

Mineral Industry Surveys

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ZINC IN JANUARY 2007

Domestic mine production (recoverable) of zinc in January 2007 was 59,300 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in January was 1,913 t, 25% higher than that in December and 2% higher than that in January 2006. Reported consumption of 33,100 t was 2% higher than that in December, but 5% lower than that in January 2006.

The Platts Metals Week average price for North American Special High Grade Zinc for the month of January was 183.47 cents per pound, 13% lower than the December average price and an increase of 82% from the January 2006 average price. The average London Metal Exchange Ltd. (LME) cash price of zinc for December increased to \$3786.21 per metric ton, 14% lower than the price in December and an 81% increase compared with the price in January 2006. During January 2007, global LME zinc stocks rose by 8,050 t to 98,525 t.

Apollo Gold Corporation (Colorado) announced that the primary waste moving project at the Montana Tunnels Mine (near Helena, MT) is scheduled to be finished by late February 2007. In October 2005, the mine closed owing to decreasing revenue and high operating costs; however, concentrate continued to be produced from stockpiles of ore. In March 2006, Apollo Gold announced plans to sell Montana Tunnels. Shortly after, production of concentrate ceased, and the mine was put on care-and-maintenance status. In August 2006, Apollo Gold entered a joint venture with Elkhorn Tunnels, LLC (Colorado) to remediate the mine, with production targeted to resume in March 2007. Montana Tunnels open-pit gold mine recovers zinc as a byproduct from gold ore. Zinc concentrates are sent to various smelters worldwide under annual contracts (Apollo Gold Corporation, 2006; 2007).

Strategic Resource Acquisition Corporation (Canada) announced that its subsidiary, Mid-Tennessee Zinc Corporation, acquired Pasmenco Ltd.'s former Tennessee zinc mines and mill. Mining is expected to resume in third quarter 2007, and concentrate production will begin in first quarter 2008 (CCN Matthews Company, 2007^{§1}). Within Tennessee, Pasmenco

operated the Clinch Valley Mine in Grainger County (closed since 2004) and the Gordonsville Mine complex in Smith County (closed since 2003). Clinch Valley was a small underground zinc mine that produced 350,000 metric tons per year (t/yr) of ore grading 3.2% zinc. About 11,000 t/yr of zinc in concentrate was produced at the onsite mill. The Gordonsville Mine complex consisted of three mines—the Cumberland, Elmwood, and Gordonsville Mines.

In China, the Ministry of Land and Resources and the National Development and Reform Commission issued a List of Restricting Land Use Projects and a List of Banning Land Use Projects. Nonferrous metal projects which fell below specified output standards were added to either the restricting or banning list and would be denied approval by local Land and Resource divisions. Zinc smelting projects which would operate below a production level of 100,000 t/yr were added to the restricting list (Beijing Antaika Information Development Co., Ltd., 2007).

The Defense National Stockpile Center aggregated cash disposal (sale) of zinc in January, under the monthly basic Ordering Agreement DLA-Zinc-004, was approximately 585 t (645 short tons), with an approximate value of \$2.1 million (Defense National Stockpile Center, 2007).

References Cited

- Apollo Gold Corporation, 2006, Apollo Gold reports first quarter 2006 results: Apollo Gold Corporation news release, May 12, 8 p.
- Apollo Gold Corporation, 2007, Apollo Gold updates progress on the Montana Tunnels Mine joint venture: Apollo Gold Corporation news release, January 8, 3 p.
- Beijing Antaika Information Development Co., Ltd., 2007, Lead and zinc and tin monthly: Beijing Antaika Information Development Co., Ltd., January, no. 122, p. 2.
- Defense National Stockpile Center, 2007, Stockpile announces BOA sales for January 2007: Fort Belvoir, VA, Defense National Stockpile Center news release, February 6, 1 p.

Internet Reference Cited

- CCN Matthews Company, 2007 (January 22), SRA closes C\$20 million special warrant equity financing and acquires Tennessee zinc mines and mill, accessed March 28, 2007, via URL http://www.marketwire.com/mw/release_html_b1?release_id=205800.

¹A reference with a section mark (§) is found in the Internet Reference Cited section.

TABLE 1
SALIENT ZINC STATISTICS¹

(Metric tons, unless otherwise specified)

	2006			2007
	January- December	November	December	January
Production:				
Mine, zinc content of concentrate	723,000	53,500	49,200	61,500
Mine, recoverable zinc	696,000	51,500	47,400	59,300
Smelter, refined zinc ^{e, 2}	248,000	19,000	20,200	21,200
Consumption:				
Refined zinc, reported	404,000	32,000	32,400	33,100
Ores ^e (zinc content)	732	61	61	61
Zinc-base scrap ^e (zinc content)	191,000	15,900	15,900	15,900
Copper-base scrap ^e (zinc content)	176,000	14,700	14,700	14,700
Aluminum-and magnesium-base scrap ^e (zinc content)	1,440	120	120	120
Total ^e	773,000	62,700	63,100	63,800
Apparent consumption, metal ³	1,130,000	83,700 ^r	74,800 ^r	76,900 ⁴
Stocks of refined (slab) zinc, end of period:				
Producer ^{e, 5}	XX	6,750	7,660	8,810
Consumer ⁶	XX	52,400 ^r	55,600 ^r	51,200
Merchant	XX	10,400	10,200	10,200
Total	XX	69,500 ^r	73,500 ^r	70,300
Shipments of zinc metal from Government stockpile	33,000	NA ⁷	237	472
Imports for consumption:				
Refined (slab) zinc	851,000	67,400	59,100	NA
Oxide (gross weight)	125,000	8,740	5,230	NA
Ore and concentrate (zinc content)	383,000	100,000	63,800	NA
Exports:				
Refined (slab) zinc	2,530	363	666	NA
Oxide (gross weight)	28,800	2,300	2,710	NA
Ore and concentrate (zinc content)	825,000	20,600	25,300	NA
Waste and scrap (gross weight)	88,300	7,930	11,900	NA
Price:				
London Metal Exchange, average, dollars per metric ton	3,274.42	4,381.27	4,404.51	3,786.21
Platts Metals Week North American Special High Grade, average, cents per pound	158.88	210.78	211.83	183.47

^eEstimated. ^rRevised. NA Not available. XX Not applicable.

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

²Includes zinc metal used to manufacture zinc oxide.

³Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

⁴Data based on reported consumption, stocks, and estimated trade data.

⁵Data from U.S. Geological Survey and American Bureau of Metal Statistics.

⁶Includes an estimate for companies that report annually.

⁷Monthly shipments are not reflected by changes in inventory due to an inventory adjustment or shipment delay.

TABLE 2
REFINED ZINC PRODUCED IN THE UNITED STATES^{1,2}

(Metric tons)

Month	Beginning		Shipments ^e	Ending
	stocks ³	Production ^e		
2006:				
January	5,590	21,200	20,100	6,750
February	6,750	19,000	20,200	5,530
March	5,530	22,100	21,100	6,580
April	6,580	19,300	18,800	7,150
May	7,150	19,100	19,900	6,300
June	6,300	19,200	19,000	6,510
July	6,510	22,100	22,300	6,340
August	6,340	19,200	19,100	6,450
September	6,450	24,100	23,400	7,110
October	7,110	23,800	23,700	7,160
November	7,160	19,000	19,500	6,750
December	6,750	20,200	19,300	7,660
January-December	XX	248,000	246,000	XX
2007, January	7,660	21,200	20,100	8,810

^eEstimated. XX Not applicable.

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

²Includes zinc metal used to manufacture zinc oxide.

³Includes stocks held at locations other than smelters.

Sources: U.S. Geological Survey and American Bureau of Metal Statistics.

TABLE 3
APPARENT CONSUMPTION OF REFINED ZINC ACCORDING TO INDUSTRY
USE AND PRODUCT¹

(Metric tons)

Industry and product	2006			2007 January ²
	January- December ^f	November ^f	December ^f	
Galvanizing:				
Sheet and strip	467,000	34,700	31,700	32,400
Other	160,000	11,600	9,600	9,800
Total	627,000	46,300	41,300	42,200
Brass and bronze	173,000	12,400	10,800	11,400
Zinc-base alloy	240,000	18,300	16,500	16,900
Other uses ³	85,800	6,800	6,300	6,400
Grand total	1,130,000	83,800	74,900	76,900

^fRevised.

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

²Data based on reported consumption, stocks, and estimated trade data.

³Includes zinc used in making zinc dust, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, rolled zinc, and miscellaneous uses not elsewhere specified.

TABLE 4
AVERAGE ZINC PRICES¹

Period	North American	LME ² cash	
	¢/lb.	¢/lb.	\$/t
2006:			
January	100.96	94.80	2,090.00
February	106.84	100.65	2,220.00
March	116.80	109.61	2,420.00
April	148.56	139.88	3,080.00
May	172.59	161.68	3,570.00
June	157.93	146.27	3,230.00
July	163.73	151.45	3,340.00
August	163.83	151.77	3,350.00
September	166.60	154.32	3,400.00
October	186.07	173.37	3,820.00
November	210.78	198.73	4,380.00
December	211.83	199.79	4,410.00
January-December	158.88	148.53	3,270.00
2007, January	183.47	171.74	3,790.00

¹Special High Grade.

²London Metal Exchange.

Source: Platts Metals Week.

TABLE 5
U.S. EXPORTS OF ZINC¹

Material	2005		2006 ²			
	Quantity (metric tons)	Value (thousands)	December		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	784	\$1,500	666	\$710	2,530	\$3,800
Ore and concentrate (zinc content)	786,000	477,000	25,300	47,700	825,000	1,060,000
Waste and scrap (gross weight)	56,000	62,000	11,900	12,100	88,300	103,000
Powders, flakes, dust (zinc content)	9,310	18,500	1,320	2,670	16,400	33,300
Oxide (gross weight)	14,600	23,600	2,710	5,390	28,800	47,900
Chloride (gross weight)	1,860	2,310	97	209	1,510	1,930
Sulfate (gross weight)	2,820	1,870	395	249	42,800	22,500
Compounds, other (gross weight)	1,130	887	19	65	706	2,200

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

²Data for January 2007 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF ZINC¹

Material	2005		2006 ²			
	Quantity (metric tons)	Value (thousands)	December		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	668,000	\$875,000	59,100	\$205,000	851,000	\$2,050,000
Ore and concentrate (zinc content)	156,000	117,000	63,800	17,100	383,000	183,000
Waste and scrap (gross weight)	9,580	8,820	1,630	2,530	14,200	18,700
Powders, flakes, dust (zinc content)	23,400	46,000	2,440	10,700	30,100	107,000
Oxide (gross weight)	109,000	127,000	5,230	15,300	125,000	243,000
Chloride (gross weight)	723	1,250	126	151	1,260	1,780
Sulfate (gross weight)	31,100	16,600	3,190	3,830	44,400	34,100
Compounds, other (gross weight)	7,010	6,370	197	263	4,970	4,000

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

²Data for January 2007 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 7
SHIPMENTS OF ZINC METAL FROM THE NATIONAL
DEFENSE STOCKPILE¹

(Metric tons)

Period	Shipments	Ending inventory ²
2006:		
January	NA ³	46,200
February	4,590	41,600
March	4,500	37,100
April	3,590	33,500
May	4,640	28,800
June	3,380	25,500
July	994	24,500
August	3,690	20,800
September	5,460	15,300
October	1,900	13,400
November	NA ³	15,500
December	237	15,300
January-December	33,000	XX
2007, January	472	14,800

NA Not available. XX Not applicable.

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

²Includes excess material and material committed for sale/pending shipment.

³Monthly shipments are not reflected by changes in inventory due to an inventory adjustment or shipment delay.

Source: Defense National Stockpile Center.

TABLE 8
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY^{1,2}

(Metric tons)

Material and country	General imports			Imports for consumption		
	2005	2006		2005	2006	
		December	Year to date		December	Year to date
Ore and concentrate (zinc content):						
Australia	8,590	--	2,850	8,590	--	2,850
Ireland	13,000	--	17,000	13,000	--	17,000
Mexico	27,300	32,500	88,100	27,300	32,500	88,100
Peru	104,000	31,300	273,000	104,000	31,300	273,000
Other	2,900	--	2,750	2,900	--	2,750
Total	156,000	63,800	383,000	156,000	63,800	383,000
Blocks, pigs, or slab:						
Australia	1	--	15,000	24,600	--	47,100
Brazil	43,700	662	8,790	43,800	662	13,000
Canada	439,000	42,600	535,000	439,000	42,600	535,000
China	15	--	2,000	2,140	1,580	57,300
India	--	2,080	12,200	--	2,080	12,200
Japan	--	--	251	1,210	--	6,200
Korea, Republic of	5,030	--	--	8,710	1,550	66,800
Mexico	147,000	10,400	103,000	147,000	10,400	103,000
Norway	--	--	--	--	--	1,160
Peru	235	249	1,080	834	249	1,360
Other	1,320	--	6,020	1,770	--	7,790
Total	636,000	55,900	683,000	668,000	59,100	851,000
Dross, ashes, fume (zinc content)						
	15,800	1,450	31,100	15,800	1,450	31,100
Grand total	807,000	121,000	1,100,000	840,000	124,000	1,270,000
Oxide (gross weight):						
Canada	62,000	2,400	49,100	62,000	2,400	49,100
China	173	62	277	173	62	277
Italy	15,400	--	24,500	15,400	--	24,500
Japan	1,080	143	1,290	1,080	143	1,290
Mexico	24,100	2,370	31,900	24,100	2,370	31,900
Netherlands	4,450	122	7,820	4,450	122	7,820
Other	2,040	124	10,100	2,040	124	10,100
Total	109,000	5,230	125,000	109,000	5,230	125,000
Other (gross weight):						
Waste and scrap	9,580	1,630	14,200	9,580	1,630	14,200
Sheets	3,630	110	2,050	3,630	110	2,050
Powders, flakes, dust (zinc content)	23,400	2,440	30,100	23,400	2,440	30,100

-- Zero.

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

²Data for January 2007 were not available at time of publication.

Source: U.S. Census Bureau.