

Mineral Industry Surveys

For information, contact:

Gerald R. Smith, Lead Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4983, Fax: (703) 648-7757
E-mail: grsmith@usgs.gov

Gaston R. Hauptert (Data)
Telephone: (703) 648-7961
Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999
Internet: <http://minerals.usgs/minerals>

LEAD IN OCTOBER 2001

Domestic mine production, based on the net quantity of lead recovered from concentrate, increased by 21% in October compared with that of September. Secondary refinery production increased by 3% in October and reported consumption was up by about 2% in October compared with the previous month.

According to Platts Metals Week published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price (U.S. dollars) increased by 0.02% and 0.68%, respectively, compared with that of September.

In North America, demand for lead remained at a fairly level pace in October. Some restocking of inventories by battery manufacturers was evident, but was modest compared with the normal pre-winter restocking of lead in preparation for the replacement automotive battery season. Manufacturers reportedly remained wary of overstocking, even though the demand for replacement batteries is driven by battery failures resulting from temperature extremes rather than by economic conditions. Some encouraging signs for an increase in lead demand began to emerge during October in the industrial battery sector and the original equipment automotive battery sectors. Specifically, the earlier decline in demand for industrial-type batteries in the telecommunications industry appeared to be bottoming out, and demand for original equipment batteries was strengthened as automotive manufacturers began to offer special buying incentives. In Europe, overall demand for lead remained moderately strong but somewhat below the level of a year ago. Battery manufacturers were purchasing lead on a short-term basis but were optimistic that demand, at least for industrial batteries, would become stronger as evidenced by an increase in orders during the month (CRU International Ltd., 2001).

The National Defense Stockpile monthly cash disposal (sale) of lead in the first month of fiscal year 2002 (October 2001 through September 2002) was 200 metric tons (t) (220 short tons).

The National Defense Stockpile Market Impact Committee recently requested public comment on its proposed revisions of disposals from the stockpile under the Annual Materials Plan (AMP) for fiscal year 2002, and proposed disposals under the fiscal year 2003 AMP. Lead disposals planned for fiscal year 2002 remained at 54,431 t (60,000 short tons). A similar quantity of lead was proposed for sale in fiscal year 2003. The U.S. Geological Survey represents the Department of the Interior on the National Defense Stockpile Market Impact Committee (U.S. Department of Commerce, 2001).

Administrators for Australia's Pasminco Ltd. obtained a court-authorized extension on the deadline for reporting their future plans for the company. Under normal conditions, the administrators would have been required to report this information within 28 days of their appointment that began September 19, 2001. However, the deadline was extended to January 14, 2002, "owing to the complex nature of Pasminco's business." Pasminco had outlined its plans to sell the Century Mine in Queensland prior to being placed under the control of the administrators. Final bids on the Century Mine were expected to be received by the end of 2001. According to a Pasminco spokesperson, two companies also had submitted bids for the company's Broken Hill Mine (American Metal Market, 2001b,c).

In China, about 60,000 t of lead production capacity was added during 2001. The 20,000 t reduction in output at the Zhuzhou and Qinghan smelters will be offset by the newly added production capacity at the Shengyang-based Zingye Industry and Trade Co. Total output of lead for 2001 is expected to be about 1.18 million metric tons. Exports of lead are predicted to be about 410,000 t, about 30,000 t above the level of 2000 (China Metal Market, 2001; Platts Metals Week, 2001).

Boliden Aspirsa S.L., the Spanish mining division of Boliden Ltd., closed its Los Frailes lead-zinc mine near Seville at the beginning of October. According to a company spokesperson, it was not likely that the mine would be reopened. Investment

in the mine had been ruled out by Boliden in October 2000 as a result of increasing financial losses (American Metal Market, 2001a). Los Frailes had been forced to close in April 1998 when a tailings dam failed, flooding a significant portion of the neighboring land. The mine was restarted in June 1999 after its milling license was restored by the local administration, along with a permit to dump tailings in the adjacent Aznalcollar open pit mine (Metal Bulletin, 2000).

References Cited

American Metal Market, 2001a, Boliden closes Spanish lead mine: American Metal Market, v. 109, no. 195, October 8, p. 8.

———2001b, Court grants Pasmenco extra reorganization time: American Metal Market, v. 109, no. 210, October 29, p. 5.

———2001c, Final bids soon for Pasmenco's Century zinc mine: American Metal Market, v. 109, no. 206, October 23, p. 5.

China Metal Market, 2001, Smelters cut output on weak prices: China Metal Market, Antaike Lead & Zinc Monthly, October, p. 1.

CRU International Ltd., 2001, Market commentary: CRU Monitor—Lead, November, p. 2.

Metal Bulletin, 2000, Full production at Los Frailes set for late March: Metal Bulletin, no. 8451, February 17, p. 9.

Platts Metals Week, 2001, China lead trade steadys: Platts Metals Week, v. 72, no. 43, October 22, p. 6.

U.S. Department of Commerce, 2001, National Defense Stockpile Market Impact Committee request for public comments: Federal Register, v. 66, no. 207, October 25, p. 53981-53983.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons, lead content, unless otherwise specified)

| | 2000 | | 2001 | | |
|---|-----------|----------------------|------------|---------|----------------------|
| | Year | January - October | September | October | January - October |
| Production: | | | | | |
| Mine (recoverable) | 457,000 | 375,000 | 32,400 r/ | 39,200 | 382,000 |
| Primary refinery | 341,000 | NA | NA | NA | NA |
| Secondary refinery: | | | | | |
| Reported by smelters/refineries | 1,120,000 | 895,000 | 91,700 | 94,500 | 902,000 |
| Estimated | -- | 12,000 | 927 | 954 | 9,100 |
| Recovered from copper-base scrap e/ | 16,100 | 12,500 | 1,250 | 1,250 | 12,500 |
| Total secondary | 1,130,000 | 920,000 | 93,900 | 96,700 | 923,000 |
| Stocks, end of period: | | | | | |
| Primary refineries | 18,600 | NA | NA | NA | NA |
| Secondary smelters and consumers | 70,000 | 62,300 | 86,400 r/ | 83,700 | 83,700 |
| Imports for consumption: | | | | | |
| Ore and concentrates (lead content) | 31,200 | 26,000 | -- | NA | 2,240 2/ |
| Refined metal | 356,000 | 277,000 | 32,700 | NA | 217,000 2/ |
| Consumption: | | | | | |
| Reported | 1,720,000 | 1,310,000 | 130,000 r/ | 132,000 | 1,290,000 |
| Undistributed e/ | -- | 83,800 | 12,800 r/ | 13,000 | 128,000 |
| Total | 1,720,000 | 1,400,000 | 142,000 r/ | 145,000 | 1,420,000 |
| Exports (lead content): | | | | | |
| Ore and concentrates | 117,000 | 93,900 | 21,100 | NA | 148,000 2/ |
| Bullion | 32,100 | 29,100 | 182 | NA | 3,360 2/ |
| Wrought and unwrought lead | 48,500 | 38,300 | 3,430 | NA | 28,200 2/ |
| Ash and residues | 11,300 | 11,000 | 2,000 | NA | 10,300 2/ |
| TEL/TML preparations, based on lead compounds | 6,110 | 3,980 | 75 | NA | 3,360 2/ |
| Exports (gross weight): Scrap | 71,600 | 52,000 | 8,630 | NA | 81,400 2/ |
| Platts Metals Week average North American producer price (cents per pound) | | | | | |
| | 43.57 | 43.56 | 43.60 | 43.61 | 43.64 |

e/ Estimated. r/ Revised. NA Not available. -- Zero.

1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

2/ Includes data for January - September only; October data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

| | North American producer price cents/lb | LME | | Sterling exchange rate dollars/£ |
|--------------|--|---------------|--------------|--|
| | | \$/metric ton | £/metric ton | |
| 2000: | | | | |
| October | 43.67 | 485.74 | 339.53 | 1.450648 |
| December | 43.59 | 461.97 | 315.79 | 1.462915 |
| Year | 43.57 | 453.58 | 300.08 | 1.515869 |
| 2001: | | | | |
| August | 43.66 | 482.59 | 335.79 | 1.437183 |
| September | 43.60 | 464.44 | 317.36 | 1.437183 |
| October | 43.61 | 467.62 | 322.19 | 1.451378 |

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1/

(Metric tons, gross weight)

| Item | Stocks | Net | Consumption | Stocks |
|-------------------------------------|--------------------------|----------|-------------|---------------------|
| | September 30, 2001 r/ | receipts | | October 31, 2001 |
| Battery-lead | 16,400 | 84,000 | 83,500 | 16,800 |
| Soft lead | W | W | W | W |
| Drosses and residues | 2,450 | 4,410 | 4,350 | 2,510 |
| Other 2/ | 2,330 | 6,630 | 6,770 | 2,190 |
| Total | 21,100 | 95,000 | 94,700 | 21,500 |
| Percent change from preceding month | XX | +8.5 | +9.0 | +1.8 |

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE
SCRAP IN OCTOBER 2001 1/

(Metric tons)

| Product recovered | Secondary metal content | | |
|-----------------------|-------------------------|-----|----------|
| | Lead | Tin | Antimony |
| Soft and calcium lead | 54,900 | -- | -- |
| Remelt lead | W | -- | -- |
| Antimonial lead | 36,900 | W | W |
| Other 2/ | W | W | W |
| Total lead-base | 94,500 | 79 | 542 |

W Withheld to avoid disclosing company proprietary data; included in "Total."
-- Zero.

1/ Data are rounded to no more than three significant digits.

2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

| Uses | 2000 | | 2001 | | January - October |
|--|------------------|----------------------|-------------------|----------------|----------------------|
| | Year | January - October | September | October | |
| Metal products: | | | | | |
| Ammunition, shot and bullets | 63,500 | 40,400 | 2,900 | 2,530 | 33,300 |
| Brass and bronze, billet and ingots | 3,670 | 3,240 | 298 | 308 | 3,020 |
| Cable covering, power and communication and calking lead, building construction | 4,130 | 2,710 | 216 | 228 | 3,080 |
| Casting metals | 35,100 | 4,740 | 617 | 671 | 6,220 |
| Sheet lead, pipes, traps and other extruded products | 25,800 | 13,300 | 1,750 | 1,820 | 19,000 |
| Solder | 11,500 | 5,650 | 113 | 158 | 1,400 |
| Storage batteries, including oxides | 1,490,000 | 1,190,000 | 119,000 r/ | 121,000 | 1,170,000 |
| Terne metal, type metal, and other metal products 2/ | 25,200 | 2,170 | 70 | W | 5,690 |
| Total metal products | 1,650,000 | 1,260,000 | 125,000 r/ | 127,000 | 1,240,000 |
| Other oxides and miscellaneous uses | 64,500 | 54,600 | 4,790 r/ | 5,190 | 49,300 |
| Total reported | 1,720,000 | 1,310,000 | 130,000 r/ | 132,000 | 1,290,000 |
| Undistributed consumption e/ | -- | 83,800 | 12,800 r/ | 13,000 | 128,000 |
| Grand total | 1,720,000 | 1,400,000 | 142,000 r/ | 145,000 | 1,420,000 |

e/ Estimated. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

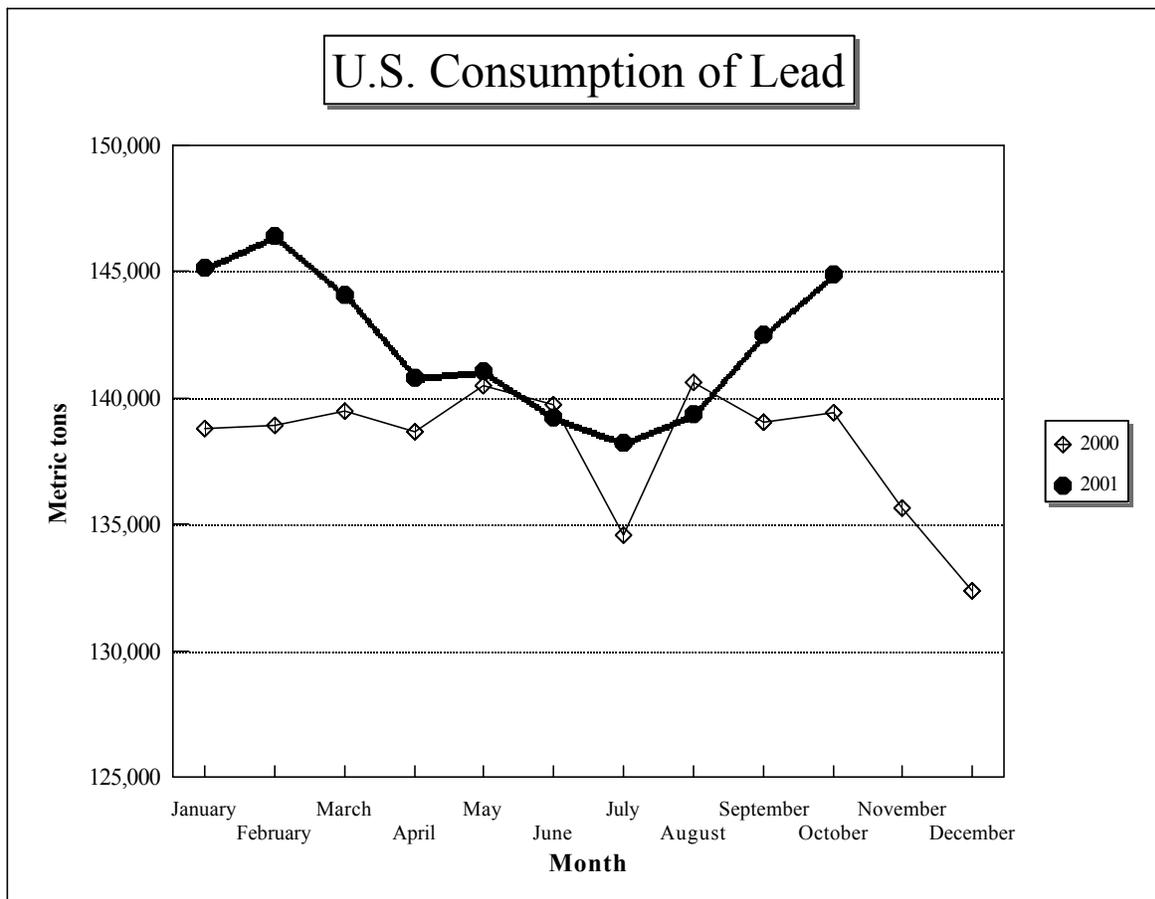


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND
CONSUMPTION OF LEAD IN OCTOBER 2001 1/

(Metric tons, lead content)

| Type of material | Stocks | | Consumption | Stocks |
|-------------------|--------------------------|-----------------|-------------|---------------------|
| | September 30, 2001 r/ | Net receipts | | October 31, 2001 |
| Soft lead | 46,700 | 76,100 | 77,500 | 45,400 |
| Antimonial lead | 36,200 | 25,900 | 28,800 | 33,300 |
| Lead alloys | W | 26,900 | 25,400 | W |
| Copper-base scrap | W | 209 | 205 | W |
| Total | 86,400 | 129,000 | 132,000 | 83,700 |

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

| | 2000 | | 2001 | | |
|--|---------|-----------|--------|-----------|------------------------|
| | Year | September | August | September | January - September |
| Lead content: | | | | | |
| Ore and concentrates | 117,000 | 37,900 | 45,100 | 21,100 | 148,000 |
| Bullion | 32,100 | 2,070 | -- | 182 | 3,360 |
| Materials excluding scrap | 48,500 | 3,430 | 2,700 | 3,430 | 28,200 |
| Ash and residues | 11,300 | 247 | 2,600 | 2,000 | 10,300 |
| TEL/TML preparations, based on lead compounds | 6,110 | 9 | 30 | 75 | 3,360 |
| Total | 215,000 | 43,600 | 50,400 | 26,800 | 193,000 |
| Gross weight: Scrap | 71,600 | 7,140 | 10,900 | 8,630 | 81,400 |

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

| Country of origin | General imports | | | | | Imports for consumption | | | | |
|--|-----------------|------------------------|--------|-----------|------------------------|-------------------------|------------------------|--------|-----------|------------------------|
| | 2000 | | 2001 | | | 2000 | | 2001 | | |
| | Year | January - September | August | September | January - September | Year | January - September | August | September | January - September |
| Ore, matte, etc.: | | | | | | | | | | |
| Canada | (2/) | (2/) | -- | -- | -- | (2/) | (2/) | -- | -- | -- |
| Mexico | 13,000 | 10,200 | -- | -- | -- | 12,600 | 10,200 | -- | -- | -- |
| Peru | 10,800 | 9,260 | -- | -- | -- | 1,720 | 1,720 | -- | -- | -- |
| Other | 42,700 | 31,400 | -- | -- | 11,200 | 16,800 | 14,100 | -- | -- | 2,240 |
| Total | 66,400 | 50,800 | -- | -- | 11,200 | 31,200 | 26,000 | -- | -- | 2,240 |
| Base bullion: | | | | | | | | | | |
| Colombia | 65 | 65 | -- | -- | -- | 65 | 65 | -- | -- | -- |
| Pigs and bars: | | | | | | | | | | |
| Australia | 36,000 | 31,000 | 1,200 | 3,980 | 12,300 | 36,000 | 31,000 | 1,200 | 3,980 | 18,600 |
| Canada | 216,000 | 162,000 | 9,130 | 9,620 | 134,000 | 216,000 | 162,000 | 9,130 | 9,620 | 134,000 |
| China | 72,100 | 60,000 | 1,650 | 7,020 | 33,800 | 72,100 | 60,000 | 1,650 | 7,020 | 37,000 |
| Germany | 537 | 420 | -- | 40 | 120 | 537 | 420 | -- | 40 | 120 |
| Mexico | 18,400 | 16,500 | 327 | 1,970 | 11,200 | 18,400 | 16,500 | 327 | 1,970 | 11,200 |
| Peru | 1,790 | 1,510 | 1,060 | 34 | 2,330 | 1,790 | 1,510 | 1,060 | 34 | 2,330 |
| Other | 3,540 | 542 | -- | 2,980 | 3,260 | 11,700 | 5,530 | -- | 10,000 | 14,500 |
| Total | 348,000 | 272,000 | 13,400 | 25,600 | 197,000 | 356,000 | 277,000 | 13,400 | 32,700 | 217,000 |
| Reclaimed scrap, including ash and residues | 25 | 25 | -- | -- | 203 | 25 | 25 | -- | -- | 203 |
| Grand total | 415,000 | 323,000 | 13,400 | 25,600 | 208,000 | 388,000 | 303,000 | 13,400 | 32,700 | 220,000 |

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.