ASSEMBLYMAN JEFFREY DINOWITZ
REPORT TO THE COMMUNITY

A Critical Analysis of the New York City Department of Environmental Protection's Explanation for the Rising Cost of constructing the Croton Water Treatment Plant in Van Cortlandt Park in the Bronx, NY

November 11, 2007

EXECUTIVE SUMMARY

Assemblyman Dinowitz' study found that none of the items cited by the DEP – inflation, labor, materials or the value of the US dollar -- could account for the doubling of the cost of a $1.3 billion project.

INFLATION

A review for the historical data for inflation[1] is displayed below. In June, 2004, the original cost projection of $1.3 billion compounded at the average annual inflation during the period of 3.3% results in $1.430 billion. Thus the impact of inflation on the DEP's original cost estimates has been no more than $130 million.

Furthermore, despite the DEP's false contentions, a 2.75% inflation rate WAS factored into the DEP's original estimates, so the affect of inflation on the comparative total cost of the project is even smaller.

InflationData.com — Current Inflation Rate

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
2007	2.08%	2.42%	2.78%	2.57%	2.69%	2.69%	2.36%	1.97%	2.76%				
2006	3.99%	3.60%	3.36%	3.55%	4.17%	4.32%	4.15%	3.82%	2.06%	1.31%	1.97%	2.54%	3.24%
2005	2.97%	3.01%	3.15%	3.51%	2.80%	2.53%	3.17%	3.64%	4.69%	4.35%	3.46%	3.42%	3.39%
2004	1.93%	1.69%	1.74%	2.29%	3.05%	3.27%	2.99%	2.65%	2.54%	3.19%	3.52%	3.26%	2.68%
2003	2.60%	2.98%	3.02%	2.22%	2.06%	2.11%	2.11%	2.16%	2.32%	2.04%	1.77%	1.88%	2.27%
2002	1.14%	1.14%	1.48%	1.64%	1.18%	1.07%	1.46%	1.80%	1.51%	2.03%	2.20%	2.38%	1.59%
2001	3.73%	3.53%	2.92%	3.27%	3.62%	3.25%	2.72%	2.72%	2.65%	2.13%	1.90%	1.55%	2.83%
2000	2.74%	3.22%	3.76%	3.07%	3.19%	3.73%	3.66%	3.41%	3.45%	3.45%	3.45%	3.39%	3.38%

Get more Historical Data from InflationData.com

On April 16, 2003 Amendment Number 1 was presented to the New York State Environmental Facilities Corporation's (EFC) as the Annual Information[2] statement, dated October 15, 2002 containing amendments including a New Exhibit 4A – "Certain Information Relating to the New York City Municipal Water Finance Authority and the System." The 2002 Capital Improvement Plan[3] referred to in that 2003 review by Black and Veatch Rate Consultants[4] confirms that the original allocation in the budget was within the estimated inflation rate of $1.4 billion.[5] While inflation has gone up, it is not so high to equal the doubling of the project cost.

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[1] http://www.inflationdata.com/Inflation/Inflation_Rate/CurrentInflation.asp

[2] http://www.nysefc.org/docs/2002_ais_amendments.pdf

[3] Proposed improvements and additions to the System under the CIP for the Reporting Period were independently evaluated and confirmed by Metcalf & Eddy of New York, Inc. (''Metcalf & Eddy''). The Forecasted Cash Flows rely upon the conclusions of Metcalf & Eddy regarding the level of planned capital improvement expenditures required during the Reporting Period to maintain the System in good working order.

[4] http://www.nysefc.org/docs/2002_ais_amendments.pdf, Appendix B is a letter from BLACK & VEATCH NEW YORK LLP, RATE CONSULTANTS dated April 16, 2003., page 1-B-1

[5] http://www.nysefc.org/docs/2002_ais_amendments.pdf, See document page 28, exhibit page I-22

LABOR COSTS

The New York City Comptroller is a watchdog for Labor's Prevailing Wages on city construction projects. According to the NY City Comptroller's data on prevailing wages,[6] the wages and benefits for selected construction workers increased between 2004 and 2007, but no more than 17%. As most of the contractor's bids were prepared and submitted prior to 2007, the cost should actually be less than that presented in the attached table below.[7] While wages and benefits has gone up, it is not so high to equal the doubling of the project cost.

Prevailing Wage Rates and Benefits by Selected Trades, NYC Comptroller Comparison[8] and Percentage Change[9] of Archive Schedules[10] for the years 2004[11] and 2007[12]

Trade	11-24-2003 to 6-30-2004			7-1-2007 to 6-30- 2008			% CHANGE
	Wage/hr	Suppl Benefits/hr	TOTAL	Wage/hr	Suppl Benefits/hr	TOTAL	
Asbestos Handler	23.85	6.35	30.2	26.25	9.2	35.45	17.38
Bricklayer	36.57	18.06	54.63	39.2	21.66	60.86	11.4
Carpenter	35.66	24.91	60.57	40.27	30.36	70.63	16.61
Electrician	41	32.36	73.36	44	35.51	79.51	8.38
Iron Worker	35.5	35.73	71.23	37.66	43.88	81.54	14.47
Laborer	31.29	16.43	47.72	34.09	20.9	54.99	15.23
Painter	31.25	16.17	47.42	33.5	18.9	52.4	10.5
Plumber	38.87	22.35	61.22	42.95	24.86	67.81	10.76
Sheet Metal Worker	37.71	25.96	63.67	40.99	31.81	72.8	14.34
Tunnel Worker	28.17	31.31	59.48	32.89	34.33	67.22	13.01

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[6] Comptroller Prevailing Wage
[7] See table
[8] Prepared by Karen Argenti, November 7, 2007
[9] (A-B)/Ax100=n
[10] Achieved Schedule of Prevailing Wages and Benefits, http://www.comptroller.nyc.gov/bureaus/bll/schedules_archives.shtm
[11] For the year 2004: http://www.comptroller.nyc.gov/bureaus/bll/2004_pdf_files/220-Prevailing-Wage-Schedule-03to04.pdf
[12] For the year 2007: http://www.comptroller.nyc.gov/bureaus/bll/2007_pdf_files/220PrevailingWageSchedule06-07.pdf

MATERIALS COSTS

The City doesn't pay for materials on the project as those expenses are borne by each contractor: Schiavone as part of the $127 million site preparation costs, or Skanska, as part of its $1.3 billion agreement to build the plant, etc. Furthermore, despite the DEP statements to NY1 that the price of copper tubing has increased 150%, the question is how much are we paying the contractor.

According to a report[13] by the US Geological Survey (USGS is the federal agency for science about the Earth, its natural and living resources, natural hazards, and the environment) over the last three years, the price of copper and other metals used in construction has remained consistent, except for the affect of inflation, which is 3.3%. While the cost of materials has gone up, it is not so high to equal the doubling of the project cost.

VALUE OF THE DOLLAR (USD)

By reviewing the historical exchange rate of the USD[14] from 2004 to 2007, the range changes throughout the years but the difference between the highest and the lowest is not more than 20%. The difference between the highest at $.84 in November 2005 and the lowest at $.69 in November 2007 is 17.86%.

The January 2004 (the time of the FSEIS review statements) rate was $.79 USD. The date the bid estimate was submitted for CRO 311 by Schiavone ($127 million) was the same month, therefore no impact. The date the bid estimate for CRO 312G (Skanksa $1.3 billion) was submitted in January 2006, the rate was $.83 USD -- a difference of 5.06%.

APPENDIX

[13] http://pubs.usgs.gov/of/2007/1257/ at http://pubs.usgs.gov/of/2007/1257/ofr2007-1257.pdf Slide 9 and 30

[14] http://www.x-rates.com/d/EUR/USD/hist2004.html, . . . hist2005.html, . . . hist2006.html, . . . hist2007.html,

Current Inflation Rates

FACTS:
The DEP calculated the cost of the project at $992 million which included the inflation rate of 2.75% when they issued the final EIS in June 2004.

In the 2003 Capital Improvement Ten Year Plan that the DEP submitted for water rate approval, the project was budgeted for $1,400 million.

The assumption is that the inflation rate of 2.75% was included in the projected years.

InflationData.com	Current Inflation Rate												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
2007	2.08%	2.42%	2.78%	2.57%	2.69%	2.69%	2.36%	1.97%	2.76%				
2006	3.99%	3.60%	3.36%	3.55%	4.17%	4.32%	4.15%	3.82%	2.06%	1.31%	1.97%	2.54%	3.24%
2005	2.97%	3.01%	3.15%	3.51%	2.80%	2.53%	3.17%	3.64%	4.69%	4.35%	3.46%	3.42%	3.39%
2004	1.93%	1.69%	1.74%	2.29%	3.05%	3.27%	2.99%	2.65%	2.54%	3.19%	3.52%	3.26%	2.68%
2003	2.60%	2.98%	3.02%	2.22%	2.06%	2.11%	2.11%	2.16%	2.32%	2.04%	1.77%	1.88%	2.27%
2002	1.14%	1.14%	1.48%	1.64%	1.18%	1.07%	1.46%	1.80%	1.51%	2.03%	2.20%	2.38%	1.59%
2001	3.73%	3.53%	2.92%	3.27%	3.62%	3.25%	2.72%	2.72%	2.65%	2.13%	1.90%	1.55%	2.83%
2000	2.74%	3.22%	3.76%	3.07%	3.19%	3.73%	3.66%	3.41%	3.45%	3.45%	3.45%	3.39%	3.38%
Get more Historical Data from InflationData.com													

http://www.inflationdata.com/Inflation/Inflation_Rate/CurrentInflation.asp

$1.3 billion in June 2004 compounded at the average annual inflation during the period of 3.3% results in $1.430 billion. Thus the impact in isolation of inflation has been $130 million.

AMENDMENT NUMBER 1, DATED APRIL 16, 2003

to the New York State Environmental Facilities Corporation's

Annual Information Statement, dated October 15, 2002

Containing Amendments Relating to the Following:

- **New Board of Directors' Designee from the Department of Environmental Conservation; and**

- **New Exhibit 4A – "Certain Information Relating to the New York City Municipal Water Finance Authority and the System"**

CAPITAL IMPROVEMENT PROGRAM
(Thousands of Dollars)

CITY FUNDS	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
WATER SUPPLY AND TRANSMISSION												
Kensico-City Tunnel	$ —	$ 15,000	$ —	$ 50,000	$ —	$ —	$ 500,000	$ 150,000	$ 500,000	$ —	$ 500,000	$ 1,715,000
Conveyance	—	40,000	—	—	100,000	100,000	—	425,000	—	550,000	—	1,215,000
City Tunnel No. 3, Stage 1	64,429	2,071	133,100	20,000	6,500	—	—	—	—	2,800	—	228,900
City Tunnel No. 3, Stage 2	43,714	13,000	35,000	257,000	8,000	355,000	—	150,000	—	15,000	—	876,714
Miscellaneous Programs	—	1,000	10,000	—	—	—	—	—	—	—	—	11,000
Subtotal	108,143	71,071	178,100	327,000	114,500	455,000	500,000	725,000	500,000	567,800	500,000	4,046,614
WATER DISTRIBUTION												
Croton Filtration Project	82,906	11,000	115,600	415,000	415,000	425,000	—	7,000	—	—	—	1,471,506
Dam Safety Program	22,335	60,133	112,100	27,375	—	305,000	—	—	—	—	—	526,943
Trunk Distribution and Main Extension	29,773	41,008	70,904	20,402	21,873	23,355	5,729	5,872	6,031	6,206	6,398	237,551
Trunk Distribution and Main Replacement	166,687	94,096	61,955	70,326	91,127	106,745	110,271	110,128	109,969	111,534	113,256	1,146,094
Other System Improvements	3,694	10,000	—	5,100	—	—	—	—	—	—	—	18,794
Water Quality Preservation	359,407	176,001	247,242	116,755	458,386	11,300	11,609	11,927	11,255	11,593	44,191	1,459,666
Subtotal	664,802	392,238	607,801	654,958	986,386	871,400	127,609	134,927	127,255	129,333	163,845	4,860,554
WATER POLLUTION CONTROL												
Biological Nutrient Removal	15,592	—	—	—	—	—	—	—	—	—	—	15,592
Consent Decree Upgrading & Construction	53,423	737,217	210,000	382,721	10,000	33,000	260,000	48,457	10,000	31,000	70,000	1,845,818
Plant Upgrading & Reconstruction	129,986	71,000	102,300	148,295	81,450	209,525	86,050	100,500	93,500	83,500	83,500	1,189,606
Sludge Disposal	2,123	26,500	—	—	—	—	148,250	—	—	—	—	176,873
Plant Component Stabilization	513,659	300,321	620,000	65,000	—	—	345,000	325,000	330,000	345,000	365,000	3,208,980
Water Quality Mandates	108,490	26,590	125,823	56,659	(11,650)	44,200	31,000	16,000	205,000	10,000	100,000	712,112
Subtotal	823,273	1,161,628	1,058,123	652,675	79,800	286,725	870,300	489,957	638,500	469,500	618,500	7,148,981
SEWERS												
Replacement or Augmentation	10,147	3,196	3,600	—	476	—	—	—	—	—	—	17,419
Extensions to Accommodate New Development	154,066	86,930	56,884	50,499	68,135	56,057	83,802	70,800	89,801	69,219	92,560	878,753
Programmatic Response to Regulatory Mandates	—	—	9,000	—	—	—	—	—	—	—	—	9,000
Programmatic Replacement and Reconstruction	17	4,200	5,200	—	3,200	4,900	3,200	3,200	3,200	3,293	3,395	33,805
Replacement of Chronically Failing Components	123,524	97,710	55,245	36,189	52,189	53,043	46,998	45,000	45,999	49,127	48,587	653,611
Trunks	—	125	—	5,136	—	—	—	—	—	—	—	5,261
Subtotal	287,754	192,161	129,929	91,824	124,000	114,000	134,000	119,000	139,000	121,639	144,542	1,597,849
EQUIPMENT												
Conservation	47,290	28,000	4,223	4,223	4,223	4,223	4,223	4,223	4,223	4,345	4,480	113,676
Management Information Systems	18,807	1,740	1,892	860	635	—	—	—	—	—	—	23,934
Facility Purchases & Reconstruction	43,726	26,768	52,500	500	27,500	12,375	38,118	—	—	—	—	201,487
Utility Relocation	38,691	21,115	20,465	20,480	20,375	20,375	20,375	20,375	20,405	20,435	20,510	243,601
Vehicles and Equipment	11,907	4,056	4,000	4,000	3,999	4,000	4,000	4,000	4,000	4,000	4,000	51,962
Subtotal	160,421	81,679	83,080	30,063	56,732	40,973	66,716	28,598	28,628	28,780	28,990	634,660
TOTAL CITY FUNDS	2,044,393	1,898,777	2,057,033	1,756,520	1,361,418	1,768,098	1,698,625	1,497,482	1,433,383	1,317,052	1,455,877	18,288,658
STATE, FEDERAL, AND PRIVATE FUNDS												
Water Quality Preservation	3,709	—	—	—	—	—	—	—	—	—	—	3,709
Consent Decree Upgrading & Construction	32,862	—	—	—	—	—	—	—	—	—	—	32,862
Water Quality Mandates	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	—	—	225,000
Miscellaneous System Improvements	135	12	—	—	—	—	—	—	—	—	—	147
Replacement of Chronically Failing Components	1,482	—	—	—	—	—	—	—	—	—	—	1,482
TOTAL NON-CITY FUNDS	63,188	25,012	25,000	25,000	25,000	25,000	25,000	25,000	25,000	—	—	263,200
TOTAL FUNDS	$2,107,581	$1,923,789	$2,082,033	$1,781,520	$1,386,418	$1,793,098	$1,723,625	$1,522,482	$1,458,383	1,317,052	1,455,877	$18,551,858

BLACK & VEATCH

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Black & Veatch New York LLP

April 16, 2003

Mr. Alan L. Anders, Executive Director
New York City Municipal Water Finance Authority

Re: New York City Municipal Water Finance Authority
Water and Sewer System Second Resolution Revenue Bonds, Fiscal 2003 Series 5

Dear Mr. Anders:

The purpose of this letter is to summarize the conclusions of our independent analysis of the financial forecast of the Authority (the "Forecasted Cash Flows") for fiscal years 2003 through 2008 (the "Reporting Period") in connection with the issuance by the New York City Municipal Water Finance Authority (the "Authority") of the Authority's $295,436,561 Water and Sewer System Second Resolution Revenue Bonds, Fiscal 2003 Series 5 (the "Series 5 Bonds"). Proceeds from the Series 5 Bonds are to be used: (i) to pay principal and interest on approximately $170 million aggregate principal amount of the Authority's outstanding Commercial Paper Notes, (ii) to reimburse banks for amounts drawn under an irrevocable letter of credit to pay principal and interest on approximately $125 million aggregate principal amount of the Authority's outstanding Commercial Paper Notes and (iii) to pay certain costs of issuance. In conducting our analysis we have prepared the following tables which are included in this Exhibit B under the headings "Capital Improvement and Financing Program" and "Financial Operations":

- Sources and Uses of Capital Funds
- Future Debt Service Requirements
- Projected Revenues
- Projected System Expense
- Forecasted Cash Flows

The forecast includes provisions for the financing of improvements to The City of New York (the "City") Water and Sewer System (the "System") as reflected in the Capital Improvement Program (the "CIP") for the Reporting Period. The Forecasted Cash Flows set forth the ability of the System to meet the operating costs, working capital needs and other financial requirements of the System, including the debt service requirements associated with the Outstanding Bonds issued under the Authority's General Revenue Bond Resolution (the "General Resolution") and obligations issued under the Authority's Second General Resolution (the "Second Resolution"), and additional Authority First Resolution Bonds and Authority Second Resolution Bonds whose issuance by the Authority during the six years ending June 30, 2008 is anticipated.

Revenues pledged to secure the Authority's First Resolution Bonds are to be derived from the following sources: (i) all Revenues, (ii) all moneys or securities in any of the Funds and Accounts, and (iii) all other monies and securities to be received, held or set aside by the Authority or by any Fiduciary pursuant to the General Resolution. The term "Revenues", as defined by the General Resolution, includes, but is not limited to, all rents, fees, charges and other income and receipts derived by the New York City Water Board (the "Board") from users of the System, and certain investment proceeds received by the Board.

Moneys pledged to secure bonds issued under the Second Resolution are to be derived from: (i) all available amounts on deposit in the Subordinated Indebtedness Fund established under the General Resolution and (ii) all moneys or securities in any of the funds and accounts established under the Second General Resolution, except the Arbitrage Rebate Fund and the Debt Service Reserve Fund.

The Forecasted Cash Flows summarize the anticipated financial operations of the Authority for the Reporting Period. We have reviewed, to the extent practicable, the Authority's books, records, financial reports, and statistical data, and have conducted such other investigations and analyses as deemed necessary to assemble and analyze the forecast of revenues, revenue requirements, and debt service coverage for the Reporting Period. We have performed various financial tests and analyses necessary to support our findings and conclusions. The Authority uses a fiscal year ending June 30, and all references in this Exhibit B to a fiscal year ("Fiscal Year") relate to the 12 month period ending June 30 of the year shown.

Proposed improvements and additions to the System under the CIP for the Reporting Period were independently evaluated and confirmed by Metcalf & Eddy of New York, Inc. ("Metcalf & Eddy"). The Forecasted Cash Flows rely upon the conclusions of Metcalf & Eddy regarding the level of planned capital improvement expenditures required during the Reporting Period to maintain the System in good working order.

Based upon our studies, we offer the following opinions and conclusions:

1. It is our opinion that Revenues (including projected revenue increases resulting from anticipated future rate increases to be implemented by the Board), as set forth in the Forecasted Cash Flows, are currently and will be sufficient to meet the following requirements during the Reporting Period:

a. One hundred and fifteen percent (115%) of the principal of and interest on all Authority First Resolution Bonds issued under the General Resolution, as the same shall become due and payable, for which such Revenues are pledged;

b. One hundred percent (100%) of the principal of and interest on Authority Second Resolution Bonds and other subordinate obligations payable from Revenues;

c. One hundred percent (100%) of all expenses of operation, maintenance, and repair of the water and wastewater system; and

d. One hundred percent (100%) of other Required Deposits as required by the General Resolution.

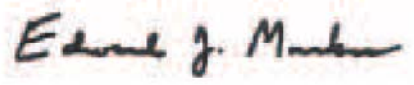
In addition, revenues are adequate to make all payments to the City.

2. In the analysis of the forecast of future operations summarized in this Exhibit B, Black & Veatch has reviewed certain assumptions with respect to conditions, events and circumstances which may occur in the future. We believe that these assumptions are reasonable and attainable, although actual results may differ from those forecast as influenced by the conditions, events and circumstances which actually occur.

3. In our opinion, the water and wastewater rates, fees, and charges of the Board, including projected increases, compare favorably to the rates and charges of other major cities and are reasonable.

We appreciate the opportunity to be of service to the Authority in this important matter.

Very truly yours,



BLACK & VEATCH NEW YORK LLP

Prevailing Wage Rates and Benefits by Selected Trades, NYC Comptroller
Comparison[1] and Percentage Change[2] of Archive Schedules[3] for the years 2004[4] and 2007[5]

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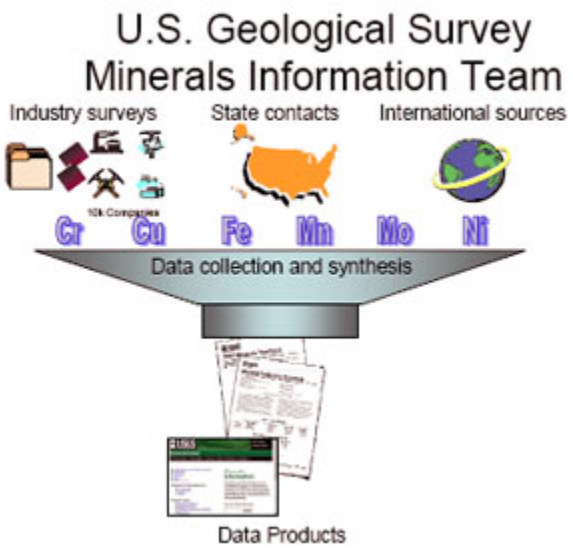
Electrician	41	32.36	73.36	44	35.51	79.51	8.38
Iron Worker	35.5	35.73	71.23	37.66	43.88	81.54	14.47
Laborer	31.29	16.43	47.72	34.09	20.9	54.99	15.23
Painter	31.25	16.17	47.42	33.5	18.9	52.4	10.5
Plumber	38.87	22.35	61.22	42.95	24.86	67.81	10.76
Sheet Metal Worker	37.71	25.96	63.67	40.99	31.81	72.8	14.34
Tunnel Worker	28.17	31.31	59.48	32.89	34.33	67.22	13.01

[1] Prepared by Karen Argenti, November 7, 2007
[2] (A-B)/Ax100=n
[3] Achieved Schedule of Prevailing Wages and Benefits, http://www.comptroller.nyc.gov/bureaus/bll/schedules_archives.shtm
[4] For the year 2004: http://www.comptroller.nyc.gov/bureaus/bll/2004_pdf_files/220-Prevailing-Wage-Schedule-03to04.pdf
[5] For the year 2007: http://www.comptroller.nyc.gov/bureaus/bll/2007_pdf_files/220PrevailingWageSchedule06-07.pdf

Open-File Report 2007–1257

Cr, Cu, Mn, Mo, Ni, and Steel Price Drivers

By John F. Papp, Lisa A. Corathers, Daniel L. Edelstein, Michael D. Fenton, Peter H. Kuck, and Michael J. Magyar



PDF (4,846 KB, 113 pages)

Summary

This report contains the 55 slide images from a presentation made by the author at the meeting of the Metal Powder Industries Federation held in Denver, CO, on May 15, 2007.

The Metal Powder Industries Federation (MPIF) invited the U.S. Geological Survey (USGS) to speak at their annual meeting about the price drivers for chromium, copper, manganese, molybdenum, nickel, and steel. These metals are of interest to MPIF because the prices of these raw materials used by their industry were at historically high levels. Because the USGS closely monitors, yet neither buys nor sells, metal commodities, it is an unbiased source of metal price information and analysis.

The authors used information about these and other metals collected and published by the USGS (U.S. production, trade, stocks, and prices) and about consumption and stocks internationally by country from industry organizations that publish such information, because metal markets are influenced by activities and events over the entire globe.

By seeking a common cause for common behavior among the various metal commodities, the authors found that major price drivers on metal commodities were inflation, major international events such as wars and recessions, and major national events such as the dissolution of the Soviet Union in 1991 and economic growth in China, which started with the open door policy in the 1970s but did not have significant market impact until starting in the 1990s. Metal commodity prices also responded to commodity-specific events.

Slide 9

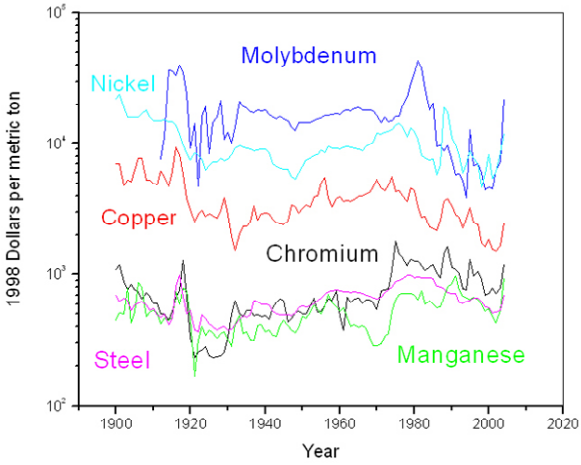
The 6 representative metals (shown here in inflation adjusted dollars) show more clearly that:

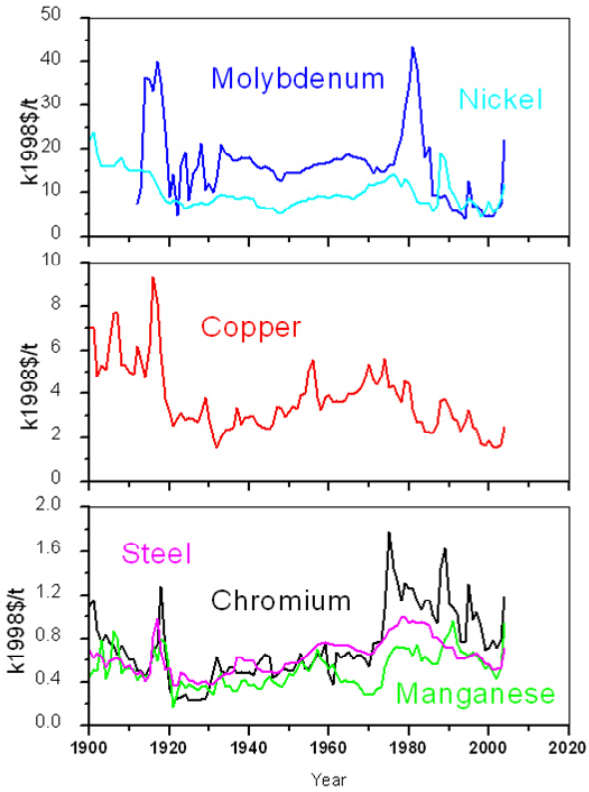
(1) Measured in current dollars, prices have risen; however, measured in inflation-adjusted dollars, prices in 2004 are quite similar to their historical values, marginally higher, or even less.

(2) Measured in current dollars, price fluctuations are greater than they used to be; however, measured in inflation-adjusted dollars, price fluctuations are quite similar to historical fluctuations.

There is a pattern of fluctuating prices throughout the time period; however, there was relative price stability in the central portion of the time period (about 1940-1960) owing to government price controls and allocations during wartime. The greatest impact on price over the (1900-2004) time period has been inflation.

Prices





Units: 1998$/t - Price deflated to 1998 dollars per metric ton.

Slide 30

From a peak in 1995, copper price declined until 2003 when it started to increase. Copper mine production rose over the 1995-2003 time period. 2003 is the year that copper stocks started to decline.

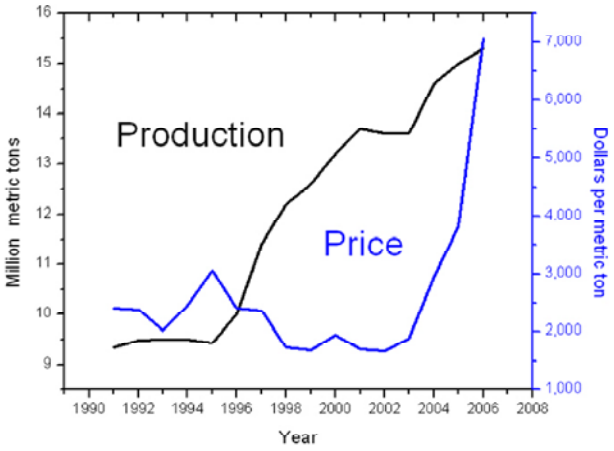
Stocks are the buffer between production and consumption. They are the reservoir of material that permits production and consumption to balance. Stock changes indicate the imbalance between production and consumption.

Like that of the other metals, world copper mine production was increasing while copper price was declining or steady. The stocks-price graph shows that demand got ahead of supply in 2003 when stocks dropped to near historic low levels and price rose. Stocks continued to decrease until 2005.

The price drop in 1997 followed the discovery in 1996 that a rogue trader used trading company money to maintain the price of copper. Copper is traded internationally and production, consumption, and stock information are widely available. The copper market is relatively transparent. The balance between production and consumption affects price; stocks changes indicate the degree and direction of balance in the market. Demand is reduced by recessions; supply can be delayed by long lead times for new facilities.

The strong relation between stock and price levels and changes suggests that an analysis of the effect of an event on prices is incomplete without knowledge of stocks.

Copper production



World copper mine production and price.

Copper (LME) stocks and price.

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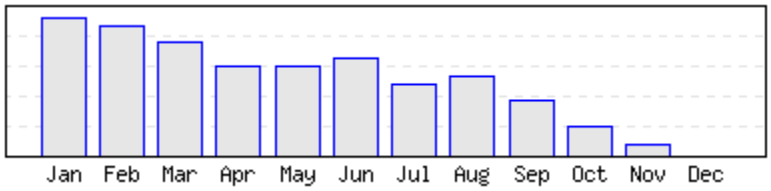
2007 - Euros to 1 USD (invert)



Average Rates

January	0.769334 EUR	(23 days average)
February	0.764384 EUR	(20 days average)
March	0.754985 EUR	(22 days average)
April	0.740076 EUR	(21 days average)
May	0.739935 EUR	(23 days average)
June	0.745139 EUR	(21 days average)
July	0.728812 EUR	(22 days average)
August	0.733945 EUR	(23 days average)
September	0.719036 EUR	(20 days average)
October	0.702626 EUR	(23 days average)
November	0.691485 EUR	(3 days average)

base currency | American Dollar

change target currency by clicking on list at right

year | 2007

graph : 30 days | 120 days | monthly average
use American Dollar as target currency

Currency

. American Dollar
. Argentine Peso
. Australian Dollar
. Botswana Pula
. Brazilian Real
. British Pound
. Canadian Dollar
. Chilean Peso
. Chinese Yuan
. Colombian Peso
. Danish Krone
. Euro
. Hong Kong Dollar
. Hungarian Forint
. Iceland Krona
. Indian Rupee
. Iranian Rial
. Israeli New Shekel
. Japanese Yen
. Malaysian Ringgit
. Mexican Peso
. Nepalese Rupee
. New Zealand Dollar
. Norwegian Kroner
. Omani Rial
. Pakistan Rupee
. Qatari Rial
. Saudi Riyal
. Singapore Dollar
. Slovenian Tolar
. South African Rand
. South Korean Won
. Sri Lanka Rupee
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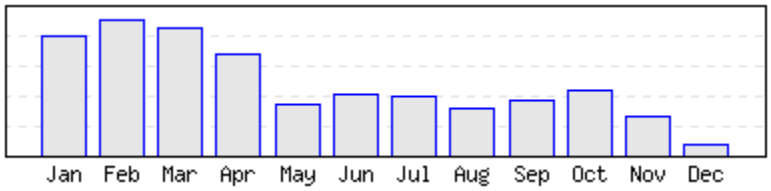
2006 - Euros to 1 USD (invert)



Average Rates

January	0.82627 EUR	(21 days average)
February	0.837593 EUR	(19 days average)
March	0.83141 EUR	(23 days average)
April	0.814902 EUR	(20 days average)
May	0.783345 EUR	(23 days average)
June	0.789929 EUR	(22 days average)
July	0.788641 EUR	(20 days average)
August	0.780622 EUR	(23 days average)
September	0.785722 EUR	(21 days average)
October	0.792652 EUR	(22 days average)
November	0.775936 EUR	(22 days average)
December	0.757527 EUR	(21 days average)

base currency | American Dollar

change target currency by clicking on list at right

year | 2006

graph : 30 days | 120 days | monthly average
use American Dollar as target currency

Currency

. American Dollar
. Argentine Peso
. Australian Dollar
. Botswana Pula
. Brazilian Real
. British Pound
. Canadian Dollar
. Chilean Peso
. Chinese Yuan
. Colombian Peso
. Danish Krone
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. Hungarian Forint
. Iceland Krona
. Indian Rupee
. Iranian Rial
. Israeli New Shekel
. Japanese Yen
. Malaysian Ringgit
. Mexican Peso
. Nepalese Rupee
. New Zealand Dollar
. Norwegian Kroner
. Omani Rial
. Pakistan Rupee
. Qatari Rial
. Saudi Riyal
. Singapore Dollar
. Slovenian Tolar
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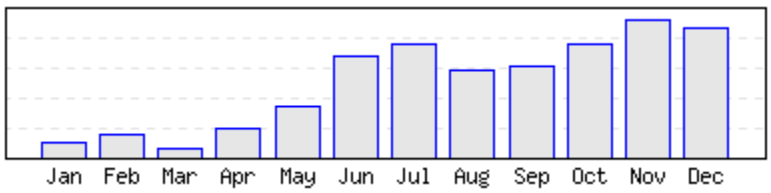
2005 - Euros to 1 USD (invert)



Average Rates

January	0.762113 EUR	(20 days average)
February	0.768564 EUR	(19 days average)
March	0.758583 EUR	(23 days average)
April	0.772678 EUR	(20 days average)
May	0.788075 EUR	(22 days average)
June	0.822727 EUR	(22 days average)
July	0.830835 EUR	(21 days average)
August	0.813361 EUR	(23 days average)
September	0.816512 EUR	(22 days average)
October	0.831505 EUR	(21 days average)
November	0.848452 EUR	(22 days average)
December	0.843167 EUR	(22 days average)

base currency | American Dollar

change target currency by clicking on list at right

year | 2005

graph : 30 days | 120 days | monthly average
use American Dollar as target currency

Currency

. American Dollar
. Argentine Peso
. Australian Dollar
. Botswana Pula
. Brazilian Real
. British Pound
. Canadian Dollar
. Chilean Peso
. Chinese Yuan
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. Iranian Rial
. Israeli New Shekel
. Japanese Yen
. Malaysian Ringgit
. Mexican Peso
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. Pakistan Rupee
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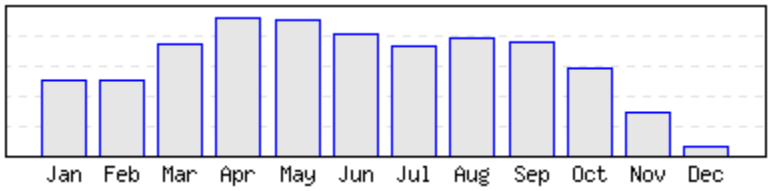
2004 - Euros to 1 USD (invert)



Average Rates

January	0.791328 EUR	(20 days average)
February	0.791199 EUR	(19 days average)
March	0.815652 EUR	(23 days average)
April	0.834161 EUR	(22 days average)
May	0.833433 EUR	(20 days average)
June	0.823351 EUR	(22 days average)
July	0.815356 EUR	(21 days average)
August	0.820331 EUR	(22 days average)
September	0.818104 EUR	(21 days average)
October	0.799695 EUR	(20 days average)
November	0.769676 EUR	(19 days average)
December	0.745974 EUR	(23 days average)

base currency American Dollar
change target currency by clicking on list at right

year 2004

graph : 30 days | 120 days | monthly average
use American Dollar as target currency

Currency

. American Dollar
. Argentine Peso
. Australian Dollar
. Botswana Pula
. Brazilian Real
. British Pound
. Canadian Dollar
. Chilean Peso
. Chinese Yuan
. Colombian Peso
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. Singapore Dollar
. Slovenian Tolar
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The City of New York
Department of Enviromental Protection
Contract Services Division
Lefrak Plaza, 17th Floor
59-17 Junction Blvd
Corona, New York 11368

Bid Tabulation
PROJECT NUMBER: CRO-311(2)
PIN NUMBER: 82604WM00133
DESCRIPTION: CROTON WATER TREATMENT PLANT SITE, BRONX, ny

Date of Bid Opening: 05/27/2004 11:30
Engineers Estimate: 134,000,000.00 Designer: FRANCIS LO.
Date of Estimate: 01/16/2004 Bond/Sec Req.5%
Contract Term: 1044 C.P# REQ: 0
Bureau: ENVIRONMENTAL ENGINEERING

POS.	BIDDER'S NAME	BID.DEP	RESP	AMOUNT
1	SCHIAVONE CONSTRUCTION CO 150 MEADOWLANDS PKWY 3RD FL SECAUCUS NJ 07094	YES	YES	127,660,000.00
2	GRANITE HALMAR / EE CRUZ (JV)	YES	YES	129,474,257.00
3	SILVERITE CONSTRUCTION	YES	YES	139,760,625.00
4	TULLY CONSTRUCTION	YES	YES	178,681,000.00
5	JUDLAU CONTRACTING / MAYRICH (JV)	YES	YES	190,535,120.00
6	LAQUILA CONSTRUCTION	YES	YES	199,774,901.00
				0.00
				0.00
				0.00
				0.00
				0.00

SRF REQ.YES[] NO[].

TOTAL SOLICITED 0

I hereby certify that this is a true copy of the tabulation or bids received at the public opening of bids for the contract work described above.

Contract Services Supervisor

Present at Bid Opening
A. HERNANDEZ
S. JONES

PLEASE NOTE: Pursuant to NYC's Procurement Policy Board Rules, this award will be granted to the lowest responsible bidder after audit and review by the Comissioner of the Department of Environmental Protection.

The City of New York
Department of Enviromental Protection
Contract Services Division
Lefrak Plaza, 17th Floor
59-17 Junction Blvd
Corona, New York 11368

Bid Tabulation
PROJECT NUMBER: CRO-312G
PIN NUMBER: 82606WM00186
DESCRIPTION: CROTON WATER TREATMENT PLANT, BRONX, NY

Date of Bid Opening: 09/26/2006 11:30
Engineers Estimate: 974,600,000.00 Designer: FRANCIS LO
Date of Estimate: 01/03/2006 Bond/Sec Req.
Contract Term: 1726 C.P# REQ: 0
Bureau: ENVIRONMENTAL ENGINEERING

POS.	BIDDER'S NAME	BID.DEP	RESP	AMOUNT
1	PERINI/TUTOR-SALIBA/O&G (JV) 1102 LOWER SOUTH STREET PEEKSKILL NY 10566	YES	YES	1,127,000,000.00
2	SLATTERY SKANSKA/GOTTLIEB/TULLY (JV)	YES	YES	1,327,700,000.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00

SRF REQ.YES[] NO[].

TOTAL SOLICITED 0

I hereby certify that this is a true copy of the tabulation or bids received at the public opening of bids for the contract work described above.

Present at Bid Opening
G. HALL
A. HERNANDEZ

Contract Services Supervisor

PLEASE NOTE: Pursuant to NYC's Procurement Policy Board Rules, this award will be granted to the lowest responsible bidder after audit and review by the Comissioner of the Department of Environmental Protection.