

# THE MINERAL INDUSTRY OF DELAWARE

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Delaware Geological Survey for collecting information on all nonfuel minerals.

In 1998, Delaware's preliminary estimated value<sup>1</sup> of nonfuel mineral production was \$11.2 million, according to the U.S. Geological Survey (USGS). This was a decrease of about \$1.2 million from that of 1997,<sup>2</sup> and followed about a \$6 million increase from 1996 to 1997. Because magnesium compound production data are withheld to avoid disclosing company proprietary data, the State's actual total values are higher than those shown in table 1.

In 1998, construction sand and gravel and magnesium compounds showed small decreases in value. During 1997,

<sup>1</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or 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 1998 USGS mineral production data published in this chapter are preliminary estimates as of February 1999 and are expected to change. Construction sand and gravel estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing for the specialists may be retrieved over the Internet at <http://minerals.usgs.gov/minerals/contacts/comdir.html>; by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists); or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at <http://minerals.usgs.gov/minerals>; facsimile copies may be obtained from MINES FaxBack.

<sup>2</sup>Values, percentage calculations, and rankings for 1997 may vary from the *Minerals Yearbook, Area Reports: Domestic 1997, Volume II*, owing to the revision of preliminary 1997 to final 1997 data. Data for 1998 are preliminary and expected to change, while related rankings may also be subject to change.

however, construction sand and gravel value significantly increased (table 1) and the value of magnesium compounds rose slightly. The value of gemstones was the result of collecting done by hobbyists and was estimated to have remained the same. Delaware ranked fifth<sup>2</sup> of the six States in the quantity of magnesium compounds produced. Magnesium compounds were extracted from seawater close to the mouth of the Delaware Bay, near Lewes, Sussex County, for use in the manufacture of chemical and pharmaceutical products.

The Delaware Geological Survey<sup>3</sup> (DGS) completed the digital portion of the States' topographic mapping project, as part of an innovative partnership agreement with the USGS and a private vendor. The eight digital layers became available in 1998 on CD-ROM from the DGS and are also available through the DGS web site. The digital layers complement the 1:24,000 quadrangle topographic maps (paper copies) that became available in 1993. The U.S. Department of the Interior's Minerals Management Service continued to provide support for studies characterizing offshore sand resources in both State and Federal waters for possible use in beach replenishment. The DGS is currently evaluating sediment characteristics of samples collected from an offshore coring program and is providing technical support for an offshore environmental assessment program in selected localities.

<sup>3</sup>John H. Talley, Associate Director, authored the text of State minerals information provided by the Delaware Geological Survey.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN DELAWARE 1/ 2/  
(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1996		1997		1998 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones	NA	1	NA	1	NA	1
Sand and gravel: Construction	2,370	6,820	2,540	12.40	2,240	11,200
Total 3/	XX	6,820	XX	12.40	XX	11,200

p/ Preliminary. NA Not available. XX Not applicable.

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

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Partial total, excludes values which must be concealed to avoid disclosing company proprietary data.

TABLE 2  
 DELAWARE: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1997,  
 BY MAJOR USE CATEGORY 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Value per ton
Concrete aggregate (including concrete sand)	1,340	\$6,940	\$5.19
Plaster and gunitite sands	130	775	5.96
Road base and coverings	61	560	9.18
Other miscellaneous uses 3/	1,010	4,060	4.04
Unspecified: Actual 4/	8	23	2.88
Total or average	2,540	12,400	4.87

1/ To avoid disclosing company proprietary data, no district tables were produced for 1997.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Includes fill, railroad ballast, and snow and ice control.

4/ Includes reported production without a breakdown by end use.