

APPENDIX 2

GIANT YELLOWKNIFE STACK EMISSIONS

ARSENIC EMISSIONS FROM GIANT MINE ROASTER **RESULTS OF STACK TESTING**

| DATE | | EMISSION RATES | | | | FLOW | TESTER |
|---------------|------|--------------------|----------|--------------------|---------------------|--------|------------|
| | | TOTAL (mg/cu m) | (kg/day) | PART. (mg/cu m) | VAPOUR (mg/cu m) | | |
| May 27 | 1981 | 6.7 | 8.8 | 0.1 | 6.6 | 54,500 | Giant |
| May 28 | 1981 | 6.7 | 7.5 | 0.3 | 6.4 | 52,500 | Giant |
| June 24 | 1981 | 4.4 | 6.5 | 1.1 | 3.3 | 61,300 | Giant |
| July 14 | 1981 | 5.5 | 8.3 | 2.2 | 3.3 | 63,200 | Giant |
| July 31 | 1981 | 5.8 | 8.1 | N/A | N/A | 58,400 | Giant |
| * August 7 | 1981 | 18.4 | 27.2 | 18.1 | 0.3 | 61,500 | Giant |
| August 20 | 1981 | 18.9 | 24.0 | N/A | N/A | 53,000 | Giant |
| August 21 | 1981 | 9.3 | 11.2 | N/A | N/A | 50,100 | Giant |
| August 25 | 1981 | 14.1 | 17.3 | N/A | N/A | 51,000 | Giant |
| ** Dec. 15 | 1982 | 10.2 | 13.2 | 0.1 | 10.1 | 54,200 | Giant |
| July 5 | 1983 | 15.8 | 17.0 | N/A | N/A | 44,900 | EPS |
| July 7 | 1983 | 19.0 | 21.8 | N/A | N/A | 47,700 | EPS |
| July 8 | 1983 | 37.0 | 40.8 | N/A | N/A | 46,000 | EPS |
| July 11 | 1983 | 29.7 | 28.1 | N/A | N/A | 39,400 | EPS |
| July 12 | 1983 | 23.0 | 25.7 | N/A | N/A | 46,400 | EPS |
| July 13 | 1983 | 25.3 | 28.8 | N/A | N/A | 47,400 | EPS |
| ** Nov. 19 | 1985 | 14.4 | 27.1 | 5.5 | 8.9 | 78,000 | Giant |
| Nov. 18 | 1986 | 16.3 | 24.3 | 1.5 | 14.8 | 62,000 | Giant |
| Sept. 28 | 1988 | 158.1 | 185.0 | | | 48,800 | Giant |
| Oct. 5 | 1988 | 198.8 | 232.8 | 60.2 | 138.6 | 48,600 | Giant |
| ** Oct. 11 | 1989 | 24.0 | 26.4 | 2.3 | 21.7 | 45,300 | Giant |
| ** August 17 | 1990 | 34.3 | 37.1 | 2.3 | 32.0 | 45,000 | Giant |
| ** June 24 | 1991 | 16.3 | 15.2 | 0.5 | 15.8 | 38,700 | Giant |
| *** August 29 | 1991 | 25.8 | 59.0 | N/A | N/A | 95,000 | Contractor |
| October 30 | 1991 | 23.0 | 25.9 | N/A | N/A | 46,900 | Contractor |
| October | 1993 | 23.0 | 29.2 | | | 39,900 | Giant |
| Sept. 13 | 1995 | 3.2 | 3.2 | N/A | N/A | 45,000 | Contractor |

* These values for arsenic in Particulate and Vapour may have been switched in the report from Giant.

** The results of these tests are suspect because Giant did not follow the EPS protocol for sampling.

*** Giant disputes these results for daily mass emissions and stack flow. They believe that the contractor erred by a factor of two.