

## 2008 Minerals Yearbook

### **PUERTO RICO**

### CULEBRA Construction sand and gravel (Principal producing areas) Municipality boundary MINERAL SYMBOLS LEGEND Crushed stone Common clay Cement plant Lime plant Capital City CS Lime Cem Clay Salt NAGUABO MAUNABO YABUCOA SAN LORENZO **PUERTO RICO** AGUAS 60 Kilometers GUAYAMA COMERIO SALINAS BARRAN-QUITAS COAMO Albers equal area projection SANTA ISABEL VEGA BAJA SG MOROVIS OROCOVIS VILLALBA MANATI CS SG, 39 JUANA DIAZ $^{\rm CS}$ CS BARCELONETA 0 CS Clay Clay Cem 15 CS PONCE SG **ARECIBO** PENUELAS UTUADO ADJUNTAS GUAYANILLA S YAUCO CAMUY LARES **QUEBRADILLAS** GUANICA MARICA 0 CS ABANA SAN SEBASTIAN LAS MARIAS ISABELA SAN SG MOCA MAYAGUEZ AGUADILLA CSANASC0 CAB0 R0J0 AGNADA HORMIGUEROS

Source: Department of Natural Resources, Commonwealth of Puerto Rico/U.S. Geological Survey (2008).

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

In 2008, Puerto Rico's nonfuel raw mineral production<sup>1</sup> was valued at \$164 million, based upon annual U.S. Geological Survey (USGS) data. This was nearly a \$59.4 million, or 57%, increase from the \$105 million of 2007, which was up \$20.5 million, or by more than 24%, from 2006 to 2007. If ranked in comparison with the 50 States, Puerto Rico would rank 42d in total nonfuel mineral production value (up from 48th in 2007).

Puerto Rico's leading nonfuel mineral commodity remained portland cement, followed by crushed stone, salt, lime, and common clay, in descending order of value. The value of portland cement decreased by more than 2% in 2008, coinciding with a significant decline in production. The Commonwealth's increase in total mineral production value does not reflect the value of portland cement in order to avoid disclosing company proprietary data. In 2008, crushed stone increased in value by \$60.7 million, a greater than 60% increase from the 2007 production value. The quantity of crushed stone produced increased by 2.5 million metric tons (t), or nearly 19%. These significant increases in production value and quantity occurred along with a 35% increase in the unit value of the mineral commodity. Additionally, crushed stone value makes up

All 2008 USGS mineral production data published in this chapter are those available as of July 2010. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

98% of Puerto Rico's publishable nonfuel mineral value and together with the next leading commodity's value, salt, makes up 99% of the Commonwealth's publishable nonfuel mineral value. 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. The collection and compilation of production data for construction sand and gravel in Puerto Rico were discontinued by the U.S. Bureau of Mines (the Federal Government agency then responsible for collecting domestic raw nonfuel mineral production data) because of a substantially low rate of response to surveys by the industry (Sikich and Alonso, 1994). In 1995, the function of collecting mineral production data was transferred to the USGS. The USGS does not survey sand and gravel producers in Puerto Rico; construction sand and gravel operations on the map are based on the Mine Safety and Health Administration's data. There was no change observed in the production value or quantity of salt. In 2008, the significant production of portland cement in Puerto Rico would rank the Commonwealth 20th, if ranked in comparison with the 36 portland cement-producing States in the Nation. Puerto Rico would rank 31st out of 40 in common clay and 27th of all the States in crushed stone, again, if compared with the producing States of each mineral

Of the U.S. Administered Islands, only American Samoa, Guam, and the Virgin Islands have reported nonfuel mineral production data for 2008, and this was limited to crushed stone (table 1).

#### **Reference Cited**

Sikich, S.W., and Alonso, R.M., 1994, The mineral industries of Puerto Rico, Northern Marianas, Island Possessions, and Trust Territory, in Area reports— Domestic: U.S. Bureau of Mines Minerals Yearbook 1992, v. II, p. 465–473.

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<sup>&</sup>lt;sup>1</sup>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 and the same for the U.S. Virgin Islands southeast of Puerto Rico are nonproprietary; these data appear in table 1.

<sup>&</sup>lt;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.

## TABLE 1 NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES $^{\!1,2}$

### (Thousand metric tons and thousand dollars)

	2006		2007		2008	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:						
Cement, portland	1,550	W	1,390	W	1,300	W
Clays, common	111	614	96	547	75	437
Lime <sup>e</sup>	11	2,250	11	2,250	11	998
Salt	45	1,500	45	1,500 <sup>r</sup>	45	1,500
Stone, crushed	12,900 <sup>r</sup>	79,700 <sup>r</sup>	13,400 <sup>r</sup>	100,000 <sup>r</sup>	15,900	161,000
Total	XX	84,100 <sup>r</sup>	XX	105,000 <sup>r</sup>	XX	164,000
Administered Islands:						
American Samoa, stone, crushed, traprock	W	W	W	W	W	W
Guam, stone, crushed	900	8,460	329	3,760	325	3,780
Virgin Islands, stone, crushed, limestone and traprock	W	W	W	W	W	W
Total	XX	8,460 <sup>r</sup>	XX	3,760	XX	3,780

<sup>&</sup>lt;sup>e</sup>Estimated. W Withheld to avoid disclosing company proprietary data; excluded from "Total." XX Not applicable.

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

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