The tax credits were expected to yield a total of \$73M over the plant components' lives.

The company is looking at expanding the concentrator for \$120M as well as building a "chemical processing plant" for \$50M. SPCC produced about 340K-mt blister/cathode copper in 1999 and expects to increase output by 3% in 2000.

Fourth-quarter 1999 copper production increased 3.4% to 203.2M lb. The increase is principally attributable to higher throughput at the Cuajone mine and increased production at the company's SX/EW facility.

Throughput at Cuajone benefited from increased mill capacity, part of the mine expansion program, which the company completed earlier this year.

Copper production on the year increased 11.9% to 745.6M lb.

Refined copper production increased 7.0% in the fourth-quarter 1999 to 173.8M lb due to improved operations at the Ilo refinery and completion of the Toquepala SX/EW plant expansion. Refined copper production for the full year 1999 increased 2.2% over 1998 to 662.0M lb.

For the full year, the cost reduction program is estimated to have produced \$29.2M in pretax savings. The cost reduction program is expected to produce approximately \$40.0M in additional pretax savings in 2000.

The Cuajone mine expansion completed earlier this year reached target ore throughput rate during the second-quarter 1999. Rainy conditions in the first quarter of the year and metallurgical difficulties with the ore reduced copper production by an estimated 80M lb during calendar 1999. Expansion of the Toquepala SX/EW facility, which increases production 26% to 62K mt/yr, was to be completed in the third-quarter 1999. The plan is to continue the modernization of the Ilo smelter, to improve production through the implementation of better technology, to comply with all environmental regulations, and to further develop strategies for the best utilization of its financial resources.

In October, increased proven and probable ore reserves at Toquepala were reported. Sulphide ore reserves at Toquepala increased 161% to 770M mt grading 0.74% Cu, and leachable reserves increased 166% to 1.931B mt grading 0.20% Cu. Drilling programs have further indicated 247M-mt mineralized material grading 0.68% Cu. Full definition of this material is expected to be completed in 2000.

Preliminary drilling results from SPCC's Los Chancas Exploration Project, located approximately 400 km northwest of its Cuajone and Toquepala mines, was reported in October. About 5,000-m exploration drilling completed to date indicates the presence of a porphyry copper of unknown dimensions. A preliminary review of drilling results indicates a geologic potential of up to 200M mt at an average grade above 1% Cu, with molybdenum and gold values.

In Asia

CHINA

On January 11, Jiangsu Province's Dahuangshan coal mine at Xuzhou was hit by an inrush of water during the morning shift. The accident happened 320-m underground, and the water came in from an abandoned mining section.

Water flooded the 400-m and 500-m sections. At its peak, the water influx was estimated at a rate of 80 m³/hr. As of January 18, of the 63 coal miners initially trapped in various sections of the mine at different levels, 41 were rescued, 15 had died, and seven were still missing and are suspected dead.

Although all telecommunications were cut off, trapped miners managed to signal rescue workers by hitting metal pipes. Rescue

was attempted by drilling small diameter holes to reach the trapped miners. Drilling of a 7.6-cm dia hole through 52.6-m rock took more than 50 hr, and after completion, fresh air, food, and water was provided. The seven missing miners are suspected to have been trapped in an underground shop.

Four rescue teams were digging from different directions, hoping to recover them.

The rescue effort was continuously hampered by roof falls, additional water inflows including massive amounts of sand and mud, and the lack of facilities and equipment at the mine.—*JCT*

About 2,500 small steel mills (each <100K-mt/yr capacity) will be shuttered as part of a national effort to lower steel production by 10% and diminish the glut in the markets of both industrial and consumer goods. The aim is to see national steel output under 110M mt and steel products below 100M mt.

RUSSIA

Pan American Silver suspended construction work on the Dukat mine in Magadan, far eastern Russia, in December after Kaskol, a Russian company, won an auction to purchase certain assets, including the old mill building that Pan American had planned to renovate and utilize for processing Dukat ore. In January, Pan American commissioned Kilborn-SNC Lavalin to perform a study to evaluate the feasibility of constructing a new mill, which would avoid the need for any of the auctioned assets. Prior to suspension of construction, Pan American's 90% share of Dukat production had been planned at 7M-oz Ag in 2000 and more than 14M-oz/yr Ag starting in 2001.

"Preliminary indications are that construction of a new mill is feasible and economically viable, and will allow compliance with the mining license, which requires production by the end of 2001," Pan American said in a project update. "Permitting is in progress to advance this alternative."—LW

IN AFRICA

GHANA

Troubled Ashanti Goldfields is selling half of its Geita gold project in Tanzania. The government, which has a 20% interest in Ashanti, had been pressuring the company. Analysts have estimated the half-interest should yield some \$400M. The company reportedly passed up an offer in 1999 for \$200M plus \$140M working capital to develop the mine. Barrick Gold, Placer Dome, and AngloGold are rumored to be prime bidders for the project. Not to be forgotten is Lonmin, which currently has a 32% interest in Ashanti.

The company has also been served with a suit by four shareholders who want to remove company executives and sell mining assets.

SOUTH AFRICA

Harmony Gold took control of Randfontein Estates, an 800K-oz/yr Au producer, in January, having acquired 34% of Randfontein's shares. The Randfontein board recommended that all shareholders accept the Harmony offer, and Harmony expressed expectations that its ownership would increase to 100%. Completion of the acquisition would lift Harmony's total production to about 2.2M-oz/yr Au.

The company said that it would become the world's sixthlargest producer, at 2.2M oz/yr, with the completion of the Randfontein transaction.