PUMICE AND PUMICITE

(Data in thousand metric tons unless otherwise noted)

Domestic Production and Use: The estimated value of pumice and pumicite sold or used in 2005 was about $26 million. Domestic output came from 16 producers at 17 mines in 7 States. Pumice and pumicite was mined in Arizona, Oregon, Idaho, California, New Mexico, Nevada, and Kansas, in descending order of significance. About 66% of production came from Arizona, Oregon, and Idaho. About 76% of the pumice was consumed for building blocks, and the remaining 24% was used in abrasives, concrete, horticulture, landscaping, stone-washing laundries, and other applications.

Salient Statistics—United States:	2001	2002	2003	2004	2005[e]
Production, mine[1]	920	956	870	1,490	1,360
Imports for consumption	379	360	366	402	410
Exports[e]	27	30	25	27	30
Consumption, apparent	1,270	1,320	1,210	1,870	1,740
Price, average value, dollars per ton, f.o.b. mine or mill	21.42	20.69	25.19	16.80	19.26
Stocks, yearend	NA	NA	NA	NA	NA
Employment, mine and mill, number	105	100	100	100	110
Net import reliance[2] as a percentage of apparent consumption	28	25	28	20	22

Recycling: Not available.

Import Sources (2001-04): Greece, 76%; Italy, 19%; Turkey, 4%; and other, 1%.

Tariff: Item	Number	Normal Trade Relations 12-31-05
Crude or in irregular pieces, including crushed pumice	2513.11.0000	Free.
Other	2513.19.0000	0.2¢/kg.

Depletion Allowance: 5% (Domestic and foreign).

Government Stockpile: None.

Prepared by **Alan Founie [(703) 648-7720, afounie@usgs.gov, fax: (703) 648-7975]**

PUMICE AND PUMICITE

Events, Trends, and Issues: The amount of domestically produced pumice and pumicite sold or used in 2005 decreased 9% compared with that of 2004. Imports increased by about 2% compared with those of 2004 as more Greek and Italian pumice was brought into Eastern U.S. ports to supply markets primarily in the Eastern United States and Gulf Coast. Total apparent consumption in 2005 fell about 6% compared with that of 2004. Use of substitutes in the horticultural market in the Western United States may have caused this decrease in consumption.

In 2006, domestic mine production of pumice and pumicite is expected to increase slightly to about 1.4 million tons, with U.S. apparent consumption rising to 1.8 million tons. Although pumice and pumicite is plentiful in the Western United States, changes in laws and public land designations could decrease access to many deposits. Pumice and pumicite is sensitive to mining and transportation costs, and, if domestic production costs were to increase, imports and competing materials might replace pumice in many domestic markets.

All domestic mining of pumice in 2005 was by open pit methods and was generally in remote areas where land-use conflicts were not severe. Although the generation and disposal of reject fines in mining and milling resulted in a dust problem at some operations, the environmental impact was restricted to a small geographic area.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves[3]	Reserve base[3]
	2004	2005[e]		
United States[1]	1,490	1,360	Large	Large
Algeria	400	450	NA	NA
Chile	1,250	1,300	NA	NA
Ecuador	710	488	NA	NA
France	450	450	NA	NA
Greece	1,600	2,000	NA	NA
Guadeloupe	210	210	NA	NA
Guatemala	270	226	NA	NA
Iran	1,200	1,200	NA	NA
Italy	4,600	4,600	NA	NA
Spain	600	600	NA	NA
Turkey	900	1050	NA	NA
Other countries	2,000	2,000	NA	NA
World total (rounded)	15,700	15,900	NA	NA

World Resources: The identified U.S. resources of pumice and pumicite in the West are estimated to be more than 25 million tons. The estimated total resources (identified and undiscovered) in the Western and Great Plains States are at least 250 million tons and may total more than 1 billion tons. Italy and Greece, and Iran remain the leading producers of pumice and pumicite, followed by the United States. Recent analysis shows that the production estimates of past years for pumice and pumicite from some countries, notably Greece, may have been erroneous. Reliable sources were used for the current production figures. There are large resources of pumice and pumicite on all continents.

Substitutes: The costs of transportation determine the maximum distance that pumice and pumicite can be shipped and still remain competitive with alternate materials. Competitive materials that can be substituted for pumice and pumicite for several end uses include crushed aggregates, diatomite, expanded shale and clay, and vermiculite.

[e]Estimated. NA Not available.

[1]Quantity sold and used by producers.

[2]Defined as imports – exports + adjustments for Government and industry stock changes.

[3]See Appendix C for definitions.