters. So the Administration's estimate would appear to be based on a misinterpretation of the requirements of the bill.

145 Production losses on alluvial valley floors

145 Given the definition of alluvial valley floors in the present bill, the Department of the Interior estimates that no more than 2.7 percent of the land in the Powder River Basin (the major Western coal area) would be affected by the bill. Given the vast amounts of coal west of the 100th meridian, the impacted area is therefore relatively insignificant.

145 In contrast, the Administration's estimates of potential coal losses on alluvial valley floors ranges from 11-66 million tons. These estimates, however, are based on a number of fallacies and misinterpretations of the bill. For example, the definition of alluvial valley floors in the bill specifically

and explicitly excludes undeveloped rangelands. Yet the Administration includes undeveloped rangelands as part of the area where they consider coal production might be inhibited by implementation of H.R. 25.

146 In addition, although the present bill contains no ban on mining on alluvial valley floors, the Administration's maximum estimate of production losses under the bill (66 million tons) is identical to their estimate of production losses if mining were banned on alluvial valley floors. Thus, presented with two entirely different sets of parameters and assumptions, they did not change their estimates of potential production losses.

146 Finally, members of Congress have had discussions with the Administration about the methodology by which they arrived at their production loss estimates for alluvial valley floors. Representatives of the Administration explained that their estimates did not represent a range of potential or even probable losses, but at times were based on assumptions that are entirely unrealistic.

146 For example, the alluvial valley floors covered by the bill are those where "farming can be practiced in the form of irrigated, flood irrigated or naturally subirrigated hay meadows or other crop lands." The Administration admitted that its high estimates were based on an assumption that the Courts might interpret the word "irrigated," to mean that if someone could run a garden hose from New Jersey to a Western alluvial valley, it would make the area subject to the alluvial valley requirements of the bill. The high side of the Administration's projections therefore assume that all alluvial valley floors are covered by the special provisions of H.R. 25. It was further explained that, as long as any one person could so interpret a provision, that interpretation however improbable, was incorporated into the maximum estimates of production losses. It is interesting that this discussion was almost immediately preceded by insistence on the part of the Administration that practical economics should be considered in all interpretations of the bill.

146 FURTHER LOSS ESTIMATES

146 It is obvious from the foregoing that the Administration's estimates of production losses attributable to H.R. 25 are generally unfounded and highly questionable. It is, in fact, more likely given the long phase-in period of the bill and the vast extent of U.S. coal reserves, that no production losses will occur. Yet the Administration uses these doubtful estimates as the cornerstone for all other Administration estimates of the impact of the bill emphasizing at all times the maximum adverse potential effects of implementing H.R. 25. From these dubious production losses they extrapolate employment losses, increased

oil imports, fuel costs and consumer costs, and coal reserve losses.

146 Employment impacts

146 The Administration's estimates of the employment impacts of H.R. 25 are extrapolated directly from their highly dubious estimates of losses in coal production. These impacts would occur, if at all, when the production losses, if any, took place - in the first full year of implementation of the Act. The first full year of implementation is not 1975; it is 1978.

146 The Administration's estimates are, at the low end, a direct job loss of 5,000 resulting from a production loss of 40 million tons.

146 The maximum production loss, 162 million tons, translates, in Administration methodology, into a direct job loss of 20,000.

146 In addition to this, the Administration assumes eight non-mining jobs will be lost for each ten mine job losses. This assumption is drawn from the work of Dr. William Miernyck who was cited by the Administration as an expert on coal input-output analysis. Dr. Miernyck has flatly stated that H.R. 25 will not cause any job losses whatever. Nevertheless, using these figures the Administration estimates a total employment impact of 9,000 to a maximum of 36,000 for the most extreme production loss estimate. Also, in fact, even without H.R. 25, they project a decline of some 4,000 surface mines by 1977 despite increased production.

146 Despite earlier statements by leading spokesmen, the Administration is not willing to admit that employment will increase as a result of H.R. 25 because of increased requirements for reclamation. In fact, the incredible claim is made that, because abandoned mine reclamation would be financed from a tax on production, a job would be lost elsewhere in the economy for each job created by the program. This view, of course, implies a total uselessness for any tax-supported public works project from the point of view of employment. Using this logic, one would also be forced to claim that the building of U.S. Interstate Highway System did not constitute a stimulus to employment. Yet, the President has recently supported a \$2 million public service job program.

147 By 1978, the earliest possible full year of implementation of the bill, the civilian work force will be well over 100 million. The employment impacts which the Administration claims will result from H.R. 25, if they materialize at all, will constitute between .01 and .04 percent - one and four one hundredths of a percent of the 1978 work force. The Administration's concern over very

uncertain prospects for a very small level of unemployment in 1978 are scarcely matched by its concern for the staggering unemployment actually being experienced in 1975 and which is forecast for 1976. The Administration's energy tariff and price decontrol proposals attempt to ration energy supplies by increasing energy prices. These price increases are inflationary, and they pose a severe threat to recovery from the current recession. Eric Herr, of Data Resources, Incorporated, a firm specializing in economic analysis and forecasting which is an important supplier of economic information and analysis for the FEA, testified before the Senate Interior Committee on February 12, that "assuming that the Federal Reserve does not fully accommodate the President's program. but rather increases the money supply at only a six percent to eight percent annual rate, the damage to the economy (from the President's program) would be substantial. . . . The unemployment rate would be raised by 0.3 percentage points by the end of this year (1975) and by 0.7 percentage points in 1976, increasing unemployment in the year 1977 by 660,000 persons."

147 The Administration's deep concern over the possible loss of jobs in 1978 is totally hypocritical when measured against its insistence on the implementation of a program in 1975 which is virtually certain to guarantee unemployment in 1975 and 1976 for hundreds of thousands more Americans.

147 Only a day after the hearings at which Administration witnesses expressed alarm over the alleged 9,000 to 36,000 job loss impact in 1978 of H.R. 25, an FEA spokesman was quoted saying that the impact of 7,000 to 14,000 persons unemployed in 1975 and 1976 as a result of the Administration's energy program would be "insignificant." (The Administration maintains that these "insignificant" figures are the proper measure of increased unemployment from the energy tax, tariff and price decontrol proposals of the President.)

147 Perhaps the final and most obvious irony of the Administration's contentions concerning the employment impacts of H.R. 25 is the fact that the UMW and the AFL-CIO - the labor unions which represent U.S. surface miners - have expressed formal support for the bill, and have urged its passage. (The AFL-CIO is in strong opposition to the President's energy pricing proposals.)

147 Oil imports

147 The most important chain of reasoning leading to the veto of H.R. 25 - in the view of the Administration - is the contention that

147 (1) coal production will be lost as a result from provisions of this legislation; and

147 (2) that this loss will require increased oil imports and higher dependence on insecure Mideastern producers.

147 There is no claim that coal production losses will persist - only that they will characterize the first three-to-four years of implementation of the Act. Thus the time interval of potential concern - and it is the only period for which there could be concern - is the period from 1978 to 1980. This year, 1975, and in 1976, and in 1977, during the phase-in period for H.R. 25, the legislation can have no significant negative effect on domestic coal production. Therefore there can be no short term increase in oil imports during 1975-1977 as a result of H.R. 25 either. The nation has over 30 months to prepare for the impact of the bill.

147 If it is granted for the sake of argument that surface coal production losses will in fact occur in the period beyond 1977 - and this is far from certain - how will these losses be made up? A March 25 memo, made available to Congressional staff by Thomas V. Falkie, Director of the Bureau of Mines, estimated that 20 percent of production losses attributable to H.R. 25 would be made up from increased production in underground mines. By the time Mr. Zarb was ready to testify before the Senate and House Interior Committees, the Administration had changed its mind and was maintaining that none of the alleged lost production from surface mines would be made up in underground mines or in other surface mines.

147 However, this is precisely what will happen if there is a demand for coal and a coal mine is shut down somewhere for any reason. Operators of other mines will attempt to capture this business - because it is a profitable business - by produce the extra coal to the extent that it is available and to the extent they can anticipate the unsupplied demand. In the case of the alleged potential impact of H.R. 25, both conditions would seem to be filled.

148 But suppose - for the sake of argument - that some switching to oil does take place. The U.S. will then import more residual fuel oil. The Administration's pre-veto analysis did not distinguish between crude oil and residual fuel oil. In fact it is the latter which is burned in electric utilities and most of this fuel is currently imported. Only 7-9 percent of the output of U.S. refineries is residual fuel oil. Imported residual fuel oil comes overwhelmingly from the Caribbean and from Venezuela. It is based primarily on Venezuelan and Nigerian crude oil. Neither of these countries has expressed any interest in embargoing the United States. In fact, during the 1973-74 embargo, residual fuel imports held to a curve which tracked 1972 and 1973 figures for comparable months - allowing for conservation and warmer weather during the 1973-74 winter. No embargo-induced dip is apparent for residual fuel imports, such as was evident in the case of crude oil imports. There is a very good reason for this: we import a substantial amount of crude

oil from the Arabs, but almost no residual fuel oil.

148 According to the Petroleum Industry Research Foundation, during the postembargo June-October, 1974 period the U.S. imported less than 2 percent of its residual fuel oil from Arab countries. Over 86 percent came from the Caribbean and Latin America.

*3*U.S. RESIDUAL FUEL IMPORTS, JUNE-OCTOBER PERIOD		
	1973	1974
Origin:		
Arab	29.6	
20.0		
Other Eastern Hemisphere	200.9	
95.3		
Canada	114.8	
51.8		
Caribbean and Latin America	1,174.4	
1,075.2		
Total	1,519.7	
1,242.3		

148 Source: Petroleum Industry Research Foundation.

148 The danger the U.S. faces from an Arab embargo is an interruption in crude oil imports for U.S. refineries. The principal refined products affected by such an embargo are the principal products of U.S. refineries - motor gasoline and distillate fuel oil. Residual fuel oil availability would be only very weakly affected by even the most successful future embargo.

148 Thus the Administration's concern over the alleged impact of H.R. 25 in increasing U.S. dependence on foreign oil can not relate to a concern over insecurity supply in the event of an embargo. The utility industry will not be significantly affected by a reduction in crude oil imports from Arab nations.

148 The only concern of the utilities is the price of their fuel. This cannot be a great Administration concern, however, in view of its proposal to add at least \$1 .80 per barrel to the price of imported refined petroleum products. Translated to the Btu equivalent in coal utility boiler fuel, this would represent an increase in coal prices of almost \$6 .30 per ton - an impact which is at least six times any conceivable impact of the reclamation fees and reclamation costs associated with H.R. 25.

148 Impact on electric utility bills

148 The Surface Mining Control and Reclamation Act of 1975 - H.R. 25 - will cause only a very slight increase in the price of electricity generated from coal. According to the Edison Electric Institute, the average consumer uses less than 700 kilowatt hours per month. The increased electricity costs due to the reclamation of strip-mined land will amount to one to two percent - less

than 35¢ per month to the bill of residential consumers whose electricity depends on surface-mined coal. For electricity generated using coal mined underground, the increase in price will be negligible. Costs for power generated by other fuels will not change.

148 Generally speaking an increase in the price of coal of \$1 .00 per ton translates into an increase of one twentieth of a cent - 0.05¢ - per kilowatt hour of electricity. On the average, residential consumers in the U.S. now pay approximately 3.0¢ per kilowatt hour for electricity, according to recent reports of the Edison Electric Institute.

149 H.R. 25 will add at most \$1 .00, on the average, to the price of surface-mined coal. This includes the reclamation fee - much less actually for lignite - and operators may have to pay up to \$0 .50 per ton on new production to cover costs of reclaiming land damaged by their own operations. Administrative costs will add a few pennies more to the price per ton.

149 Surface-mined coal constitutes approximately one-half of U.S. coal production. The fee assessed by H.R. 25 on the remaining underground production is \$0 .15 per ton. This fee will have a negligible effect on the price of electricity produced using deep-mined coal.

149 Thus the cost impact of reclaiming land damaged by strip-mining in the past and to restore the land to be disturbed to mine the coal supplies required for the future is approximately a nickel for every 100 kilowatt hours of electricity, less than 35¢ per month for the average user and approximately \$1.30 per month for an all-electric home.

149 Coal company profits

149 Electricity rates and coal prices have soared over the past year as energy prices were pulled up by the steep rise in the price of imported and domestic crude oil. These increases have hit consumers hard and have swollen the profits of coal companies. According to data compiled by the Congressional Research Service, major coal companies have seen their earnings increase by over a thousand percent in 1974.

*5*COAL COMPANY

EARNINGS

5[Dollar amounts in millions]

	3d quarter 1973	3d quarter 1974	Increase 1973-74	Percent increase
Consolidation coal	\$0.2	\$15.0	\$14.8	7,850
Island Creek Coal	-.9	35.2	36.1	n(2)
Pittston	n1 3.1	27.5	24.4	790
Westmoreland				

Coal	1.0	12.8	11.8	1,240
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149 n1 LOSS.

149 n2 Infinite.

149 Source: Congressional Research Service.

149 Average coal prices

149 The average price of coal delivered to electric utilities doubled in 1974 over 1973 in response to the nearly three fold increase in price of the residual fuel oil which utilities purchased. The chart (not printed) attached shows the dramatic rise in both coal and oil prices per million Btu and the relative magnitude of a \$1 .00 per ton coal cost compared to these increases. It is totally ridiculous to assert that H.R. 25 will produce rises in electricity costs similar in any way to the increases of the past year. Relief from high electric rates can only come from a lowering of oil prices - a policy the Congress favors and the Administration opposes.

149 Coal is used to produce approximately 45 percent of the electricity consumed in the United States. According to the most recent data released by the Federal Power Commission, the average price of coal to electric utilities in February 1974 was \$1 7.71 per ton. Spot purchases are reported by FPC to average nearly \$2 6.00 per ton, while the price of a ton of coal purchased on long-term contracts averages \$15.71. Coal produced from underground mines is selling at \$1 9.43 per ton on the average. The comparable figure for surfaced-mined coal is \$16.64.

149 In October, 1973 prior to the embargo, the average price paid for coal by electric utilities was \$9.34 per ton. The spot price, \$1 1.24 per ton, was only slightly higher, and the contract price, \$8 .86 per ton, only slightly lower. At that time, coal mined underground sold for \$10.58 per ton and surface-mined coal sold for \$8 .62 per ton.

149 Industry and utility views

149 The dramatic increase in coal prices paid by utilities since late 1973 has followed the nearly three-fold rise in the price of heavy fuel oil. This increase, stimulated by the OPEC cartel, permitted coal operators to charge prices which averaged nearly ten dollars a ton more than pre-embargo levels. Isolated spot purchases were even higher, in the \$40 to \$60 per ton range for coal which sold for \$8 per ton a year ago. A brochure prepared for the National Rural Electric Cooperative Association entitled "Why Electric Rates are Going Up" indicates that NRECA expects to pay nearly \$2 8.00 per ton for coal in 1975. These rapid price increases are unrelated to the cost of producing coal.

150 Given the coal industry's profit margins, it is ridiculous to assume

that the industry cannot absorb the entire cost of H.R. 25 - 50~- $\$1.50$ per ton, for surfacemined coal. In most cases this is considerably less than 10% of the present price of coal.

150 As coal prices have been rising continually over the past 30 months, few complaints were heard from coal producers or even utilities. No attempt was made to reduce coal prices and nothing was said about the cost to the consumer of the soaring coal costs. Now, however, when producers face a minor cost-related increase rather than a net gain in profits, the industry has mounted a major propaganda campaign to exaggerate the potential burden the consumer may bear - particularly in the form of higher electric bills - because of H.R. 25. The inconsistency is glaring.

150 Much misleading information is being circulated by utilities about the cost of H.R. 25. A typical example of such deceptive propaganda is a press release put out by Southwestern Electric Power Co. of Shreveport, La. This release states that the bill cost its consumers $\$125$ million for coal to be purchased under two contracts "at some future date". (The company now burns no coal at all.) What the company neglects to point out is that this cost (if and when it occurs) will be spread out over a 25 year period.

150 One of the planned contracts will be for lignite mined in Louisiana and Texas. SWEPCO estimates the reclamation fee for the lignite at 35~/ton although the bill set a limit for the fee on lignite at 5% of the value of the coal (usually $\$1-3$ ton) and thus the fee would be 5-15~/ton. The 125 million total cost of the bill is thus considerably overstated. The Company also neglects the fact that, for the lignite mined in Louisiana, one half of the fee is retained by the State. Yet even with all of these over-estimated costs, the increased cost to the SWEPCO consumer resulting from H.R. 25 is $\$4.97$ million a year, or 4/100ths of a mil (.04 mils) per kilowatt hour, or $\$3.36$ per year for a household using 700 kilowatts a month.

150 A more realistic presentation of increased consumer costs would be to show the cost of the bill on an annual and per kilowatt hour basis. Also, it would be more accurate to set the reclamation fee for lignite at 15~/ton (assuming $\$3.00$ /ton coal) or less. This would, of course, decrease the total cost to the consumer by $\$1.44$ million a year, or $\$36$ million over a 25 year period.

150 The administration's analysis of consumer costs

150 If the propaganda on H.R. 25 being offered by the coal producers and electric utilities is misleading, the Administration's "analysis" of the consumer cost of H.R. 25 breaks new ground in ex post facto justification of a political position.

150 The fact sheet accompanying the President's veto message on H.R. 25 suggests that the legislation was rejected because if it became law "consumers would pay higher costs - particularly for electric bills - when consumer costs are already too high."

150 The President's use of this rationale for rejecting H.R. 25 is just astonishing. This Administration has been threatening the Congress for four months with what it calls an "energy program." The foundation and central feature of this program is embodied in the Administration's contention that the proper solution to energy problems must involve higher energy costs for consumers and higher profits for energy companies.

150 This is what the proposal to add \$1 , \$2 and finally \$3 to the tariff on imported oil is all about. This is what the decontrol of domestic crude oil and the deregulation of natural gas is all about. This is why the President proposes excise taxes of \$2 per barrel on domestic crude oil production, and 37~ per mcf on domestic natural gas. This is why the Administration's "Energy Independence Act" calls for faster and more complete incorporation of electric utility costs, including the costs of construction in the monthly electric bills for consumers.

150 The increased costs of the program which the Administration intends to implement without any new Congressional authority amounts to \$3 3 billion on an annual basis. The Administration maintains that these costs are necessary, and that the Congress ought to permit them to be imposed. Moreover, the Administration has proposed legislation for Congressional action which would raise the \$3 3 annual billion cost of energy for U.S. consumers by at least \$10 billion more.

150 In view of these proposals and the Administration's repeated claims that high prices are the proper stimulus to conservation, the veto of legislation to control surface mining and reclaim damaged lands on grounds that it will raise energy costs is totally hypocritical.

151 What is the cost impact of H.R. 25? The fee imposed by the legislation averages approximately 25~ per ton on all U.S. coal production. The reclamation costs will average perhaps 50~ per ton when spread over all production. The administrative costs are at most a few pennies per ton. The total added cost of reclamation, estimated by the Administration, amounts to approximately \$3 00 million dollars annually, to be imposed in 1978 and thereafter.

151 The Administration has proposed, and is insisting on enactment of, an energy program which will raise energy cost by at least 100 times this amount to be implemented this year.

151 In 1974 the average price of coal at the mine on a national basis increased by 76%, from \$8.50 per ton to \$1 5.00 per ton. Without comment from the Administration the price of average coal rose by \$6 .50 per ton. On the spot market, where many electric utilities make their coal purchases, prices have increased by as much as \$2 0 per ton. None of these increases have gone into reclamation of strip-mined land. They have gone into the pockets of coal producers. All this has been acceptable to this Administration. Responsible legislation which reclaims the land at a cost of at most \$1 per ton is not.

151 The fact sheet submitted by the Administrator of the Federal Energy Administration, Frank Zarb, to the Senate and House Interior Committees on June 3 estimated consumer costs of H.R. 25 at \$2.4 to \$5.6 billion annually.

151 These estimates are based on highly dubious assumptions. It is also implied that H.R. 25 will cause higher prices and increased imports now in 1975 - instead of in 1978 when the full impact of the bill would actually be felt. To obtain the Administration's cost figures, it is necessary to assume:

151 (1) That coal production will fall 40 to 162 million tons short of demand because of the provisions of H.R. 25;

151 (2) That no added coal production from surface or underground mines operating in 1978 in compliance with H.R. 25 will replace this "lost" production;

151 (3) That all "lost" coal production will be replaced by imported oil; and

151 (4) That, in response to a shortage of coal spot-market prices will rise by \$12 to \$18 dollars per ton.

151 The first two assumptions are questionable for a number of reasons discussed elsewhere. The third assumption clearly depends on the first two. The fourth assumption, that coal prices will rise by \$12 to \$1 8 per ton to the oil equivalent level is interesting in view of the Administration's repeated claims that President Ford's energy program, while increasing oil prices, will

not affect the price of coal.

151 In fact, coal spot prices increased by \$1 5 per ton in between October 1973 and February 1975. This price increase for coal occurred in direct response to the tremendous rise in the price of imported oil. In fact, the price of coal has at this time reached an equilibrium with oil at a price significantly below Btu equivalency. There is no evidence that, without a further increase in oil prices, coal prices will again rise towards the \$40-\$42 which represents Btu equivalents with residual fuel oil. There is no question then, that coal prices do follow trends in oil prices. The Administration is now attempting to use this fact to grossly exaggerate the effects of H.R. 25. But because oil is a cleaner and more convenient fuel to burn than coal, the total cost of burning coal to utilities, including transportation and pollution control, will generally be higher. Hence the delivered price of coal is not ever likely to rise to the Btu equivalent price of oil. Thus it is unrealistic to assume anything like a \$12-\$18 per ton coal price increase because of the enactment of H.R. 25, particularly in the absence of a further major increase in the price of oil. The FEA's consumer cost estimates are thus totally without foundation.

151 Coal reserve losses

151 The Administration estimates that as a result of H.R. 25, some 17.9 - 73.4 billion tons of coal reserves would be "locked up". They claim that these estimates were derived from the estimate of production losses. However, there is in fact no direct relationship between coal production and reserves and the Administration has provided no explanation of the methodology used to make such a derivation. Nor do they explain the reason for their estimate that 14.2 billion tons of coal could be locked up by the surface owner consent requirements of the bill. Also, with respect to alluvial valley floors, representatives of the U.S. Geological Survey told the House and Senate Interior Committees in sworn testimony that the reserve loss estimates were made first, and the production losses derived later.

152 Nevertheless, insofar as it is true that the reserve losses are extrapolated from the production estimates, they must be considered highly dubious, since the Administration's projections of potential output losses are, as noted earlier, exceedingly questionable.

152 Furthermore, these reserve loss estimates are predicated on the assumption that if certain reserves are closed to surface mining, they are inevitably lost. This totally ignores that fact that much of this coal can

still be mined by underground mining methods, and is therefor not "locked up".
The reserve loss estimates are thus greatly overstated.

152 Finally, the U.S. has some 434 billion of demonstrated recoverable coal reserves, enough to last more than 500 years. Even if one were to accept the Administration's worst possible estimate, we would experience a loss of about 17 percent of our total reserves, leaving more than 400 years' worth of reserves available for mining.

153 APPENDIX II

153 NEWS ANALYSIS OF DATA JUSTIFYING VETO OF H.R. 25

153 [From the Courier-Journal, June 30, 1975]

153 CONTRADICTIONS, DISCREPANCIES NOTED - DATA USED TO JUSTIFY STRIP-MINE BILL VETO QUESTIONED

153 (By Ward Sinclair)

153 WASHINGTON. - The lengthy, emotional congressional effort to put federal regulations on the strip-mining of coal was stymied last month when President Ford vetoed the bill on the grounds that it was too costly and too stringent.

153 The President made his case from a mountain of controversial statistics prepared to document the bill's impact. He said as many as 36,000 jobs would be lost and coal production in 1977 could be cut by 162 million tons if the bill became law.

153 The statistics were put together by engineers from the U.S. Bureau of Mines and the Federal Energy Administration (FEA). Mr. Ford's allies in Congress and industry relied heavily on the data and, on June 10, the House failed to override the veto.

153 One of the major environmental measures of recent years had gone down the tubes. And by putting heavy emphasis on eye-grabbing statistics and the "crisis" aspect of national energy needs, Mr. Ford and the industry were able to convert what had been essentially an environmental debate into a murky and heated conflict over jobs and tonnages.

153 During the past several weeks, numerous interviews and a review by this newspaper of procedures used by the engineers at FEA and the bureau produced some basic conclusions. Among them are these:

153 A systematic economic-impact study was not made to determine the mining companies' ability to pay for new costs the bill might cause. Bureaucrats "assumed" that companies, particularly small operators in Appalachia, simply

could not pay and would go out of business.

153 Some impact figures were gathered after Mr. Ford had vetoed the bill. Some Bureau of Mine employees readily conceded that "a lot of guessing" was going on as the figures were prepared and that the data in some cases was "mushy."

153 Although most federal officials were cooperative after repeated requests for information, a pattern emerged: Background data was "destroyed," other material was "scattered" around the country, lists of names and mines became "unavailable" and officials complained openly about their figures not being taken on faith.

154 In other instances, statistics were drawn up from flatly erroneous starting points. For example, until last Wednesday, two key men in the data-gathering process thought the vetoed bill banned mining on slopes over 20 degrees. It didn't. In fact, both the House and Senate on roll-call votes specifically precluded any steep-slope bans.

154 Obscured in the debate, but crucial to the validity of the statistics, was the point that much of the projected "lost" production and many of the "lost" jobs do not exist today. The engineers estimated production goals for 1977 and then concluded the bill would prevent that future coal from being mined and, thus, the jobs from being created.

154 Given a near-impossible assignment to quantify losses that might occur, the bureaucrats came up with wide ranges of projections from which political figures - principally, Mr. Ford and FEA chief Frank Zarb - tended to emphasize the highest range of predicted losses.

154 Officials defended their projected impacts by saying they had carefully doublechecked with companies, trade association and state reclamation agencies. A survey of those sources found that many were among the most vehement opponents of the legislation, who in turn were guessing about impact; others reported only cursory contact with the federal people.

154 After Mr. Ford vetoed the bill on May 20, congressmen and environmentalists leaped to the attack, arguing that the President's statistics were inadequate. Major supporters of the measure, such as Reps. Morris Udall, D-Ariz., Patsy Mink, D-Hawaii, and John Melcher, D-Mont., and Sens. Henry Jackson, D-Wash., and Lee Metcalf, D-Mont., were among the most outspoken.

154 Faced with rapidly eroding support in the House as members became worried about economic and energy impacts of the bill, Udall postponed a May 21

veto-override vote and announced that an Interior Committee inquiry on the statistics would be held in June.

154 The day-long congressional hearing produced a welter of arguments, contradictions and partisan sniping - in part because of the administration's refusal to provide all the background data that Udall and Mrs. Mink had requested in advance.

154 Since the hearing and the unsuccessful override vote, an exhaustive investigation and a series of interviews brought out an array of contradictions and discrepancies. Some examples:

154 FEA and the bureau insisted that part of the impact was determined by an FEA field survey of state reclamation offices, trade groups and selected strip-mining companies. This was done to confirm and doublecheck their own findings, they said

154 FEA's survey was anything but formal or scientific. Each of the trade groups already was on record opposing the federal legislation.

154 Some interviews were conducted by long-distance telephone, some in person. No set of standardized questions was used. In some cases, according to FEA engineer Dan Jones - the man who thought the bill banned steep-slope mining - answers were forthcoming only after FEA had read portions of the legislation to the interviewee and sought an expression of their impact on mining.

154 Jones' Alabama source was William Kelce. Kelce, of the Alabama Mineral Producers Association, in 1974 appeared before the United Mine Workers executive board to talk about why a similar bill pending then should be killed.

155 The FEA roll-call showed that a Kentucky source was Keenus Bowling, head of the quasi-governmental Interstate Mining Compact Commission, based in Lexington. In 1974 the compact voted 5 to 2 against the bill.

155 FEA's Virginia source was B. V. Cooper, head of the state's stripmine operators who had organized and led a demonstration of miners and truck drivers in Washington in April - protesting passage of the bill.

155 According to FEA its West Virginia source was Ben Lusk, head of the Surface Mining & Reclamation Association in Charleston. Lusk contacted by telephone, said he had not been interviewed by FEA nor contacted for data. Had he been contacted, he went on, he would have "told them plenty."

155 Lusk publicly opposed the legislation. He praised President Ford after

he pocket-veto a similar strip-mine control bill last December. Privately, in a newsletter to association members Lusk was assuring them that they could live with and comply with the bill.

155 Jones of FEA said he saw no conflict in that. Lusk, in the interview, reiterated his belief that passage of the bill would have been devastating to West Virginia strip miners.

155 Although the FEA contact list did not mention his name, Tom Duncan, president of the Kentucky Coal Association said he was contacted several times during recent months by government officials seeking the association's impression of the possible impact of the bill.

155 Duncan said the association believed the bill would be fatal to almost all small mine operators in hilly Eastern Kentucky. He said the impression was based on his group's knowledge of the industry and companies' financial resources.

155 "We felt by all logic anyone mining 100,000 tons or less in Eastern Kentucky could not survive," Duncan said. "As a practical matter we felt you could write off any production from mines of 50,000 tons or less. They couldn't survive, only a few tenacious ones could survive."

155 Duncan said the government officials who contacted the Kentucky delegation "were asking for honest answers and we tried to give them that . . . we didn't want them to get their figures shot down. But there was no pressure of any kind on us to come up with anything."

155 As FEA and the bureau finally worked it out, they projected that of the 950 small mines in Kentucky they believed would be operating in 1977 without a federal law, 900 of them would have to close down if the law passed. In 1973, 632 small mines (50,000 tons or less) produced 9.9 million tons of strip coal in the state. The 1977 production-loss projection: 18.3 million tons.

155 Officials at the state level expressed some perplexity over reports that they had collaborated with FEA in compiling an impact assessment.

155 For example, John Roberts, head of Kentucky's reclamation division, said he was visited by an FEA official "probably in February" but their conversation was "only in the most general terms. . . ."

155 Roberts said his greatest concern was that the pending federal bill

might cause "paperwork problems" for the state and for mining companies, particularly with issuing permits. But beyond that, he said the conversation dealt with a few specifics.

156 Walter Heine, who directs the Pennsylvania reclamation program, said he had had no contact with FEA officials regarding potential impacts, although he said FEA might have talked to others in his state agency.

156 Heine said he was "really frosted" when he received a call from a bureau official asking for steep-slope mine data the day after Reps. Udall and Mink announced they would grill administration officials at a hearing. Heine said he felt the bureau was trying to put together data "after the fact" and he did not cooperate.

156 The bureau man who made the call, William Kebblish, based in Harrisburg, Pa., said he had indeed called Heine "about three or four weeks ago - when the congressmen were going to counteract the veto."

156 Kebblish said he had been directed by the bureau in Washington to make the contact "to recheck some of their statistics . . . everyone was questioning the figures, you know. I'm pretty sure this was when the committee was having their hearings."

156 Heine, after checking with staff assistants, said Kebblish had sought data about the number of steep-slope mines in the state and the number of mines producing 50,000 or less tons of strip coal yearly. Kebblish said he had sought the data.

156 Both FEA and the bureau said vital back-up data to document and justify the final tabulations were not available. Jones of FEA said his agency's notes of conversations with the state groups had been destroyed because he saw no need to retain them once the final tabulation was made.

156 The tabulation, applying to steep-slope mines in the Eastern United States, projected that a maximum of 52 million tons would not be produced from those operations in 1977 if the bill became law.

156 The same tabulation, delivered to Mrs. Mink after the June 3 hearing, indicated that "samples" of information had been obtained from "approximately five operating mines in each state."

156 The federal officials, both at the hearing and in interviews, have steadfastly refused to name the companies on the grounds that the data was collected on a confidential basis.

156 John Hill, deputy administrator of FEA, indicated to a reporter that he would authorize release of the economic data from those companies without naming any of them. Names were "proprietary," he said, and could not be given out.

156 But the list promised by Hill never was delivered. Queries to Hill's assistants at FEA failed to bring delivery of the data, although they continued to insist that the data exists.

156 There was more controversy and discussion of other lists. Bureau of Mines director Thomas V. Falkie told Mrs. Mink that his agency, along with FEA, had made a field survey that showed a mine-by-mine listing of companies that would not be able to comply with permit and bonding requirements of the proposed law.

156 At Mrs. Mink's insistence, Falkie told her he would supply the material to the committee. Different items have been sent to Mrs. Mink since the hearing, none apparently fitting the description of the data she sought.

157 Later in an interview, Falkie said no such list exists and even if it did "we would not give it to you" for fear of jeopardizing the companies in some undefined future regulatory situation.

157 Falkie's bureau apparently had some of the same difficulty that FEA had in keeping records from its surveys. James Paone, head of the bureau's environmental division, which did the statistical work, said much of the back-up data was "scattered all around the country . . . in Spokane, in Pittsburgh and Denver." But some of it, he added, doubtlessly had been destroyed during the months since the study began.

157 The bureau and the FEA rejected several recent government-financed studies that indicate the cost of reclamation on steep slopes in Appalachia can be paid by small companies if current or higher coal prices prevail.

157 One such study was introduced in the Congressional Record last winter by Sen. Howard Baker, R-Tenn., who wanted the Senate to know that the Tennessee Valley Authority had found coal could be mined and the land reclaimed on steep slopes for less than \$9 a ton.

157 Bureau engineers cast the report aside as inadequate. Another

bureau-sponsored study by consultants, who found a slightly higher per-ton cost for similar mining, was discredited by engineers who thought the consultants wanted the bill passed into law to enhance their consulting business.

157 Lower-level employees at the Bureau of Mines said privately that at least one statistic, projecting minimum tonnage loss if the bill became law, was viewed as "mushy" and was revised downward to make it more immune from attack. Employees said the bureau, if need be, intended to come up with more specific statistics tailored to back up Falkie's public assertions about production losses.

157 In partial corroboration, Commerce Department counsel Ray Peck, lamenting public criticism of the statisticians' work, said that in at least one instance the administration told the engineers to come up with new figures because their calculations were "too high to be believed." Peck said they refused to do so - evidence of their professionalism.

157 Another bureau employee, minerals economist Walter Dupree, a recognized expert within the government, had a more straight forward view about the procedures used by the engineers and officials in coming up with statistics.

157 "A lot of guessing was going on," Dupree said, in explaining how they had come up with a projected coal tonnage loss between 40 and 162 million tons.

157 Although Dupree was a member of the statistical team and although colleagues good-naturedly hooted at him as he made the "guessing" remark, he was saying essentially the same thing Rep. Udall said as the congressional inquiry began June 3.

157 Udall accused administration officials of "guessing" that production would fall if the bill became law. Udall, predicting that production would increase, said he was "guessing too."

157 By then, minds had been set, opinions formed and votes committed. On June 10 the House failed to override the veto by four votes.

158 COAL-VETO DATA HELD SLOPPY - FORD'S FIGURES SUPPLIED BY BILL OPPONENTS

158 (By Stephen E. Nordlinger)

158 WASHINGTON. - The figures on the loss of coal production cited by President Ford to justify his veto of the strip-mining bill appeared to have been based on the roughest kind of estimates, verified in part by checking with state mining association officials who were known vocal opponents of the legislation.

158 Some of the material designed to substantiate the production losses was hastily assembled after the veto was announced, in preparation for a special congressional hearing called to examine the administration's figures.

158 A memo written at the Interior Department referred to some of the figures as "mushy" and said that supporting material might have to be assembled if they became subject to attack in Congress.

158 One Bureau of Mines official interviewed said that "a lot of guessing" had been done to compile the information to support the presidential veto.

158 Mr. Ford announced May 20 his veto of the bill to control environmental damage from strip-mining in Appalachia and in the Western fields. The House of Representatives by three votes failed to override the veto June 10.

158 The President's primary argument against the bill rested on a wide range of estimates of production losses going from 40 million to 162 million tons in 1977, when it was said the impact of the law would be felt by mine operators.

158 Although engineers and officials at the Bureau of Mines and the Federal Energy Administration developed this range, Mr. Ford and administration spokesmen emphasized the loss at the extreme upper end. Lobbyists representing the coal and electric utility industries ignored all but the top figure in their intense campaign to defeat the bill.

158 A three-week study of the methods used to compile the figures disclosed the following:

158 There was no economic analysis made of the small mines in Appalachia to determine their financial ability to comply with the bill's new requirements. An economic analysis would have studied the capabilities of the mines in light of expectations of high demand for coal and rising prices. The administration estimated that almost all small mines would be closed and few would be able to open as a result of the bill.

158 Thomas V. Falkie, director of the Bureau of Mines, promised at the special congressional hearing on the production figures to provide a list of the small mines that would be closed by the bill. In a later interview, Mr. Falkie said no such list exists, but that, if it did, he would keep it confidential on grounds that it contained proprietary information.

158 A chart submitted to the same hearing said that predicted tonnage losses from small mines were based on projections from samples "of approximately five operating mines" in seven states. The Federal Energy Administration refused to disclose the names of the mines, but John A. Hill, the deputy administrator, said a list would be made available using coded names for the mines. No such list has been provided.

159 Only an informal survey was made of state agencies, mining associations and mine operators, often by long-distance phone, in an attempt to verify the engineering estimates of the Bureau of Mines and the Federal Energy Administration. No fixed set of questions was used and no written responses were requested. The sheets nothing the informal replies have been destroyed.

159 The check of mining association officials included B. V. Cooper, executive director of the Virginia Surface Mining and Reclamation Association, who organized the caravan of mine operators that demonstrated against the bill here April 9. Another official questioned, Keenus Bowling, represents the Interstate Mining Compact Commission that voted 5 to 2 in May, 1974, against the then pending strip-mining bill.

159 The professional engineers at the Bureau of Mines were directed to assume for their calculations of production losses a possible court-ordered ban on all strip mining that substantially affected the alluvial valley floors in the West. The resulting estimate, not based on any formal study of the degree to which the mines could adjust the operations to the bill, accounted for a major part of the production-loss figures.

159 The scheduling of a special congressional hearing shortly after the President's veto to look into the production figures apparently triggered some intense activity at the governmental agencies to develop new substantiating information. The witnesses were to testify under oath about the figures.

159 Walter N. Heine, associate deputy director of the Mine and Land Protection in Pennsylvania and a supporter of the stripmine bill, said the "phones rang off the hook" with requests for new information concerning the impact of the bill.

159 "It really frosted me that they wanted to do it after the fact," said Mr. Heine, who said he was "not too co-operative."

159 The request for new material was confirmed by William Kebblish, of the Bureau of Mines in Harrisburg, who said he was asked to seek the information by James Paone, director of the Environmental Division at the headquarters of the Bureau of Mines here.

159 "Everyone was questioning the figures you have so we were rechecking," said Mr. Kebblish. Mr. Heine said, however, that the Bureau of Mines had not checked previously with him or his staff for the kind of material requested.

159 In the months preceding the final congressional action on the bill, staff members of the Federal Energy Administration called by phone or visited officials in seven states in the East and South to get their assessment of the bill, according to a list supplied by the agency and interviews with government officials. The complex provisions of the bill were described on the phone in some cases.

159 One of the officials contacted, John Roberts, chief of the Division of Reclamation in Kentucky, the largest coal producing state in Appalachia, said that Fred Brokaw, of the energy administration, visited his office and discussed the pending legislation during a "general type of conversation." Mr. Roberts said that no formal questionnaire was submitted to his agency for information.

160 A list of seven industrial associations reportedly consulted by the Federal Energy Administration mentioned Ben Lusk, president of the West Virginia Surface Mining and Reclamation Association, but Mr. Luck said in an interview that no one from Washington contacted him about the bill, although he said he opposed the legislation. In a report to association members last October 4, however, Mr. Lusk said he thought West Virginia miners could "adjust properly" to the then pending bill, which was weaker than this year's measure.

160 One of those on the same list, William Kelce, of the Alabama Mineral Producers Association, was selected by the coal industry to represent its views against the bill before the international executive board of the United Mine Workers of America in order to discourage union support of the legislation. The United Mine Workers of America later endorsed the bill.

160 Although the government relied on outside state and industry officials for appraisals of the lengthy, complicated bill and its consequences for coal production, apparently even the staff members of the Federal Energy Administration and the Bureau of Mines, presumably closest to compiling information on the bill's impact, were not entirely conversant with the provisions.

160 During an interview last week, two officials, Daniel Jones, of the energy agency, and Buck Miller, of the mines bureau, said the legislation explicitly banned strip mining on slopes of 20 degrees or greater. No such provision existed in the vetoed bill, and, in fact, such a specific prohibition was deliberately omitted by Congress in Senate and House roll-call votes.

160 Both Mr. Jones and Mr. Miller were closely involved in assessing the impact of the legislation on coal production.

160 During two lengthy interviews with officials of the Federal Energy Administration and the Bureau of Mines, the production figures were strenuously defended, although the engineers indicated that they could not be responsible if only the most extreme tonnage loss calculations were cited by opponents of the bill.

160 According to Mr. Falkie, director of the Bureau of Mines, the figures were based "on our experience and the vast amount of data available." He said the bureau estimated that to qualify for a strip-mining permit the operator of a small mine would have to spend between \$9,000 and \$29,000 to meet the bill's mapping, hydrolic and other requirements, without assurance of receiving a permit.

160 This information was submitted to Representative Patsy T. Mink (D., Hawaii), chairman of the House Subcommittee on Mines and Mining, on June 17, but without an economic analysis of the ability of mines to cope with added expenses.

160 The report arrived a week after the veto-override vote in the House and almost a month after the President's veto.

160 Mr. Paone, of the mines bureau, said part of the projected production loss was based on an estimate of the number of mines the government thought might open by 1977 without a regulatory bill, although the mines are not operating now.

160 "We tried to make a judgmental evaluation," he said, based on the best available engineering experience.

161 UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY, Reston, Va., March 3, 1976.

161 Hon. JOHN MELCHER, Chairman, Subcommittee on Public Lands, Committee on Interior and Insular Affairs, House of Representatives, Washington, D.C.

161 DEAR CONGRESSMAN MELCHER: In response to a telephone request from Mr. Harry Crandell of your office, attached are copies of maps of 42 quadrangles in the northern Powder River Basin, Montana, showing alluvial valley floors and areas underlain by strippable coal. We believe that the definition of alluvial valley floor used in preparation of these maps is consistent with that of H.R. 9725. Measurement indicates that 2.7% of the area underlain by strippable coal in the region covered by these maps lies beneath alluvial valley floors. We

believe that the area is typical of the Powder-River Basin as a whole. This is consistent with the estimate of less than 5% for the more restricted wording of S. 11 made last year.

161 Estimates based on preliminary studies suggest that less than 1% of the area of strippable coal in the Yampa Basin, Colorado, and less than 5% of the area of strippable coal in the Kaiparowitz Plateau, Utah, lie beneath alluvial valley floors.

161 Another map that may be of interest to you is USGS Misc. Geologic Investigations Map I-484F, which shows probable environmental effects of surface mining of the Wyodak-Anderson Coal, Campbell County, Wyoming. This map has just been printed in Denver, and copies are on their way to Reston, but have not yet been received. We will forward you a copy as soon as they arrive.

161 Sincerely yours,

161 M. R. KLEPPER, Acting Director.

161 Enclosures.

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Additional, dissenting, separate, and supplemental views

STEIGER, SEBELIUS, YOUNG, BAUMAN, SYMMS, SMITH

SKUBITZ

SUPP-VIEW: ADDITIONAL VIEWS

For all the oral and written pains being taken to distinguish H.R. 9725 from the vetoed H.R. 25 (Surface Mining Act of 1975), the bills meet the test for being "of the same substance." Thus, a vote by the House on H.R. 9725 would violate section XLIII of Jefferson's Manual:

. . . a question once carried cannot be questioned again at the same session, but must stand as the judgment of the House; and a bill once rejected, another of the same substance cannot be brought in again the same session.

A side-by-side comparison of H.R. 9725 and H.R. 25 reveals but a few word differences and not a single deleted section. Both bills remain nearly 200 pages long with more than 40,000 words of text in each. The actual difference in language is, at best, cosmetic. The insignificance of the changes are spelled out in other views filed with this Report. Suffice it to say, at this point, that not a single issue, argument, or controversy raised by H.R. 25 is

put to rest by H.R. 9725. The bill this Committee reports is a second consideration of the vetoed H.R. 25.

We believe the rule against "second consideration" has an important purpose. It is more than a limitation against those who would waste the time of the House in repeated agitations of the same question. It fixes the judgment of the House. If every question of close decision were permitted to be brought again, the judgment of the House would never be known.

Of course, a new Congress is not bound by the decisions of an earlier Congress. We agree that the next Congress could again examine the surface mining control issue as presented in H.R. 25 or H.R. 9725. But this Congress has decided against passing H.R. 25, or any other bill of the same substance, by sustaining the veto of H.R. 25. The judgment must be regarded as the will of the 94th Congress, and H.R. 9725 cannot be brought.

The test of what constitutes "of the same substance" is not without precedent. In 1856, the Speaker overruled a point of order against a bill allegedly "of the same substance" by finding that the one bill differed from the other "in the very material manner of wanting the proviso, which is the subject matter of controversy . . ." n1 As we have pointed out, H.R. 9725 has not eliminated any section of controversy from H.R. 25. Nearly all provisos are identical to H.R. 25, leaving the two bills "of the same substance."

n1 See Section 3384, Cannon's Precedents, p. 295.

We are aware of an instance in 1864 in which the Speaker observed that "a resolution which the House had laid on the table might not be presented again, unless one or two words were changed, to make it in fact a different resolution". n2 Proponents of H.R. 9725 believe this opinion (which was not a formal ruling) requires only a literal change in one or two words to defeat the test "of the same substance." We disagree. We believe the words, "to make it in fact a different resolution," govern the meaning of the Chair's opinion. We believe the Chair intended that a word or words changed must affect the meaning of the bill so as to make it different. Otherwise, if all that is required is cosmetic change, the rule against "second consideration" has no purpose. Such an interpretation is wrong because it renders a House Rule useless without a vote to repeal it.

n2 See Section 3385, Cannon's Precedents, p. 295.

Section XLIII of Jefferson's Manual applies, and H.R. 9725 is not in order. Its consideration in the 94th Congress would be a violation of the House Rules.

SAM STEIGER.

KEITH SEBELIUS.

DON YOUNG.

ROBERT BAUMAN.

STEVE SYMMS.

VIRGINIA SMITH.

STEIGER, BAUMAN, SYMMS, SMITH YOUNG

DISSENTING VIEWS

We strongly oppose the passage of H.R. 9725, the "Surface Mining Control and Reclamation Act of 1976," as amended and reported by the Committee on Interior and Insular Affairs.

As introduced, this bill is virtually identical to H.R. 25, the bill which last year was enacted by the Congress and vetoed by the President on May 20, 1975. That veto was sustained in the House on June 10, 1975, and both the reasons for the veto and the arguments for sustaining any such veto remain valid for this bill. The changes that have been made to H.R. 9725 are cosmetic and insignificant.

On June 3, 1975, an unprecedented post-veto hearing subjected Administration witnesses (some under oath) to a rigorous and vicious cross examination at which the witnesses successfully defended and explained the development of the loss and cost impacts of the bill. Several unsuccessful attempts to discredit the analysis of the bill's impact have been attempted since that time. In fact the proponents' arguments against the Administration analysis depend largely on a so-called "investigation" by two newspaper reporters with little or no technical training or background in surface mining technology or economics. Proponents claim that the bill has been changed but no valid evidence has been presented to back up this claim. Indeed throughout the history of surface mining legislation the proponents have failed to develop quantitative analyses. Last year the Administration's analysis of H.R. 25, performed by trained and experienced engineers, economists, and lawyers, formed the basis for the veto and show that:

1. As many as 36,000 people would lose jobs when unemployment is already too high.

2. Consumers would pay higher costs - particularly for electric bills - when consumer costs are already too high.

3. The Nation would be more dependent on foreign oil - when we are already overly dependent and dangerously vulnerable.

4. Coal production would be unnecessarily reduced - when this vital domestic energy resource is needed more than ever.

H.R. 9725 is for all practical purposes the same as H.R. 25. Changes in projected production and employment losses would be minor. The proposed bill does not take into consideration geographical and geological differences among various sections of the country. The administrative and legal delays built into the bill would cause most final decisions to be made by the courts after lengthy litigation.

For example, a recent study by the United States Geological Survey entitled Maps of Alluvial Valley Floors and Strippable Coal in 42 Quadrangles, Southeastern Montana (open file report number 76-162 (February 1976)), indicates that of the 27.6% of the area of three mapped counties that contain strippable coal, only 2.7% is overlain by alluvial valley floors. According to USGS the mapped area "is typical of the Powder River Basin as a whole." Based on this limited area of mapping, the report states that the major objection affecting western coal has been removed. This is simply not true. The geologist directed to prepare such maps for USGS was told to do so using the definition of "alluvial valley floors", as contained in H.R. 9725, as introduced but prior to amendment in Full Committee, as a guide. We believe that the results obtained from such mapping is extremely misleading at best and not conducted in an objective manner. Credibility of this mapping project could be challenged by any competent geologist. If any two geologists were given the same task, devoid of the nebulous definition in the bill, of mapping the same area based upon their perception of what "alluvial valley floors" meant, the result would vary considerably as to the percentage of coal overlain by "alluvial valley floors." Therefore, the results of a mapping exercise of this nature conducted under these constraints could in no way be considered as reflective or typical of the Powder River Basin as a whole.

The majority report also depends on a distorted view of the comparability of Pennsylvania laws with the proposed bill. This distortion is based on the

assumption that H.R. 9725 and the Pennsylvania laws are identical but in fact they are not. The Pennsylvania law does not, for example, have the stringent and exhaustive application requirements of H.R. 9725. It provides for variance provisions that are nonexistent in H.R. 9725. Pennsylvania surface mine production did in fact drop in 1972, the year following enactment of their law.

Ohio, West Virginia, and Tennessee also experienced a decline in surface mine production in the year following implementation of regulations. Contrary to the

testimony by officials from the State of Pennsylvania, experienced and knowledgeable Administration engineers and economists had been developing data

for analysis of S. 425 and H.R. 25 long before the veto message was prepared. The Department of Interior had data and information about Pennsylvania laws and

mining activities gathered and assessed by its Bureau of Mines Eastern Field Operations in Pittsburgh, by the Bureau's Liaison Officer in Harrisburg and by

the Bureau Environmental Field Office in Wilkes-Barre. The final assessment on

the comparison between the Pennsylvania law and H.R. 25 was made in Washington

by experienced and professional mining engineers and economists who had access

to exhaustive data on Pennsylvania mining activities.

It is our strong view that H.R. 9725 would:

- Cause coal production losses at a time when coal should be used increasingly as an energy source;
- Cause losses of valuable coal reserves at time when conservation of our resources is important;

- Cause unnecessary employment losses when unemployment is already too high;

- Cause increased oil imports;

- Cause the cost of coal to rise and thereby cause the consumer's cost of electric power to rise;

- Create yet another bureaucracy at a time when big Government is a deep concern to all;

- Cause increased Government spending to feed the bureaucracy;

- Weaken and eventually destroy existing State programs of enforcement, most of which have been vastly improved in the past few years;

- Undo the efforts of the Department of the Interior to strengthen regulations for controlling surface mine reclamation on public lands;

- Lead to years of regulatory delays, litigation and uncertainty against the best interests of achieving our environmental and energy objectives because of

ambiguous, vague and complex provisions;

- Inject the Federal Government immediately into a field which is already regulated by most states because of cumbersome and unwieldy Federal-State regulatory and enforcement provisions; and finally

- Prevent a national resource from being used in the national interest because of these provisions which enable State governments to ban surface mining of coal on Federal lands.

We consider it to be ironic and irresponsible that this Congress should continue to attempt to pass anti-coal legislation at a time when virtually all energy experts agree that the production and use of this country's vast coal reserves and resources are vital toward solving the Nation's energy problem.

Progress and importance of State regulatory mechanisms

All of the coal producing States have now enacted legislation to control the surface mining of coal. Moreover, many of these States have, even since the introduction of H.R. 25, substantially revised or upgraded their laws so that with respect to lands subject to their control, the need for Federal legislation that would override their State programs is greatly diminished. Indeed, provisions designed to correct the specific abuses against which H.R. 25 was drafted have been adopted in many recent amendments of State laws. The differences, however, between these State programs and H.R. 25/H.R. 9725, are significant. The State provisions are generally more flexible, and allow appropriate recognition by State regulatory authorities of the particular physical, geological, hydrological and social conditions of their State and of the particular mine sites and proposed operations.

Even the most cursory review of these State laws and regulations, particularly those of the Western States, indicates that for the most part they are working. The abuses which occurred under or in the absence of the legislation and regulations which existed in the past are not occurring, and cannot occur, under modern State regulatory mechanisms.

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STATE SURFACE MINING LAWS - ENACTMENTS AND/OR AMENDMENTS SINCE JAN. 1, 1969

State	1969	1970	1971	1972	1973	1974	1975
1976							
West Virginia n1			a				
Indiana n1				a	a	a	
Illinois n1			a				
Pennsylvania n1		a	a	a	a		
Ohio n1				a		a	a
Kentucky n1			a			a	
Maryland n1				a			
Virginia n1				a	a		
Montana n1	a		a		a	a	
Tennessee n1				a		a	
Iowa n1						a	a

Oklahoma n1		a	a		
Kansas n1				a	
Wyoming n1	e			a	a
North Dakota n1	e			a	a
Arkansas n1	e				
Minnesota	e			a	
Colorado n1	e		a	a	
Maine	e				
Alabama n1	e				a
Washington n1		e			
Michigan n1			a		
Idaho	e				
South Dakota n1	e	a			
North Carolina		e			
Missouri n1		e			
Oregon n1		e			
New Mexico n1			e		
South Carolina				e	a
New York					e
Texas n1					e
Utah n1					e
California					e
Massachusetts					
p					
Mississippi					
p					

n1 Coal producing States.

E - Original enactment.

A - Amended or new enactment.

P - Now pending in State legislature.

These mechanisms have been adopted by the States and represent their balanced judgments on the important questions involved. H.R. 9725, however, like its predecessor H.R. 25, would begin by overriding such State programs and requiring Federal law to control ongoing operations. Moreover, State programs would be required to be revised substantially and new programs in compliance with H.R. 9725 be developed, enacted and submitted within 18 months from the date of enactment (Section 503). It may be that there was a time when such direct, detailed and inflexible intrusion by the Federal government in ongoing State programs would have been appropriate. It simply is not so today and in our view would seriously disrupt the vigorous initiatives underway at the State level to oppose stringent controls on surface mining of coal within their own boundaries.

Some have argued that a Federal law is necessary in order to assure uniformity between and among the States in this regulatory area. We do not believe this is the case. First, a review of State laws and of H.R. 9725 indicates that no State regulatory mechanism approaches the detail and inflexibility of the proposed Federal law. H.R. 9725 is not, therefore, an

example of minimum Federal requirements. It is an example of the arbitrary and unnecessary imposition of Federal judgments upon questions more appropriate for State judgment. Moreover, there will inevitably be instances in which the specific judgments of States will differ, and requirements of different but equally acceptable levels of stringency may be applied. In such cases, to require the most stringent level of protection adopted by any State to apply outside its borders, and control development within another, perhaps neighboring, State would do serious violence to our ordered concepts of State jurisdiction. But that is precisely what some proponents of H.R. 9725 have in mind. In this light, Federal legislation is viewed as a way to impose the strictest standards upon all States and relieve the competitive disadvantage which a State adopting particularly stringent requirements might otherwise suffer with respect to other States adopting a more balanced judgment. The fact that this measure might be adopted by the Federal government does not change the character of its intrusion upon the appropriate discretion of each State.

Control of Federal coal development

State regulatory mechanisms are, however, only a part of the story. Since H.R. 25 was vetoed, the Department of the Interior has acted vigorously to control the leasing and development of the huge Federal coal resources of the West.

After several years of development, debate and public comment, on September 5, 1975, the Department published proposed regulations of the Bureau of Land Management and U.S. Geological Survey. These regulations provide for the imposition of stringent operating and reclamation standards upon both the issuance of Federal coal leases and specific proposed plans of operation of individual mines.

The period for public comment on these proposed regulations was extended to insure maximum opportunity for participation by interested parties. Moreover, following his installation as Secretary of the Interior on October 17, 1975, the new Secretary Thomas S. Kleppe directed that additional opportunity for public participation be offered. As a result, public meetings were held on December 18, 19 and 20, 1975, in Cheyenne, Wyoming; Denver, Colorado; and Billings, Montana. In all, the Department informs us that more than 1,000 pages of written comments and 300 pages of testimony were received from more than 100 separate participants. These included all of the major environmental and public interest groups, as well as the Governors or appropriate representatives of each of the Western States and of the member States of the Interstate Mining Compact.

Based upon the review of this extensive public participation and the

detailed, carefully considered opinions of the States involved, the Directors of the BLM and the USGS on February 13, 1976 presented their recommendations for final rulemaking to the Secretary. A detailed final Environmental Impact Statement under Section 102 (2) (C) of the National Environmental Policy Act of 1969 accompanied these recommendations. A review of these regulations, and of the impact statement written on them, clearly indicates that the Department has made major and significant progress towards developing and implementing a regulatory mechanism that will enable it to balance the need for stringent environmental protection and increase domestic production of coal more rapidly, more efficiently and with a greater flexibility and regard for State interests than would H.R. 9725.

The proposed regulations will shortly be decided upon and enacted as final rulemaking by the Department. The Secretary has clearly indicated, in testimony before the Congress, his determined conviction that stringent standards be adopted and enforced with respect to the development of Federal coal and, moreover, that more stringent State standards be applied and enforced unless overriding national interests dictate otherwise.

In our view, the proposed Interior regulations, operating in conjunction with the increasingly stringent State laws, provide adequate recognition of the important interests to be protected. They will do the job, and should be given an opportunity to work.

In any event, the solutions proposed by the Department's pending regulations deserve careful attention in light of the many questions and problems that have been raised with respect to H.R. 9725. It is unnecessary to review these regulations in detail, but we believe that a brief summary of how they would solve some of the major dilemmas still posed by this bill is in order.

Flexibility of Mechanisms

The proposed regulations impose stringent levels of environmental protection, and allow the Department to incorporate these levels of protection in the specific requirements of each Federal lease or approved plan of operations. No lease or plan of operations will be issued or approved unless reclamation of the lands involved is both attainable and assured. Performance bonds adequate to cover the cost of all remaining reclamation must be furnished to the Department and maintained and adjusted in amount throughout the course of the operation.

The proposed regulations cover such important elements as backfilling and grading to restore the approximate original contour of the affected lands,

protecting the hydrology of affected areas before, during and after mining, requiring revegetation at least equal in density and permanence to the pre-existing vegetation, restoration to an equal or better postmining land use and appropriate consideration of natural wildlife and any land use planning goals which have been adopted for the areas in question.

As already noted, State laws which provide protection of environmental values more stringent than would occur under the Federal regulations will, by formal rulemaking, become applicable to Federal coal development as well. In a similar rulemaking proceeding, specific agreements may be entered into with individual States or groups of States providing for joint Federal-State enforcement mechanisms to eliminate overlap and duplication in those many areas where Federal and State jurisdictions are involved in coal development.

Unlike H.R. 9725, the proposed regulations do not purport to change the balanced judgments of the States, as expressed by the provisions of their common or statutory law, as to what rights are to be given to surface owners to consent or withhold consent to the mining of Federal coal which underlies their surface estate. Instead, the regulations expressly provide that surface owners' rights which may arise under State law shall not be construed as being altered or diminished by the proposed regulations.

This is consistent with the position that the Administration had taken with respect to H.R. 25, and in our judgment leaves the right and responsibility to make decisions in this important area at the State level where it properly belongs.

The proposed regulations incorporate some elements of flexibility as to the levels of control that will have to be met by operators in those areas which we all recognize are the most difficult to prescribe in advance by regulatory language. These areas deal with such questions as whether or not to require the elimination of all highwalls and the degree of protection to be afforded the hydrology of those areas where significant farming and ranching operations are involved.

Creating this flexibility has been one of the most difficult questions that the Congress or the Executive Branch has had to face, because creating the opportunity for flexibility necessarily involves creating the possibility that such flexibility, or the administrative discretion involved, might be abused.

The proposed regulations guard against any such abuse. In general, they

greatly expand the opportunity for public participation in the regulatory actions of the Department. The significant decisions of the BLM and the USGS must be in writing and set forth the factual basis and the rationale for such decisions. A "notice of availability" of all major pending decisions relating to lease issuance, plan approvals, or cessation of operations and release of bonds must be prepared, published in the Federal Register and the local newspapers, and mailed to all interested parties and anyone who has expressed a desire to receive such notices. Where particularly sensitive elements of discretion or flexibility such as determinations of what the highest levels of control reasonably commensurate with the cost of achieving such controls might be, the notice of availability of any decision which includes the exercise of such discretion must so inform the public.

Thereafter, any person with an interest which is or may be adversely affected may request a public hearing on the decision itself. Where such requests are made, public hearings are mandatory on such important questions as approval of mine plans, abandonment of operations or release of bond. The transcript of such hearings must be maintained and, along with the decisions of the Department which are required to be in writing, are to be made available to the public. The ultimate decision must take into account all testimony and written comments received at such hearings.

This mechanism not only seems workable, but it is a significant improvement over the inflexible and difficult to administer provisions of H.R. 9725.

Specific Provisions of H.R. 9725

As noted above, the legislation which has been reported out by the Committee is virtually identical to H.R. 25. The problems which have previously been identified with respect to this bill remain problems. Its absence of flexibility and the arbitrary, confusing, unnecessary and unreasonable procedural requirements that it would impose upon both the Federal and State governments will in our view substantially delay or prevent the development of this vital national resource. The problems presented by the impossible burdens of proof and requirements for affirmative demonstration of the absence of negative impacts by an applicant for a permit, coupled with the broad citizen suit provisions, will tie coal development programs up in litigation for many years.

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Some minor changes have been made to H.R. 9725. They do not begin to rectify the adverse impacts of the bill.

First, Section 502(c) has been amended to extend from 135 days to 12 months the time within which existing mines must be brought into conformity with certain of the detailed performance standards. The problem, however, is with the standards themselves and with the capital investments that will be necessary to enable ongoing operations to adjust to the standards. Merely extending the time for compliance for this brief period only delays by that same period the inevitable results of decreased production and possible mine closures. In light of the overall scope of the bill, the amendment does not begin to address the heart of the problem.

Second, Section 401(d) extends through the first quarter of next year the time within which the initial payment of the reclamation fees imposed by the bill must begin. That same section, however, also extends the duration of the program from 10 years, as proposed in H.R. 25, to 15 years. Again, the minor change made in H.R. 9725 is cosmetic only and would merely delay for a brief period the inevitable adverse results. The size of the reclamation fee and the rate at which it will be collected is not commensurate with the size of the problem. The fee should be smaller and bear direct relationship to the cost of the reclamation involved. Any such fund should be progressive and increase in rate over time to reflect the expanding administrative capability of the Government to decide how and when such funds should be expended.

Section 405 has been amended to provide that lands can be reclaimed under Title 4 while remaining in private ownership. A lien would attach to such land so that if it were sold in the future the enhanced value of the land due to reclamation would accrue to the fund. Far from improving the bill, this minor change makes it more complex and administratively unworkable. Creating, policing and determining the value of any such lien would greatly add to the complexity of the Federal government's responsibilities.

Finally, the Committee accepted an amendment to Section 510 (b) (5) that modifies one portion of the bill's requirements for special protection given to alluvial valley floors. Again, the basic thrust of the amendment is cosmetic. The intended result is to define differently those same areas of protection which would have been covered under H.R. 25, with new language even more confusing than the previous section. Instead of solving problems, we have created more. For instance, what would "interrupt, discontinue or prevent" mean in the context of the new Section 510(b) (5) (A)? A mine would always so interfere with farming or ranching at the site of the mine. What does "undeveloped range lands" mean, and which such lands would be considered

"significant" to farming? This is precisely the same problem and unanswered question that was presented by the earlier language. What would "negligible impact" mean? How would it be interpreted by the courts? Would this section not create a strong preferential bias that would allow large farming units to consent to mining on their property while the smaller units, to whom the financial benefits from such a decision would be proportionately more significant, would be deprived of such opportunity? What does "within or adjacent to" and alluvial valley floor mean, in terms of geology, geography or cause and effect relationships?

Perhaps the most insidious change contained in the new amendment, however, lies in Subparagraph 510(b)(5)(B). Its stated intent is to "grandfather" out of the prohibition on mining on alluvial valley floor several specific mines in Montana. Review by the Department of the Interior indicates that this intent would not be achieved, and only one of the mines in question would in fact be removed from coverage of this prohibition. More important, however, even if the intent of the amendment were clarified and the specific existing mines eliminated from coverage, it is our view that to do so is environmentally indefensible. There will be occasions and locations where the prudent judgment of the administrative agency enforcing laws or regulations would be to prohibit mining. The clear intent of this subsection would be to the contrary, and could be read to qualify or at the least inhibit such administrative judgments.

The amendment adopted by the Committee represents the worst kind of "overkill". Whereas the original section was arbitrary and indefensible in its prohibition of mining, the proposed amendment is arbitrary and indefensible in selectively exempting some mines from such prohibition. The correct response to the problem presented would have been similar to that contained in the proposed Department of the Interior regulations. Under those regulations, no arbitrary judgment is involved. The specific problem, namely, protection of significant surface resource uses dependent upon valley floors that supply important resources, is directly addressed. Mining operations must protect such water resources and, if they cannot, they will not be permitted to continue or commence operations.

It would be pointless to discuss in greater detail the deficiencies of H.R. 9725. They have already been addressed by the Congress and the Executive Branch in the lengthy and frustrating proceedings that surrounded the passage, veto and sustaining of the veto of H.R. 25.

Since those events, the Nation's energy situation has deteriorated, not improved. Whatever long range salutary effects the compromise energy

legislation recently enacted by the Congress and signed by the President may have, in the short term it will increase, not decrease, the Nation's reliance upon insecure foreign sources of energy. As a result, it will inevitably help to sustain the high price of oil set by the international cartels of foreign producing nations.

The cost to the Nation of enactment of H.R. 9725, both in terms of delayed or diminished development of the Nation's domestic energy resources, and in terms of the economic consequences of such results, are significantly greater than they were when H.R. 25 was rejected in the constitutional process of enactment and veto. To re-enact the same legislation would be even more irresponsible now, and we strongly oppose any such action by the Congress.

SAM STEIGER.

ROBERT BAUMAN.

STEVEN SYMMS.

VIRGINIA SMITH.

DON YOUNG.

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SEPARATE VIEWS OF REPRESENTATIVE JOE SKUBITZ

Last year, I voted to report from Committee H.R. 25, the Surface Mining Control and Reclamation Act of 1975. I was a Conferee and supported the Conference Report on final passage. I did not vote, however, to override the President's veto of that bill.

On June 10, 1975, before the vote on the veto, I announced my intentions. I said, and I still believe, that the timing is wrong. This Nation is still dependent on foreign oil for energy. Now is simply not the time to implement stiff law that may hinder the production of our most abundant energy resource: coal.

Let me quote from my Floor comments in discussing the situation which we faced then and continue to face now:

I am going to support the President's position because if the President is wrong then all that can result, is a loss of funds - temporarily - to reclaim orphan lands. It will result in very little despoiling of land since every State that now mines coal has already enacted reclamation laws.

But, if Mr. Udall is wrong, then we do irreparable damage to our economy through increased cost of fuel - increased prices of the commodities we buy - increased unemployment, and disaster insofar as the production of energy is concerned.

I am pleased to note that the Department of the Interior, under the direction of Secretary Tom Kleppe, has promulgated stringent regulations to control strip mining without discouraging coal production. It is encouraging to learn of the cooperation between the Department and the States most affected by strip mining and to know that the Secretary is seeking to apply each State's standards to strip mining within its borders.

Finally, I am personally persuaded, in my reading of the House Rules, that we are on questionable ground in bringing this bill (which is so nearly like the vetoed H.R. 25) to the House Floor again in the 94th Congress. In my judgment, the will of the House has been expressed and the matter is concluded until the new Congress convenes.

JOE SKUBITZ.