



MINERAL INDUSTRY SURVEYS

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON, D. C. 20241



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Explosives, Annual
(Revised October 1981)

APPARENT CONSUMPTION OF INDUSTRIAL EXPLOSIVES AND BLASTING AGENTS IN THE UNITED STATES, 1980

Apparent consumption of explosives and blasting agents in the United States increased 4% to 4.3 billion pounds, according to the Bureau of Mines, U.S. Department of the Interior. Apparent consumption is measured by sales reported by manufacturers.

Permissibles showed the most significant change in consumption of all classes of explosives and blasting agents in 1980, an increase of 17% over the amount used in 1979.

All principal consuming industries except the coal mining industry used less quantities of explosives and blasting agents in 1980 than in 1979. About 59% of the total weight was utilized in the mining of coal. Nearly all permissibles and 64% of ammonium nitrate fuel-mixed blasting agents and unprocessed ammonium nitrate were consumed in coal mining. Other high explosives were used primarily in quarrying and nonmetal mining (29%) and construction (26%). The majority of water gels and slurries went into metal mining (42%).

Seven States collectively consumed 58% of all explosives and blasting agents used in the United States in 1980. These were, in order of consumption, Kentucky, Pennsylvania, Alabama, West Virginia, Ohio, Arizona, and Indiana.

Due to changes in data reported to the Bureau of Mines we are issuing a revised Mineral Industry Surveys. Please discard the Mineral Industry Surveys - Apparent Consumption of Industrial Explosives and Blasting Agents in the United States, 1980 dated July 2, 1981.

Prepared in the Section of Nonmetallic Minerals, October 22, 1981.

Classification of Industrial Explosives and Blasting Agents

"Apparent consumption" of explosives and blasting agents, as used in this report, means sales reported to the Institute of Makers of Explosives (IME) by IME members and provided to the Bureau of Mines on a proprietary basis, plus sales by nonmember manufacturers reported directly to the Bureau on Form 6-1439-A. Classification of explosives and blasting agents by type and use appears as reported by the manufacturers. Sales of explosives and blasting agents imported by nonmanufacturers are not included, but may be locally important. Some quantities are published in such a way as to avoid disclosing company proprietary data.

The principal distinction between explosives and blasting agents is related to their sensitivity to initiation--explosives are cap-sensitive but blasting agents are not, and therefore require a primer. Only "high" explosives are currently reported. "Low" explosives, which burn very rapidly but do not detonate, include principally black powder and propellants. Black powder has not been reported in industrial use since 1971. Both explosives and blasting agents vary widely in composition, although most blasting agents are essentially mixtures of ammonium nitrate plus a fuel.

Water gels and slurries may be either explosives or blasting agents, but for convenience are classified separately in a recognizable category.

The five product classifications used in this report are the same as those adopted by IME. These are:

1. Permissibles.--Grades of high explosives approved by brand name by the U.S. Bureau of Mines or the Mine Safety and Health Administration for use, in a prescribed manner, in underground coal mines, including water gels and slurries approved as permissibles.

2. Other High Explosives.--All high explosives except

a) permissibles and

b) any water gels or slurries that would otherwise be classified as high explosives.

Included in the "Other High Explosives" classification are all formulations packaged in metal containers.

3. Packaged and Bulk Water Gels and Slurries.--All water gels and slurries, packaged or in bulk, made by addition of more than 5% water to high explosives or blasting agents, except those approved as permissibles.

4. Ammonium Nitrate Fuel-Mixed Blasting Agents.--Without regard to packaging or container.

5. Unprocessed Ammonium Nitrate.--Prilled or grained ammonium nitrate for use in blasting agents.

Companies covered by this report, including IME members, are:

American Cyanamid Company--Wayne, New Jersey
Apache Powder Company--Benson, Arizona
Atlas Powder Company--Dallas, Texas
Austin Powder Company--Cleveland, Ohio
C-I-L Inc.--Quebec, Canada
Columbia Nitrogen Corp.--Augusta, Georgia
E. I. du Pont de Nemours & Co., Inc.--Wilmington, Delaware
Energy Sciences & Consultants, Inc.--Biwabik, Minnesota
Goex Inc.--Cleburne, Texas
W.R. Grace & Co. ACG--Memphis, Tennessee
Gulf Oil Chemicals Company--Merriam, Kansas
Hawkeye Chemical Company--Clinton, Iowa
Hercules, Inc.--Wilmington, Delaware
Independent Explosives Company of Pennsylvania--Scranton, Pennsylvania
Ireco Chemicals--Salt Lake City, Utah
Kaiser Aluminum & Chemical Corp.--Savannah, Georgia
Monsanto Co.--St. Louis, Missouri
Phillips Chemical Co.--Bartlesville, Oklahoma
Sierra Chemical Company--Reno, Nevada
Southern Explosives Corporation--Glasgow, Kentucky
Trojan Division, IMC Chemical Group, Inc.--Allentown, Pennsylvania
Union Oil Company of California--Los Angeles, California
USS Agri-Chemicals--Atlanta, Georgia

TABLE 1. - Salient statistics of industrial explosives and blasting agents sold for consumption in the United States, 1979-80
(Thousand pounds)

Class	1979	1980
Permissibles-----	<u>1</u> /47,307	55,461
Other high explosives-----	<u>1</u> /182,319	175,910
Water gels and slurries-----	460,913	404,519
Ammonium nitrate fuel-mixed blasting agents-----	<u>r</u> /1,331,313	1,395,836
Unprocessed ammonium nitrate-----	<u>r</u> /2/2,068,606	2,242,736
Total-----	<u>r</u> /4,090,458	4,274,462

r/ Revised.

1/ Some quantities of this class of explosive are included with "Unprocessed ammonium nitrate" to avoid disclosing company proprietary data.

2/ Includes some quantities of permissible explosives and other high explosives.

TABLE 2. - Industrial explosives and blasting agents sold for consumption in the United States by class and use, 1979-80
(Thousand pounds)

Class	Coal mining 1/		Metal mining 1/		Quarrying and nonmetal mining 1/		Construction work 1/		All other purposes 2/		Total	
	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
Permissibles 3/--	44,891	52,476	281	81	615	716	1,294	973	226	1,215	47,307	55,461
Other high explosives 3/--	25,783	24,912	23,699	25,085	60,734	50,138	52,924	46,185	19,179	29,590	182,319	175,910
Water gels and slurries-----	74,739	93,916	238,738	171,213	107,280	99,947	38,284	36,311	1,872	3,132	460,913	404,519
Ammonium nitrate fuel-mixed blasting agents	<u>r/889,368</u>	981,454	65,394	70,073	221,460	227,637	151,669	113,483	3,422	3,189	<u>r/1,331,313</u>	1,395,836
Unprocessed ammonium nitrate 4/-----	<u>r/1,202,612</u>	1,350,601	<u>r/284,708</u>	292,777	<u>r/262,944</u>	245,746	229,951	218,695	<u>r/88,391</u>	134,917	<u>r/2,068,606</u>	2,242,736
Total-----	<u>r/2,237,393</u>	2,503,359	<u>r/612,820</u>	559,229	<u>r/653,033</u>	624,184	474,122	415,647	<u>r/113,090</u>	172,043	<u>r/4,090,458</u>	4,274,462

r/ Revised.

1/ Some quantities of this use are included with "All other purposes" to avoid disclosing company proprietary data.

2/ Includes some quantities from coal mining, metal mining, quarrying and nonmetal mining, and construction work.

3/ Some quantities of this class of explosive are included with "Unprocessed ammonium nitrate" to avoid disclosing company proprietary data for 1979.

4/ Includes some quantities of permissible explosives and other high explosives for 1979.

TABLE 3. - Industrial explosives and blasting agents sold for consumption
in the United States, by State and use, 1980
(Thousand pounds)

State	Use					Total
	Coal mining	Metal mining	Quarrying and nonmetal mining	Construction work	All other purposes	
Alabama-----	249,134	50	28,994	109,640	1,074	388,892
Alaska-----	975	2,432	42	7,020	146	10,615
Arizona-----	29,252	178,852	3,718	2,497	326	214,645
Arkansas-----	10,954	911	6,437	2,290	99	20,691
California-----	1,880	16,525	10,373	8,188	663	37,629
Colorado-----	62,355	23,662	2,327	757	391	89,492
Connecticut-----	---	---	10,022	4,838	277	15,137
Delaware-----	---	---	193	1,437	165	1,795
District of Columbia <u>1/</u>	---	---	---	---	---	---
Florida-----	---	---	30,912	12,758	---	43,670
Georgia-----	162	---	22,428	3,380	20	25,990
Hawaii-----	---	---	312	8	---	320
Idaho-----	1,375	13,835	11,019	3,227	40	29,496
Illinois-----	95,268	3	42,381	3,549	1,612	142,813
Indiana-----	177,290	252	21,971	5,748	3,915	209,176
Iowa-----	2,536	---	19,282	1,844	7,559	31,221
Kansas-----	15,212	---	8,400	2,184	314	26,110
Kentucky-----	630,856	6	56,048	27,887	34,398	749,195
Louisiana-----	8	---	3,242	97	2,596	5,943
Maine-----	---	---	820	278	---	1,098
Maryland-----	7,533	---	10,506	3,555	10	21,604
Massachusetts-----	322	---	3,715	1,653	210	5,900
Michigan-----	3,251	28,608	25,323	5,386	2,013	64,581
Minnesota-----	1,660	116,012	4,304	528	3,323	125,827
Mississippi-----	---	---	443	60	2,145	2,648
Missouri-----	16,211	5,224	28,976	10,835	1,407	62,653
Montana-----	39,022	24,635	1,582	1,160	8,551	74,950
Nebraska-----	3	---	1,756	769	28	2,556
Nevada-----	---	20,924	1,881	122	278	23,205
New Hampshire-----	---	---	738	894	62	1,694
New Jersey-----	---	17	2,966	654	12	3,649
New Mexico-----	38,938	45,046	7,045	1,721	34	92,784
New York-----	321	392	9,316	5,479	351	15,859
North Carolina-----	3,716	28	18,799	19,253	10	41,806
North Dakota-----	334	---	---	4	2,176	2,514
Ohio-----	140,631	488	64,424	9,825	8,645	224,013
Oklahoma-----	45,569	2,246	7,735	2,294	3,117	60,961
Oregon-----	83	---	2,758	9,374	604	12,819
Pennsylvania-----	374,350	1	52,249	14,599	3,239	444,438
Rhode Island-----	---	---	390	159	---	549
South Carolina-----	---	---	3,891	2,928	---	6,819
South Dakota-----	8	542	484	---	3	1,037
Tennessee-----	57,330	4,830	26,462	31,004	119	119,745
Texas-----	256	2,468	27,665	39,155	8,193	77,737
Utah-----	1,529	47,544	4,466	1,233	1,763	56,535
Vermont-----	37	---	851	786	1	1,675
Virginia-----	121,623	10	14,589	20,087	181	156,490
Washington-----	5,600	5,734	1,560	8,192	59	21,145
West Virginia-----	214,689	---	4,556	19,248	549	239,042
Wisconsin-----	---	2,464	5,817	6,596	784	15,661
Wyoming-----	153,086	15,488	10,016	467	7,276	186,333
Undistributed-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	63,305	63,305
Total-----	2,503,359	559,229	624,184	415,647	172,043	4,274,462

1/ Included with Maryland.

2/ Quantities included with "All other purposes" to avoid disclosing company proprietary data.

TABLE 4. - Industrial explosives and blasting agents sold for consumption in the United States, by State and class, 1980
(Thousand pounds)

State	Class					Total
	Fixed high explosives		Water gels and slurries	Ammonium nitrate fuel-mixed blasting agents	Blasting agents	
	Permissibles	Other high explosives				
Alabama-----	3,355	2,891	11,041	114,710	256,895	388,892
Alaska-----	---	2,063	5,031	116	3,405	10,615
Arizona-----	---	2,420	44,003	13,015	155,207	214,645
Arkansas-----	---	1,306	2,335	6,678	10,372	20,691
California-----	---	3,306	6,584	3,902	23,837	37,629
Colorado-----	331	5,671	22,218	22,034	39,238	89,492
Connecticut-----	---	1,783	4,306	3,017	6,031	15,137
Delaware-----	---	2	52	1,741	---	1,795
District of Columbia 1/	---	---	---	---	---	---
Florida-----	---	11,637	17,585	9,585	4,863	43,670
Georgia-----	---	2,811	6,459	16,495	225	25,990
Hawaii-----	---	---	320	---	---	320
Idaho-----	---	1,746	1,270	708	25,772	29,496
Illinois-----	536	7,414	7,696	85,995	41,172	142,813
Indiana-----	408	2,308	7,990	149,898	48,572	209,176
Iowa-----	143	2,616	5,591	1,558	21,313	31,221
Kansas-----	4	473	1,709	21,034	2,890	26,110
Kentucky-----	27,260	9,749	9,981	287,958	414,247	749,195
Louisiana-----	8	2,666	475	2,794	---	5,943
Maine-----	---	313	262	523	---	1,098
Maryland-----	22	3,075	4,101	13,605	801	21,604
Massachusetts-----	---	2,182	364	2,781	573	5,900
Michigan-----	10	1,294	20,493	15,875	26,909	64,581
Minnesota-----	---	517	71,813	38,310	15,187	125,827
Mississippi-----	---	2,141	450	57	---	2,648
Missouri-----	12	7,803	5,150	14,735	34,953	62,653
Montana-----	---	8,135	967	1,543	64,305	74,950
Nebraska-----	1	348	495	1,712	---	2,556
Nevada-----	---	619	386	6,436	15,764	23,205
New Hampshire-----	---	1,080	68	478	68	1,694
New Jersey-----	---	1,350	565	1,690	44	3,649
New Mexico-----	22	5,762	15,272	30,671	41,057	92,784
New York-----	7	2,304	2,033	6,362	5,153	15,859
North Carolina-----	---	2,980	8,680	17,799	12,347	41,806
North Dakota-----	---	2,177	---	9	328	2,514
Ohio-----	949	4,953	7,193	75,712	135,206	224,013
Oklahoma-----	---	3,762	2,006	51,991	3,202	60,961
Oregon-----	---	3,607	1,258	3,687	4,267	12,819
Pennsylvania-----	1,349	15,735	39,435	64,528	323,391	444,438
Rhode Island-----	---	182	---	367	---	549
South Carolina-----	---	1,124	2,230	3,465	---	6,819
South Dakota-----	---	9	1,028	---	---	1,037
Tennessee-----	1,152	7,595	3,837	41,559	65,602	119,745
Texas-----	---	8,986	4,049	23,482	41,220	77,737
Utah-----	178	5,078	10,069	937	40,273	56,535
Vermont-----	1	428	607	639	---	1,675
Virginia-----	12,123	6,950	6,245	66,057	65,115	156,490
Washington-----	313	3,387	2,611	337	14,497	21,145
West Virginia-----	7,093	5,818	3,033	93,153	129,945	239,042
Wisconsin-----	6	1,356	6,663	6,852	784	15,661
Wyoming-----	178	3,998	28,510	69,246	84,401	186,333
Undistributed-----	---	---	---	---	2/63,305	2/63,305
Total-----	55,461	175,910	404,519	1,395,836	2,242,736	4,274,462

1/ Included with Maryland.

2/ Quantities undistributed to avoid disclosing company proprietary data.

TABLE 5. - Permissible explosives sold for consumption in the United States,
by State and use, 1980
(Thousand pounds)

State	Use					Total
	Coal mining	Metal mining	Quarrying and nonmetal mining	Construction work	All other purposes	
Alabama-----	3,076	---	128	151	---	3,355
Alaska-----	---	---	---	---	---	---
Arizona-----	---	---	---	---	---	---
Arkansas-----	---	---	---	---	---	---
California-----	---	---	---	---	---	---
Colorado-----	331	---	---	---	---	331
Connecticut-----	---	---	---	---	---	---
Delaware-----	---	---	---	---	---	---
District of Columbia <u>1/</u>	---	---	---	---	---	---
Florida-----	---	---	---	---	---	---
Georgia-----	---	---	---	---	---	---
Hawaii-----	---	---	---	---	---	---
Idaho-----	---	---	---	---	---	---
Illinois-----	457	---	79	---	---	536
Indiana-----	397	---	11	---	---	408
Iowa-----	136	---	7	---	---	143
Kansas-----	---	---	---	4	---	4
Kentucky-----	26,419	---	36	---	805	27,260
Louisiana-----	8	---	---	---	---	8
Maine-----	---	---	---	---	---	---
Maryland-----	22	---	---	---	---	22
Massachusetts-----	---	---	---	---	---	---
Michigan-----	---	---	10	---	---	10
Minnesota-----	---	---	---	---	---	---
Mississippi-----	---	---	---	---	---	---
Missouri-----	1	---	11	---	---	12
Montana-----	---	---	---	---	---	---
Nebraska-----	---	---	---	1	---	1
Nevada-----	---	---	---	---	---	---
New Hampshire-----	---	---	---	---	---	---
New Jersey-----	---	---	---	---	---	---
New Mexico-----	2	---	---	20	---	22
New York-----	---	---	---	7	---	7
North Carolina-----	---	---	---	---	---	---
North Dakota-----	---	---	---	---	---	---
Ohio-----	665	---	279	5	---	949
Oklahoma-----	---	---	---	---	---	---
Oregon-----	---	---	---	---	---	---
Pennsylvania-----	1,148	---	85	108	8	1,349
Rhode Island-----	---	---	---	---	---	---
South Carolina-----	---	---	---	---	---	---
South Dakota-----	---	---	---	---	---	---
Tennessee-----	417	---	70	665	---	1,152
Texas-----	---	---	---	---	---	---
Utah-----	95	71	---	1	11	178
Vermont-----	---	---	---	---	1	1
Virginia-----	12,043	10	---	---	70	12,123
Washington-----	313	---	---	---	---	313
West Virginia-----	6,874	---	---	5	214	7,093
Wisconsin-----	---	---	---	6	---	6
Wyoming-----	72	---	---	---	106	178
Total-----	52,476	81	716	973	1,215	55,461

1/ Included with Maryland.

TABLE 6. - Other high explosives sold for consumption in the United States, by State and use, 1980
(Thousand pounds)

State	Use					Total
	Coal mining	Metal mining	Quarrying and nonmetal mining	Construction work	All other purposes	
Alabama-----	445	---	332	1,045	1,069	2,891
Alaska-----	---	---	---	1,955	108	2,063
Arizona-----	---	1,745	221	250	204	2,420
Arkansas-----	11	6	547	643	99	1,306
California-----	30	217	472	2,298	289	3,306
Colorado-----	435	4,902	10	93	231	5,671
Connecticut-----	---	---	1,118	665	---	1,783
Delaware-----	---	---	---	---	2	2
District of Columbia ^{1/}	---	---	---	---	---	---
Florida-----	---	---	4,604	7,033	---	11,637
Georgia-----	100	---	1,907	789	15	2,811
Hawaii-----	---	---	---	---	---	---
Idaho-----	---	791	1	954	---	1,746
Illinois-----	929	---	5,737	748	---	7,414
Indiana-----	568	252	1,309	179	---	2,308
Iowa-----	5	---	2,269	262	80	2,616
Kansas-----	---	---	98	72	303	473
Kentucky-----	6,121	---	1,989	815	824	9,749
Louisiana-----	---	---	209	4	2,453	2,666
Maine-----	---	---	147	166	---	313
Maryland-----	119	---	1,740	1,206	10	3,075
Massachusetts-----	---	---	1,265	764	153	2,182
Michigan-----	---	372	802	29	91	1,294
Minnesota-----	10	152	87	268	---	517
Mississippi-----	---	---	116	59	1,966	2,141
Missouri-----	359	3,805	2,571	1,068	---	7,803
Montana-----	476	922	---	776	5,961	8,135
Nebraska-----	3	---	---	317	28	348
Nevada-----	---	527	---	26	66	619
New Hampshire-----	---	---	410	621	49	1,080
New Jersey-----	---	---	1,185	153	12	1,350
New Mexico-----	22	4,827	75	804	34	5,762
New York-----	---	194	857	902	351	2,304
North Carolina-----	---	---	805	2,165	10	2,980
North Dakota-----	2	---	---	---	2,175	2,177
Ohio-----	1,394	463	2,433	561	102	4,953
Oklahoma-----	21	---	432	575	2,734	3,762
Oregon-----	1	---	477	2,822	307	3,607
Pennsylvania-----	5,371	1	6,920	3,170	273	15,735
Rhode Island-----	---	---	121	61	---	182
South Carolina-----	---	---	19	1,105	---	1,124
South Dakota-----	6	---	---	---	3	9
Tennessee-----	1,008	1,640	2,830	2,117	---	7,595
Texas-----	12	265	630	2,741	5,338	8,986
Utah-----	258	2,685	106	839	1,190	5,078
Vermont-----	10	---	143	275	---	428
Virginia-----	1,536	---	4,663	640	111	6,950
Washington-----	37	1,174	32	2,108	36	3,387
West Virginia-----	4,607	---	223	673	315	5,818
Wisconsin-----	---	---	114	1,242	---	1,356
Wyoming-----	1,016	145	112	127	2,598	3,998
Total-----	24,912	25,085	50,138	46,185	29,590	175,910

^{1/} Included with Maryland.

TABLE 7. - Packaged and bulk water gels and slurries sold for consumption in the United States, by State and use, 1980
(Thousand pounds)

State	Use					Total
	Coal mining	Metal mining	Quarrying and nonmetal mining	Construction work	All other purposes	
Alabama-----	7,942	50	1,758	1,291	---	11,041
Alaska-----	2	---	42	4,982	5	5,031
Arizona-----	---	43,619	155	151	78	44,003
Arkansas-----	88	55	1,712	480	---	2,335
California-----	---	301	4,035	2,201	47	6,584
Colorado-----	6,066	14,881	612	499	160	22,218
Connecticut-----	---	---	1,438	2,868	---	4,306
Delaware-----	---	---	---	---	52	52
District of Columbia 1/	---	---	---	---	---	---
Florida-----	---	---	15,128	2,457	---	17,585
Georgia-----	62	---	5,653	739	5	6,459
Hawaii-----	---	---	312	8	---	320
Idaho-----	---	787	237	246	---	1,270
Illinois-----	2,602	---	3,969	1,125	---	7,696
Indiana-----	5,115	---	2,614	258	3	7,990
Iowa-----	90	---	5,142	359	---	5,591
Kansas-----	411	---	1,108	179	11	1,709
Kentucky-----	7,744	6	1,819	412	---	9,981
Louisiana-----	---	---	239	93	143	475
Maine-----	---	---	229	33	---	262
Maryland-----	272	---	2,866	963	---	4,101
Massachusetts-----	---	---	234	130	---	364
Michigan-----	---	18,833	1,652	8	---	20,493
Minnesota-----	---	70,722	1,036	55	---	71,813
Mississippi-----	---	---	270	1	179	450
Missouri-----	314	310	3,542	982	2	5,150
Montana-----	342	75	---	364	186	967
Nebraska-----	---	---	368	127	---	495
Nevada-----	---	31	340	14	1	386
New Hampshire-----	---	---	37	29	2	68
New Jersey-----	---	17	479	69	---	565
New Mexico-----	9,989	4,624	381	278	---	15,272
New York-----	---	148	775	1,110	---	2,033
North Carolina-----	---	28	5,570	3,082	---	8,680
North Dakota-----	---	---	---	---	---	---
Ohio-----	950	25	5,369	849	---	7,193
Oklahoma-----	472	44	1,066	424	---	2,006
Oregon-----	---	---	83	1,170	5	1,258
Pennsylvania-----	24,257	---	14,086	1,011	81	39,435
Rhode Island-----	---	---	---	---	---	---
South Carolina-----	---	---	1,403	827	---	2,230
South Dakota-----	2	542	484	---	---	1,028
Tennessee-----	119	727	2,298	693	---	3,837
Texas-----	---	16	2,405	1,379	249	4,049
Utah-----	176	8,872	66	393	562	10,069
Vermont-----	---	---	520	87	---	607
Virginia-----	2,225	---	3,663	357	---	6,245
Washington-----	---	1,132	65	1,414	---	2,611
West Virginia-----	1,344	---	473	1,196	20	3,033
Wisconsin-----	---	2,464	3,349	850	---	6,663
Wyoming-----	23,332	2,904	865	68	1,341	28,510
Total-----	93,916	171,213	99,947	36,311	3,132	404,519

1/ Included with Maryland.

TABLE 8. - Ammonium nitrate fuel-mixed blasting agents sold for consumption
in the United States, by State and use, 1980
(Thousand pounds)

State	Use					Total
	Coal mining	Metal mining	Quarrying and nonmetal mining	Construction work	All other purposes	
Alabama-----	93,689	---	20,933	83	5	114,710
Alaska-----	---	---	---	83	33	116
Arizona-----	939	6,790	3,342	1,900	44	13,015
Arkansas-----	3,539	1	2,267	871	---	6,678
California-----	---	39	1,586	1,950	327	3,902
Colorado-----	20,039	125	1,705	165	---	22,034
Connecticut-----	---	---	2,289	728	---	3,017
Delaware-----	---	---	193	1,437	111	1,741
District of Columbia 1/	---	---	---	---	---	---
Florida-----	---	---	6,317	3,268	---	9,585
Georgia-----	---	---	14,643	1,852	---	16,495
Hawaii-----	---	---	---	---	---	---
Idaho-----	---	30	638	---	40	708
Illinois-----	73,575	3	10,741	1,676	---	85,995
Indiana-----	126,563	---	18,024	5,311	---	149,898
Iowa-----	6	---	1,403	149	---	1,558
Kansas-----	13,264	---	5,841	1,929	---	21,034
Kentucky-----	255,469	---	14,711	17,778	---	287,958
Louisiana-----	---	---	2,794	---	---	2,794
Maine-----	---	---	444	79	---	523
Maryland-----	6,500	---	5,763	1,342	---	13,605
Massachusetts-----	---	---	2,115	609	57	2,781
Michigan-----	1,974	3,373	10,404	124	---	15,875
Minnesota-----	---	38,241	29	40	---	38,310
Mississippi-----	---	---	57	---	---	57
Missouri-----	4,069	1,109	5,308	4,207	42	14,735
Montana-----	1,358	165	---	20	---	1,543
Nebraska-----	---	---	1,388	324	---	1,712
Nevada-----	---	5,930	213	82	211	6,436
New Hampshire-----	---	---	223	244	11	478
New Jersey-----	---	---	1,258	432	---	1,690
New Mexico-----	23,325	138	6,589	619	---	30,671
New York-----	321	---	3,680	2,361	---	6,362
North Carolina-----	---	---	12,424	5,375	---	17,799
North Dakota-----	4	---	---	4	1	9
Ohio-----	56,103	---	13,285	6,324	---	75,712
Oklahoma-----	44,099	2,202	4,487	1,203	---	51,991
Oregon-----	82	---	928	2,385	292	3,687
Pennsylvania-----	47,391	---	13,000	3,808	329	64,528
Rhode Island-----	---	---	269	98	---	367
South Carolina-----	---	---	2,469	996	---	3,465
South Dakota-----	---	---	---	---	---	---
Tennessee-----	29,117	---	5,369	7,073	---	41,559
Texas-----	---	2,187	15,285	4,913	1,097	23,482
Utah-----	---	887	50	---	---	937
Vermont-----	27	---	188	424	---	639
Virginia-----	46,103	---	5,648	14,306	---	66,057
Washington-----	---	120	4	190	23	337
West Virginia-----	78,276	---	2,926	11,951	---	93,153
Wisconsin-----	---	---	2,354	4,498	---	6,852
Wyoming-----	55,622	8,733	4,053	272	566	69,246
Total-----	981,454	70,073	227,637	113,483	3,189	1,395,836

1/ Included with Maryland.

TABLE 9. - Unprocessed ammonium nitrate sold for consumption
in the United States, by State and use, 1980
(Thousand pounds)

State	Use					Total
	Coal mining	Metal mining	Quarrying and nonmetal mining	Construction work	All other purposes	
Alabama-----	143,982	---	5,843	107,070	---	256,895
Alaska-----	973	2,432	---	---	---	3,405
Arizona-----	28,313	126,698	---	196	---	155,207
Arkansas-----	7,316	849	1,911	296	---	10,372
California-----	1,850	15,968	4,280	1,739	---	23,837
Colorado-----	35,484	3,754	---	---	---	39,238
Connecticut-----	---	---	5,177	577	277	6,031
Delaware-----	---	---	---	---	---	---
District of Columbia <u>1/</u>	---	---	---	---	---	---
Florida-----	---	---	4,863	---	---	4,863
Georgia-----	---	---	225	---	---	225
Hawaii-----	---	---	---	---	---	---
Idaho-----	1,375	12,227	10,143	2,027	---	25,772
Illinois-----	17,705	---	21,855	---	1,612	41,172
Indiana-----	44,647	---	13	---	3,912	48,572
Iowa-----	2,299	---	10,461	1,074	7,479	21,313
Kansas-----	1,537	---	1,353	---	---	2,890
Kentucky-----	335,103	---	37,493	8,882	32,769	414,247
Louisiana-----	---	---	---	---	---	---
Maine-----	---	---	---	---	---	---
Maryland-----	620	---	137	44	---	801
Massachusetts-----	322	---	101	150	---	573
Michigan-----	1,277	6,030	12,455	5,225	1,922	26,909
Minnesota-----	1,650	6,897	3,152	165	3,323	15,187
Mississippi-----	---	---	---	---	---	---
Missouri-----	11,468	---	17,544	4,578	1,363	34,953
Montana-----	36,846	23,473	1,582	---	2,404	64,305
Nebraska-----	---	---	---	---	---	---
Nevada-----	---	14,436	1,328	---	---	15,764
New Hampshire-----	---	---	68	---	---	68
New Jersey-----	---	---	44	---	---	44
New Mexico-----	5,600	35,457	---	---	---	41,057
New York-----	---	50	4,004	1,099	---	5,153
North Carolina-----	3,716	---	---	8,631	---	12,347
North Dakota-----	328	---	---	---	---	328
Ohio-----	81,519	---	43,058	2,086	8,543	135,206
Oklahoma-----	977	---	1,750	92	383	3,202
Oregon-----	---	---	1,270	2,997	---	4,267
Pennsylvania-----	296,183	---	18,158	6,502	2,548	323,391
Rhode Island-----	---	---	---	---	---	---
South Carolina-----	---	---	---	---	---	---
South Dakota-----	---	---	---	---	---	---
Tennessee-----	26,669	2,463	15,895	20,456	119	65,602
Texas-----	244	---	9,345	30,122	1,509	41,220
Utah-----	1,000	35,029	4,244	---	---	40,273
Vermont-----	---	---	---	---	---	---
Virginia-----	59,716	---	615	4,784	---	65,115
Washington-----	5,250	3,308	1,459	4,480	---	14,497
West Virginia-----	123,588	---	934	5,423	---	129,945
Wisconsin-----	---	---	---	---	784	784
Wyoming-----	73,044	3,706	4,986	---	2,665	84,401
Undistributed <u>2/</u> -----	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>	63,305	63,305
Total-----	1,350,601	292,777	245,746	218,695	134,917	2,242,736

1/ Included with Maryland.

2/ Quantities undistributed to avoid disclosing company proprietary data.

3/ Undistributed quantity for this use is included with undistributed "All other purposes."