

Oklahoma

Third largest number of highwalls reclaimed

The coal-bearing strata of Oklahoma occur in the eastern part of the state over an area of 14,500 square miles, 20.7 percent of the state's total area. Commercially valuable deposits of bituminous coal cover about 8,000 square miles in seams ranging from 10 inches to five feet thick. Estimated reserves in Oklahoma are 1.6 billion tons, representing 0.3 percent of U.S. coal reserves. The vast majority of coal mined in Oklahoma is used in a single power plant within the state.

Oklahoma gained primacy when its regulatory program was conditionally approved January 19, 1981. Authority for the state to administer the Abandoned Mine Land program was granted January 21, 1982. On April 30, 1984, the Office of Surface Mining substituted direct federal operation of the inspection and enforcement portions of the Oklahoma program, based on a finding that Oklahoma had not operated the inspection and enforcement portions of its program effectively. As of January 1, 1986, Oklahoma inspection and enforcement authority was reinstated. Full program authority was granted to Oklahoma on January 14, 1986.

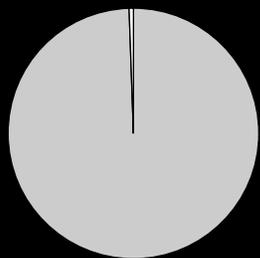
Since 1977, the Office of Surface Mining has completed 43 Abandoned Mine Land emergency projects in Oklahoma. These reclamation projects cost over \$200,000 and eliminated hazards caused by underground mining.

The Oklahoma Abandoned Mine Land program has completed over \$20 million of high priority-problems. The principal problems in Oklahoma have been dangerous highwalls and hazardous water-filled pits. Many of those problems originated when mine pits filled with water, leaving dangerous conditions that attracted people to the sites. Reclamation costs for this type of project are high because fill material must be hauled to the abandoned mine site.

Oklahoma currently has an inventory of over 500 high-priority Abandoned Mine Land problems in need of reclamation at an estimated cost of almost \$100 million. In addition, the state has over \$47 million of environmental (Priority 3) problems still in need of reclamation. Since Oklahoma receives only the minimum program annual reclamation grant (\$1.5 million), it will take many years to eliminate the remaining Abandoned Mine Lands hazards from the state.

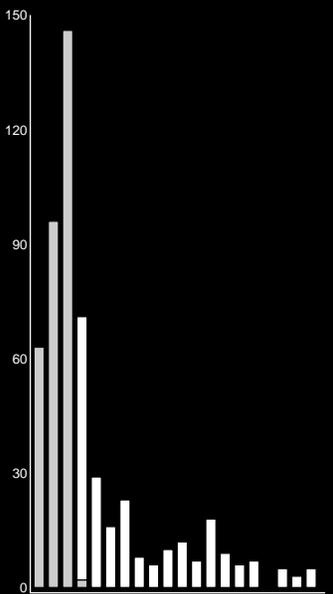
coal production¹⁰

	1978		1997		1978-1997 Rank
	Amount	Percent U.S. Total	Amount	Percent U.S. Total	
Tons Produced					
Surface	3,895,948	1.5%	1,427,484	0.2%	17
Underground	0	0%	190,219	0.04%	16
Lignite	0	0%	0	0%	0
Total	3,895,948	0.9%	1,617,704	0.1%	22
Number of Producing Mines					
Surface (bituminous coal)	54	1.6%	27	1.1%	11
Underground	0	0%	1	0.05%	15
Lignite (surface)	0	0%	0	0%	0
Total	54	0.9%	28	0.6%	12
Mine Production					
Average	72,147	101.5%	57,775	21.9%	
>1,000,000 tons	0	0%	0	0%	
300,000-1,000,000 tons	1	0.4%	0	0%	
<300,000 tons	53	0.9%	28	0.7%	



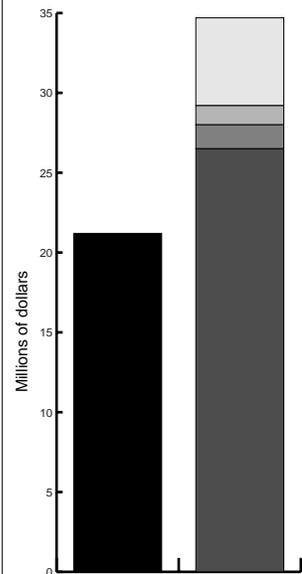
Production tonnage 1978-1997

■ U.S. Total
■ Oklahoma Coal Production



Number of new permits 1978-1997

■ Interim Program
■ Permanent Program



■ Amount paid into the AML Fund¹¹
\$ 21,266,723
■ Amount received for reclamation¹²
\$ 26,574,541
■ State share balance in the Fund¹³
\$ 1,593,629
■ Federal abandoned mine projects¹⁴
\$ 1,217,664
■ RAMP abandoned mine projects¹⁵
\$ 5,515,445

Active mining and reclamation¹⁶

	1978	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	Total
Number of New Permits																					
Surface Mining	60	94	146	71	29	16	20	7	6	10	12	6	9	9	6	7	0	4	3	5	520
Underground Mining	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	3
Other	3	2	0	0	0	0	3	0	0	0	0	0	9	0	0	0	0	0	0	0	17
Acres Permitted																					
Surface Mining	8,050	27,597	18,528	12,352	15,135	1,507	5,850	4,529	3,486	6,155	2,459	1,455	2,801	9,838	2,908	2,692	0	1,624	920	3,228	131,114
Underground Mining	0	0	0	0	0	0	0	142	0	0	0	25	0	0	0	0	0	94	0	0	261
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acres of Bond Release																					
Interim Prog. (final)	0	1,121	1,711	3,792	4,697	3,333	1,130	321	1,133	14	20	0	0	0	0	0	0	0	0	0	17,272
Phase 1	0	0	0	0	0	0	0	0	0	16	21	1,426	2,425	1,987	8,373	1,495	5,461	1,571	2,876	1,776	27,427
Phase 2	0	0	0	0	0	0	0	0	0	6	7	854	230	2,537	3,445	3,285	3,150	10,156	849	1,556	26,075
Phase 3	0	0	0	0	113	197	0	5	58	4	10	141	922	1,632	2,485	2,397	1,446	1,578	1,150	7,492	19,630
Inspections																					
Complete	10	120	276	238	573	665	509	775	489	792	889	816	710	945	916	526	447	483	338	401	10,918
Partial	7	166	192	49	1,540	1,142	427	2,372	763	1,296	1,195	1,034	931	1,046	1,008	885	754	728	523	697	16,755
Oversight	0	0	0	NA	NA	173	133	NA	NA	80	295	153	150	136	152	123	107	148	123	85	1,858
Citations Issued																					
NOV's	3	50	78	23	452	511	379	299	193	133	108	97	88	101	90	90	116	265	70	69	3,215
CO's	1	11	16	10	32	116	130	111	68	84	37	38	27	28	16	24	67	114	10	1	941

Abandoned coal mine reclamation 1977-1997¹⁷

	Reclaimed Problems			Remaining Problems	
	OSM Emergency	State Emergency	Non-Emergency	Number	Estimated Cost
Priority 1 & 2 (Protection of Public Health, Safety, and General Welfare) and Emergency Projects					
Clogged Streams (miles)	0	0	1.9	11.1	\$ 114,000
Clogged Stream Lands (acres)	0	0	0	143.0	938,400
Highwalls (feet)	0	0	207,147.0	948,541.0	75,369,112
Impoundments (count)	0	0	0	2.0	80,000
Piles & Embankments (acres)	0	0	331.5	2,634.0	4,700,550
Slides (acres)	0	0	45.3	0	0
Gases (count)	0	0	0	0	0
Equipment & Facilities (count)	0	0	13.0	20.0	275,500
Water Bodies (count)	0	0	160.0	609.0	11,294,161
Industrial Waste (acres)	0	0	5.5	44.0	440,000
Portals (count)	0	0	119.0	95.0	317,000
Polluted Water: Agriculture & Industrial (count)	0	0	3.0	4.0	126,000
Polluted Water: Human Consumption (count)	0	0	2.0	8.0	430,000
Subsidence (acres)	3.27	0	4.8	105.5	5,275,000
Surface Burning (acres)	0	0	0	0	0
Underground Mine Fires (acres)	0	0	0	0	0
Vertical Openings (count)	3	0	92.0	43.0	204,000
Total					\$ 99,563,723
Priority 3 (Environmental Restoration)					
Bench (acres)	0	0	0	64.0	\$ 345,600
Industrial Waste (acres)	0	0	0	0	0
Equipment & Facilities (count)	0	0	0	24.0	80,000
Gob (acres)	0	0	0	229.5	1,157,600
Highwall (feet)	0	0	0	11,300.0	395,834
Haul Road (acres)	0	0	0	26.0	52,000
Mine Opening (count)	0	0	0	46.0	114,000
Pit (acres)	0	0	0	458.6	2,690,648
Spoil Area (acres)	0	0	0	8,351.0	42,737,133
Slurry (acres)	0	0	0	18.0	180,000
Slump (acres)	0	0	0	0	0
Water (gallons/minute)	0	0	0	0	0
Total					\$ 47,752,815