



# THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS<sup>1</sup>

**This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Puerto Rico Department of Natural Resources, Bureau of Geology, for collecting information on all nonfuel minerals.**

In 2004, Puerto Rico's nonfuel raw mineral production was valued<sup>2</sup> at \$187 million, based upon annual U.S. Geological Survey (USGS) data. If ranked in comparison with the 50 States, Puerto Rico would rank 41st in total nonfuel mineral production value.<sup>3</sup> Portland cement, by value, continued to be the Commonwealth's leading nonfuel mineral commodity, followed by crushed stone.

In 2004, the nonfuel mineral production value of portland cement (production up 6%) rose and accounted for the largest increase in value of Puerto Rico's nonfuel mineral commodities. The largest decrease in value was a \$2.4 million decrease in crushed stone (production down about 5%). Conversely, in 2003, the largest increase in value was in crushed stone and portland cement showed the largest decrease. At nearly 48%, or \$19.4 million, the rise in value of crushed stone resulted from a 15% increase in production and a higher average unit value for the commodity. The production of portland cement was down 2.6%.

In 2004, Puerto Rico produced significant quantities of portland cement; the Commonwealth would rank 17th if ranked in comparison with the 37 producing States. Construction sand and gravel was produced in Puerto Rico, mainly for use as aggregate in concrete and concrete products, as road base materials, and as fill, but production data are not available. The collection and compilation of production data for construction sand and gravel were discontinued in 1973 by the U.S. Bureau of Mines (the Federal Government Agency then responsible for collecting domestic raw nonfuel mineral production data) because of a low rate of response to surveys by the industry (Sikich and Alonso, 1993).

Metals have not been mined in Puerto Rico since the Juncos iron mine closed in 1953; prospects for resuming metal mining in the near future do not appear to be likely. However, metal occurrences are common on the island, and the possibility of developing a metal deposit will probably not be completely discounted (Sikich and Alonso, 1993).

Of the U.S. Administered Islands, only American Samoa, the Virgin Islands, and Guam recently have reported nonfuel mineral production data, and these have been limited to crushed stone. Crushed stone production and value data for Guam are shown in table 1. Data for the production of crushed stone for American Samoa (traprock) and the Virgin Islands (limestone and traprock) have been withheld (company proprietary data).

## Reference Cited

Sikich, S.W., and Alonso, R.M., 1993, The mineral industries of Puerto Rico, Northern Marianas, Island Possessions, and Trust Territory: U.S. Bureau of Mines Minerals Yearbook 1992, v. II, p. 467-470.

---

<sup>1</sup>While a Memorandum of Understanding (MOU) was officially made between the U.S. Geological Survey (USGS) and the Commonwealth of Puerto Rico, MOUs were not established with the Commonwealth of the Northern Mariana Islands, U.S. Caribbean and Pacific Island Possessions, or the U.S. Trust Territory of the Pacific Islands. Nevertheless, data on nonfuel raw mineral production were reported from several of the Administered Islands to the USGS. Only aggregated crushed stone data for the island of Guam of the Pacific Island Possessions are nonproprietary; these data appear in table 1.

<sup>2</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity. All 2004 USGS mineral production data published in this chapter are those available as of December 2005. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—also can be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>.

<sup>3</sup>Values, percentage calculations, and rankings for 2003 may differ from the Minerals Yearbook, Area Reports: Domestic 2003, Volume II, owing to the revision of preliminary 2003 to final 2003 data. Data and rankings for 2004 are considered to be final and are not likely to change significantly.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED  
BY THE UNITED STATES<sup>1, 2</sup>

(Thousand metric tons and thousand dollars)

Mineral	2002		2003		2004	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Puerto Rico:</b>						
Cement, portland	1,530	W	1,490	W	1,580	W
Clays, common	114 <sup>r</sup>	585	114	585	114	585
Lime	W	W	W	W	11	2,250
Salt	45	1,500	45	1,500	45	1,500
Stone, crushed	7,940	40,600	9,130	60,000	8,660	57,600
Combined values of sand and gravel (industrial), stone (dimension marble), and values indicated by symbol W	XX	144,000	XX	119,000	XX	125,000
<b>Total</b>	<b>XX</b>	<b>187,000</b>	<b>XX</b>	<b>181,000</b>	<b>XX</b>	<b>187,000</b>
<b>Administered Islands:</b>						
American Samoa, stone, crushed, traprock	W	(3)	W	(3)	W	(3)
Guam, stone, crushed	846	8,370	728	7,670	1,410	13,000
Virgin Islands, stone, crushed limestone and traprock	W	(3)	W	(3)	W	(3)
<b>Total</b>	<b>XX</b>	<b>8,370</b>	<b>XX</b>	<b>7,670</b>	<b>XX</b>	<b>13,000</b>

<sup>c</sup>Estimated. <sup>r</sup> Revised. W Withheld to avoid disclosing company proprietary data. Withheld values included in "Combined values" data. XX Not applicable.

<sup>1</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Withheld to avoid disclosing company proprietary data.