Industrial Mineral Production and Potential in New Mexico

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Industrial minerals, rocks and materials are nonmetallic commodities (IM hereafter). Some produced in New Mexico lead the nation in several categories and all are important to the economy of the state. Potential for new economic IM deposits is high for certain commodities but regulation kept exploration and development very low in the 1990s.

New Mexico leads the nation in production of potash, perlite, and zeolite. It is 2nd in pumice and mica, and 3rd in humate. In 1996, New Mexico ranked 12th nationally for nonfuel mineral production at about $434 million or 45% of the estimated total value of $963 million reported by the US Geological Survey. This contrasts with national totals where metals are about 1/3rd and nonmetals about 2/3rd of total value. New Mexico differs because population is low (small local market) while the state is large in area (many possible deposits) and remote (transport costs to distant markets dominate IM economics). Additional IMs produced in New Mexico are aggregate (sand & gravel; crushed stone), cement, gypsum, dimension stone (travertine and limestone), salt, scoria & cinders, and clay (Table 1).

Potential is high for potash and salt, perlite, zeolite, pumice, and humate. The potash- and salt-producing area in southeastern New Mexico is a small part of the surrounding lower-grade potash resource. Deeper potash may be developed through technology. Perlite and zeolite potential is high in the volcanic terrane of southwestern New Mexico where several deposits have been drilled or had minor production. Humate is abundant in the San Juan basin in northwestern New Mexico at weathered coal outcrops and in some carbonaceous shale. High-calcium limestone, limestone and gypsum are abundant in the southern 2/3rd of the state but these sources are often distant from consumption centers. Sand and gravel are abundant along the Rio Grande but are locally restricted near urban areas, which raises delivered cost; other areas use crushed stone or caliche both of which have moderate to high potential.

Potential is moderate for alunite (possible potash/aluminum co-products), stone, silica, gamet, sulfur, barite, fluorite, feldspar, nepheline syenite, pegmatite minerals, sulfur, and diatomite. Clay deposits are generally sparse in New Mexico but common clay is used locally for pottery, brick or adobe. Potential is low for borates and most other IMs.

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