

Gold, copper found in Utuado-Adjuntas

Deposits valued at nearly \$391 million

By JULIO GHIGLIOTTY
Of The STAR Staff

The Department of Natural and Environmental Resources is evaluating a proposal to mine copper and gold deposits in the Utuado-Adjuntas area that could generate some \$391 million for Puerto Rico, DNER Secretary Pedro Gelabert said Thursday.

Gelabert said he will reserve judgment about the proposal until the proponents, Southern Gold Resources (USA) Inc. and USMX Inc., complete their environmental impact statement.

The group's preliminary proposal calls for the government to take 2/3 of the estimated \$588 million in net earnings over the 18-year span of the project. The gold miners, who are paying for the mineral rights on government-owned land, would begin extracting ore by 1999.

Gelabert said that the group's preliminary report indicates that the proposed mining operation would have a significantly lesser impact on the environment than proposals in the 1960s and 1970s by

Kennecott Copper and American Metal Climax Inc.

Those proposals generated strong environmental protests and objections over its costs.

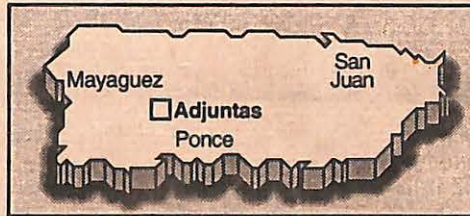
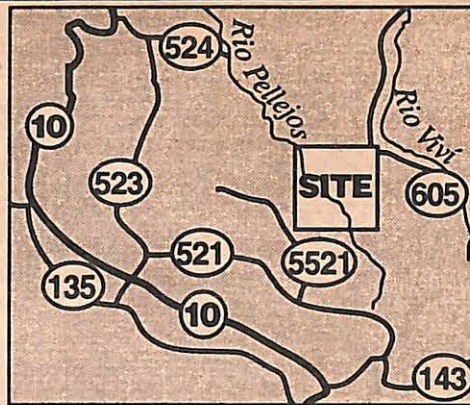
Under the current scheme, the mining operation, which includes the open pit and the processing plant and facilities, would be limited to 669 acres, compared to 3,300 acres under AMAX's 1961 proposal.

Secondly, the estimated water needs have been reduced from 5.3 million gallons a day to about 700,000 gallons.

But the most important element is that the smelting operation, which would have been the source of the worst and most dangerous pollution, would not be carried out in Puerto Rico, Gelabert said.

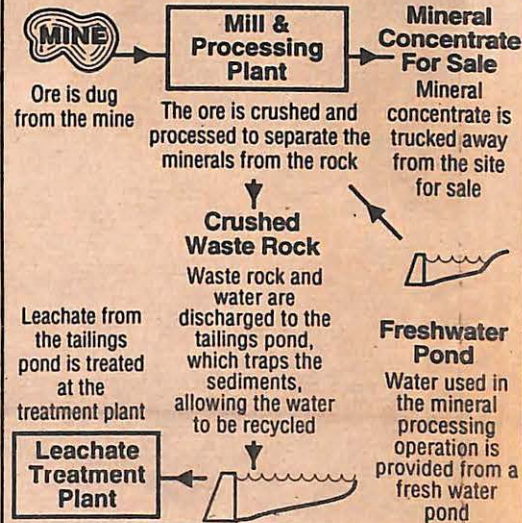
Smelting requires burning chemicals that include sulfur, which is one of the most damaging of the air pollutants.

Southern Gold's proposal calls for extracting 2.2 million tons of ore a year during the first four years of operation and 3.3 million tons during the subsequent 10 years. A preliminary development period of four years would also be built into the schedule.



TYPICAL MINING OPERATION

Simplified flow diagram



Daily ore extraction would be 6,000 tons at first and would provide employment for 146 persons, of whom 43 would work directly in the mine, Gelabert said. When production goes up to 9,000 tons a day, the payroll for the mining operation would cover 170 people, 50 of them in the mine itself, he added.

The operation will use the open pit method of extraction and the "flotation" method for separating the mineral from rock. This calls for immersing the ore in water mixed with an element to which the mineral adheres and floats up to the top, from where it is skimmed for further

concentration. This concentrated mineral would be shipped to the foundry for further purification.

The mining companies expect to recover 378,661 tons of copper and 597,144 ounces of gold from the operation in the Cala Abajo sector, which straddles Utuado's barrio Consejo and Adjuntas' barrio Pellejas, Gelabert said.

The economic viability study made by the two companies indicate that the operation will cost them an average of 62 cents per pound of copper recovered, and initial cost for the project is estimated at \$57.1 million, he added.