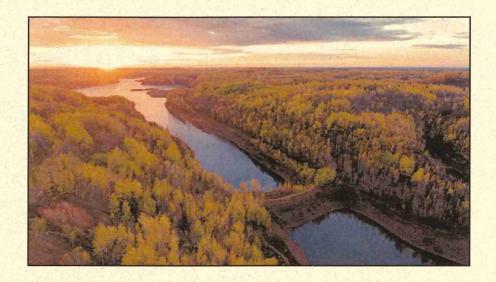
This document is made available electronically by the Minnesota Legislative Reference Library as part of an ongoing digital archiving project. https://www.lrl.mn.gov

The Annual Report of the Inspector of Mines



2020

Derek Harbin Mine Inspector St. Louis County 201 South 3rd Avenue West Virginia, MN 55792 218-742-9841 Joseph Austin Safety & Risk Mgmt. Director St. Louis County 2503 Rice Lake Road Duluth, MN 55811 218-726-2139

The ANNUAL REPORT of the **INSPECTOR OF MINES**

St. Louis County, Minnesota

2020 ******

INSPECTOR OF MINES

Derek Harbin 16079 Goss St., P.O. Box 241

Penailly, MN 55775

CELL PHONE: 218-910-4753

E-MAIL: harbind@stlouiscountymn.gov E-MAIL: austinj@stlouiscountymn.gov

FAX: 218-471-7270

ASSISTANT MINE INSPECTOR

David Hamalainen 620 Bourgin Road

CELL PHONE: 218-290-8855 OFFICE PHONE: 218-742-9843

SAFETY & RISK MGT. DIRECTOR

Joseph J. Austin 5888 Sunny Lane

Caribou Lake, MN 55811

OFFICE PHONE: 218-742-9841 OFFICE PHONE: 218-726-2139 CELL PHONE: 218-348-0355

FAX: 218-722-8860

ASSISTANT MINE INSPECTOR

Micah Hovet

37968 Hanson Lake Road Virginia, MN 55792 Grand Rapids, MN 55744 CELL PHONE: 218-244-7772 OFFICE PHONE: 218-742-9840

> OFFICE AT **GOVERNMENT SERVICES CENTER**

201 South 3rd Avenue West, Virginia, Minnesota 55792 PHONE: 218-742-9841 *********

THE ST. LOUIS COUNTY BOARD OF COMMISSIONERS

| District 1 | Frank Jewell, Duluth, Minnesota |
|------------|-----------------------------------|
| District 2 | Patrick Boyle, Duluth, Minnesota |
| | Beth Olson, Duluth, Minnesota |
| District 4 | Paul McDonald, Ely, Minnesota |
| | Keith Musolf, Duluth, Minnesota |
| | Keith Nelson, Virginia, Minnesota |
| | |

THE ITASCA COUNTY BOARD OF COMMISSIONERS

| District 1 | Davin Tinquist |
|--------------|-----------------------|
| District 2 | Terry Snyder |
| | Leo Trunt |
| District 4 | Burl Ives |
| District 5 | Ben DeNucci |
| | |
| .leff Walker | Itasca County Auditor |

Vic Williams Itasca County Sheriff, Itasca County Mine Inspector

THE HONORABLE BOARDS OF COMMISSIONERS

ST. LOUIS COUNTY COURT HOUSE DULUTH, MN 55802-1202 ITASCA COUNTY COURT HOUSE GRAND RAPIDS, MN 55744

Dear Chairs Jugovich, Ives and Commissioners:

The Annual Report of the Inspector of Mines for 2020 is herewith submitted.

Mining activity for 2020 showed a reduction in production schedule for both St. Louis and Itasca counties. A total of 31,921,917 tons of taconite were shipped from area operations compared to 38,665,148 in 2019. Mining related employment was reported at 3,562 individuals. This represents a decrease of 543 employees compared to the 4,105 reported in 2019. The total work hours reported for area mining operations was 7,036,130 for the year.

Throughout much of 2020 the COVID-19 pandemic impacted the world and area operations. It contributed to the temporary idling of several operations during portions of 2020 which had an influence on the total production numbers for the year. By the end of 2020 all six operations were back on line and active. These operations include: Cleveland Cliffs Minorca, Hibbing Taconite, Keetac, Minntac, Northshore and United Taconite.

The objective of growth during the coming years remains on the forefront. PolyMet carried on efforts to obtain the final mine permits associated with the NorthMet project (copper/nickel/precious metal mining), and Twin Metals continued to move forward with efforts directed toward their semi-precious metal mining project near Ely.

Mine land reclamation and reuse was showcased in 2020 with the opening of the Redhead Mountain Biking Park at the location of the Iron World Pit Complex (Leonard Burt, Monroe-Tenner, Dunwoody, Douglas, Duncan) near Chisholm, MN. This project became a reality after years of planning and major collaboration by numerous area stakeholders.

(Continued on page 3)

During 2020, area mining operations reported a total of 11 lost-time or serious accidents. This is an increase in comparison to the seven experienced in 2019, which was a historic low. No fatalities were reported for the 2020 year.

St. Louis County Mine Inspectors successfully completed all required inspections of area operations mandated by Minnesota State Law Chapter 180, Section 180.03 during 2020.

Acknowledgement and appreciation is extended to both Labor and Management for their continued interest, efforts and cooperation in the field of Safety and Health throughout the mines and plants in St. Louis and Itasca counties.

Respectfully submitted,

Dans P. Wali

Derek P. Harbin Inspector of Mines

St. Louis County

110

Joseph J. Austin MS, MIS, CHMM Director, Safety and Risk Management St. Louis County

Excerpts from the Law On

INSPECTOR OF MINES

CHAPTER 180

MINNESOTA STATUTES

SECTION 180.05

INSPECTOR, POWERS; OWNER, DUTIES.

It shall be lawful for the inspector of mines or assistant inspector to enter, examine, and inspect any and all mining operations and machinery belonging to the mine owner, operator, or agent at all reasonable times by day or by night, but so as not to obstruct or hinder the necessary workings of the facility. At the request of the inspector of mines, the owner, operator, or agent of a mining operation shall furnish for inspection:

- (1) all maps, drawings, and plans of the mining facility, together with the plans of all contemplated changes;
- (2) a suitable person, who shall be chosen by the inspector from a list containing at least three candidates, submitted by a majority of employees of the mine, to accompany the inspector through the mining operation;
- (3) any necessary equipment to make a proper inspection; and
- (4) all necessary facilities for such entry, examination, and inspection.

Upon receipt of a written request made by the inspector of mines, refusal to permit the inspection, or to furnish the necessary facilities for entry, examination, and inspection, shall be deemed a gross misdemeanor.

SUMMARY OF STATISTICS

2020

| Number of Mining Companies | 6 |
|--|-------------|
| Number of Mines in Operation | 6 |
| Number of Plants in Operation | 6 |
| Number of Wash Plants | 0 |
| Number of Mines Inactive | 285 |
| Number of Abandoned Mine Shafts Inspected | 66 |
| Total Number of Mines and Plants | 291 |
| Total Taconite Products Shipped | 31,921,917 |
| Total Concentrate Shipped | 3,560 |
| Taconite Mined | 107,153,931 |
| Stripping and Waste Removal, Tons | 129,230,131 |
| Total Material Moved, Tons Estimate | 236,384,062 |
| Total People Employed | 3,562 |
| Number of Fatal Accidents, Open Pit | 0 |
| Number of Fatal Accidents, Plant | 0 |
| Total Number of Fatal Accidents | 0 |
| Fatalities per 1,000 People Employed | 0 |
| Number of Lost-Time and Time Charged Accidents | |
| Total Number of Employee-Hours Worked | |
| Number of Inspections | 322 |
| Number of Investigations | 1 |

2020 WAGE RATES INCENTIVE INCLUDED

| Labor | Wage |
|-------|---------|
| Grade | Rate |
| 1 | \$26.83 |
| 2 | \$29.37 |
| 3 | \$32.30 |
| 4 | \$33.99 |
| 5 | \$36.10 |

Due to contractual changes the wage structure from mine to mine has changed significantly in recent years resulting in differing methods of payment. This results in different pay scales and different average daily wages from mine to mine. This is an example of what the rates are for the mines in St. Louis and Itasca counties.

| YEAR | MINES | TONS | EMPLOYED | INJURED | FATALS | FAT/1000 | WAGES |
|--------------------|---|--------------------------|-----------------|------------|----------|--------------|------------------|
| 1905-10 | (Averag | e per year) | 13,320 | | 73 | 5.44 | 2.110 |
| 1910-11 | (************************************** | . , , , | 19,918 | | 78 | 3.91 | 2.640 |
| 1911-12 | | | 15,286 | | 51 | 3.31 | 2.575 |
| 1912-13 | | | 16,048 | | 44 | 2.74 | 2.705 |
| 1913-14 | | | 16,000 | | 43 | 2.59 | 2.310 |
| 1914-15 | | | 11,430 | | 24 | 2.10 | 2.421 |
| 1915-16 | | | 14,639 | | 34 | 2.32 | 2.923 |
| 1916-17 | | | 14,779 | | 22 | 1.51 | 3.391 |
| 1917-18 | (Silver 0 | Cave Disaster) | 15,307 | | 60 | 3.92 | 4.347 |
| 1918-19 | 444 | 05.040.004 | 14,212 | | 33 | 2.32 | 5.645 |
| 1919-20 | 114 | 25,349,924 | 14,121 | | 36 26 | 2.55 2.16 | 6.010 6.037 |
| 1920-21 1921-22 | 102 84 | 27,165,386 13,398,525 | 12,043 9,688 | | 26 24 | 3.48 | 4.062 |
| 1921-22 | 90 | 33,147,517 | 11,896 | | 27 | 2.27 | 5.076 |
| 1924 | 75 | 22,808,875 | 11,538 | | 21 | 1.82 | 5.144 |
| 1925 | 76 | 29,077,679 | 10,180 | | 18 | 1.77 | 5.126 |
| 1926 | 66 | 32,583,943 | 9,225 | | 15 | 1.63 | 5.283 |
| 1927 | 70 | 28,052,363 | 9,038 | | 22 | 2.43 | 5.305 |
| 1928 | 59 | 29,704,774 | 8,022 | | 9 | 1.12 | 5.230 |
| 1929 | 57 | 35,680,720 | 8,008 | | 17 | 2.12 | 5.340 |
| 1930 | 50 | 25,196,155 | 7,752 | | 13 | 1.68 | 5.280 |
| 1931 | 32 | 12,270,886 | 4,824 | | 4 | 0.83 | 5.260 |
| 1932 | 30 | 1,773,750 | 2,243 | | 2 | 0.89 | 4.308 |
| 1933 | 35 | 10,809,167 | 2,843 | | 1 | 0.35 | 4.433 |
| 1934 | 42 | 11,781,226 | 4,272 | | 2 | 0.47 | 4.830 |
| 1935 | 40 | 13,703,715 | 4,079 | | 6 | 1.47 | 5.060 |
| 1936 | 42 50 | 23,322,975 | 4,694 | | 6 5 | 1.28 0.79 | 4.800 6.200 |
| 1937 1938 | 52 38 | 36,536,326 10,976,760 | 6,356 3,773 | | 4 | 1.06 | 5.816 |
| 1939 | 43 | 24,156,258 | 4,589 | | 3 | 0.65 | 6.080 |
| 1940 | 43 47 | 36,493,781 | 5,547 | | 1 | 0.18 | 6.400 |
| 1941 | 63 | 45,874,218 | 7,097 | 60 | 5 | 0.70 | 6.820 |
| 1942 | 60 | 53,923,635 | 8,101 | 107 | 14 | 1.70 | 7.030 |
| 1943 | 62 | 51,753,320 | 9,597 | 156 | 7 | 0.73 | 7.440 |
| 1944 | 66 | 50,532,679 | 9,390 | 247 | 6 | 0.64 | 7.750 |
| 1945 | 56 | 47,544,509 | 8,495 | 175 | 12 | 1.41 | 7.720 |
| 1946 | 60 | 38,380,361 | 7,100 | 167 | 6 | 0.84 | 7.720 |
| 1947 | 79 | 47,293,918 | 8,715 | 153 | 9 | 1.03 | 8.720 |
| 1948 | 80 | 52,020,563 | 10,286 | 178 | 5 | 0.49 | 9.480 |
| 1949 | 94 | 42,406,528 | 9,680 | 187 | 7 | 0.72 | 9.480 |
| 1950 | 109 | 48,671,966 | 10,257 | 159 | 4 | 0.38 | 10.480 |
| 1951 | 116 | 60,249,538 | 11,884 | 188 | 8 | 0.66 | 10.480 |
| 1952 | 122 | 48,192,132 | 10,838 | 160 | 2 4 | 0.18 0.33 | 11.480 12.160 |
| 1953 | 122 | 60,776,174 | 12,079 9,925 | 215 157 | 4 | 0.33 | 12.160 |
| 1954 1955 | 121 127 | 49,845,118 36,137,304 | 9,925 10,381 | 157 | 2 | 0.40 | 14.850 |
| 1955 | 127 | 44,493,944 | 11,017 | 134 | 6 | 0.13 | 17.560 |
| 1000 | 161 | + 1, 100,0 + 4 | , 0 | | <u> </u> | | |

| YEAR | MINES | TONS | EMPLOYED | INJURED | FATALS | FAT/1000 | WAGES |
|--------------|----------|--------------------------|-----------------|----------|--------|--------------|------------------|
| 1957 | 124 | 50,093,275 | 12,804 | 144 | 6 | 0.47 | 17.560 |
| 1958 | 90 | 30,495,093 | 10,250 | 83 | 0 | 0.00 | 18.400 |
| 1959 | 89 | 16,055,353 | 9,256 | 93 | 4 | 0.43 | 22.480 |
| 1960 | 95 | 39,526,879 | 11,797 | 132 | 2 | 0.16 | 22.430 |
| 1961 | 85 | 33,169,291 | 9,200 | 51 | 4 | 0.43 | 22.430 |
| 1962 | 46 | 23,269,349 | 8,676 | 57 | 1 | 0.11 | 22.430 |
| 1963 | 61 | 35,255,178 | 7,671 | 30 | 2 | 0.26 | 22.430 |
| 1964 | 42 | 39,115,088 | 8,102 | 26 | 1 | 0.12 | 22.430 |
| 1965 | 54 | 40,891,345 | 8,305 | 53 | 0 | 0.00 | 22.430 |
| 1966 | 49 | 44,412,473 | 9,445 | 56 | 4 | 0.43 | 22.430 |
| 1967 | 51 | 41,216,870 | 8,825 | 52 | 4 | 0.44 | 23.760 |
| 1968 | 53 | 43,078,879 | 9,125 | 55 | 2 | 0.22 | 25.640 |
| 1969 | 51 | 34,628,234 | 9,394 | 58 | 0 | 0.00 | 27.430 |
| 1970 | 49 | 33,648,268 | 9,631 | 71 50 | 5 | 0.52 | 28.520 |
| 1971 | 50 | 32,687,511 | 9,441 | 58 | 0 | 0.00 | 32.480 |
| 1972 1973 | 46 47 | 35,100,156 46,076,814 | 9,431 10,131 | 63 58 | 0 4 | 0.00 0.40 | 34.096 35.352 |
| 1973 | 47 49 | 51,745,763 | 10,131 | 60 | 1 | 0.40 | 44.360 |
| 1975 | 51 | 45,394,814 | 10,864 | 71 | Ö | 0.00 | 45.842 |
| 1976 | 52 | 41,425,833 | 11,514 | 77 | 1 | 0.09 | 47.368 |
| 1977 | 24 | 26,556,566 | 10,840 | 82 | 2 | 0.19 | 56.682 |
| 1978 | 26 | 50,806,547 | 13,056 | 138 | 1 | 0.08 | 64.344 |
| 1979 | 26 | 54,530,338 | 13,267 | 164 | 0 | 0.00 | 70.832 |
| 1980 | 18 | 42,076,497 | 11,441 | 107 | 1 | 0.09 | 80.112 |
| 1981 | 12 | 47,300,056 | 11,630 | 96 | 0 | 0.00 | 89.472 |
| 1982 | 11 | 22,335,570 | 7,626 | 44 | 0 | 0.00 | 94.192 |
| 1983 | 9 | 26,843,983 | 5,935 | 50 | 2 | 0.34 | 84.19 |
| 1984 | 9 | 30,463,941 | 6,305 | 55 | 0 | 0.00 | 87.39 |
| 1985 | 9 | 31,948,722 | 5,539 | 29 | 0 | 0.00 | 90.60 |
| 1986 | 9 | 26,608,769 | 5,250 | 33 | 0 | 0.00 | 94.19 |
| 1987 | 9 | 30,063,909 | 4,857 | 26 | 1 | 0.21 | 94.19 |
| 1988 | 9 | 37,250,243 | 4,546 | 41 | 1 | 0.18 | 94.19 |
| 1989 | 9 | 38,421,803 | 5,664 | 55 | 2 | 0.35 | 94.19 |
| 1990 | 9 | 41,441,888 | 6,379 | 40 | 1 | 0.16 | 94.19 |
| 1991 | 10 | 38,420,014 | 6,468 | 49 | 0 | 0.00 | 94.19 |
| 1992 | 10 | 37,684,439 | 6,325 5,953 | 110 | 0 | 0.00 | 106.94 |
| 1993 | 9 | 39,338,920 43,976,323 | 5,953 6,051 | 133 | 0 | 0.00 | 106.94 93.936 |
| 1994 | 9 9 | 47,030,820 | 6,005 | 97 87 | 1 0 | 0.17 0.00 | 93.936 97.936 |
| 1995 1996 | 8 | 46,144,621 | 6,003 | 96 | 0 | 0.00 | 101.936 |
| 1997 | 8 | 46,978,014 | 6,129 | 84 | 0 | 0.00 | 103.616 |
| 1998 | 8 | 46,862,734 | 5,962 | 114 | 1 | 0.17 | 105.016 |
| 1999 | 9 | 43,136,042 | 5,633 | 99 | Ö | 0.00 | 105.936 |
| 2000 | 9 | 44,806,128 | 5,611 | 77 | 1 | 0.18 | 109.936 |
| 2001 | 8 | 34,144,559 | 4,212 | 60 | Ö | 0.00 | 113.936 |
| 2002 | 8 | 39,087,907 | 4,036 | 60 | Ö | 0.00 | 113.936 |
| | | | • | | | | |
| L | | | | | | | |

| YEAR | MINES | TONS | EMPLOYED | INJURED | FATALS | FAT/1000 | WAGES |
|------|-------|------------|----------|---------|--------|----------|---------|
| 2003 | 8 | 35,282,267 | 4,177 | 35 | 0 | 0.00 | 121.936 |
| 2004 | 8 | 42,059,597 | 3,444 | 24 | 0 | 0.00 | 145.384 |
| 2005 | 8 | 40,464,089 | 3,568 | 29 | 0 | 0.00 | 178.40 |
| 2006 | 7 | 39,617,873 | 3,714 | 14 | 1 | 0.27 | 178.40 |
| 2007 | 7 | 38,041,616 | 3,724 | 13 | 2 | 0.54 | 187.848 |
| 2008 | 7 | 40,599,311 | 3,732 | 26 | 0 | 0.00 | 182.40 |
| 2009 | 7 | 18,025,710 | 2,687 | 39 | 0 | 0.00 | 201.44 |
| 2010 | 7 | 37,996,765 | 3,761 | 27 | 0 | 0.00 | 238.44 |
| 2011 | 7 | 40,395,202 | 4,215 | 24 | 0 | 0.00 | 188.40 |
| 2012 | 9 | 41,099,022 | 4,441 | 17 | 0 | 0.00 | 221.85 |
| 2013 | 9 | 40,221,204 | 4,371 | 29 | 0 | 0.00 | 226.24 |
| 2014 | 9 | 41,301,098 | 4,387 | 29 | 0 | 0.00 | 226.24 |
| 2015 | 10 | 34,683,076 | 4,047 | 19 | 0 | 0.00 | 231.92 |
| 2016 | 7 | 28,970,579 | 3,621 | 22 | 0 | 0.00 | 231.92 |
| 2017 | 7 | 39,485,849 | 3,944 | 18 | 0 | 0.00 | 231.92 |
| 2018 | 6 | 40,986,054 | 3,954 | 14 | 0 | 0.00 | 241.20 |
| 2019 | 6 | 38,665,148 | 4,105 | 7 | 1 | 0.24 | 249.68 |
| 2020 | 6 | 31,921,917 | 3,562 | 11 | 0 | 0.00 | 258.40 |
| l | | | | | | | |

REPORT OF THE COUNTY INSPECTOR OF MINES — PER MS 180.11 OPERATIONAL SUMMARY YEAR ENDING DECEMBER 31, 2020

| MIN | ES | | TONS OF TACONITE PRODUCTS SHIPPED | TOTAL TACONITE MINED | TONS STRIPPING WASTE (ROCK & OVERBURDEN) | AVERAGE NUMBER PEOPLE EMPLOYED PLANTS / PITS | EMPLOYEE HOURS | MONTHS WORKED |
|------|---|-----------|--|----------------------------|---|--|-------------------|------------------|
| | VELAND CLIFFS ORCA MINE, INC. | Pellets - | 2,824,085 | 8,518,424 | 7,293,213 | 348 | 750,818 | 12 |
| НІВЕ | BING TACONITE CO. | | 5,483,346 | 21,294,754 | 24,367,751 | 711 | 1,151,805 | 9 |
| 8 | RTHSHORE MINING CO. BBITT AND SILVER BAY | | 3,913,269 | 11,323,380 | 7,378,552 | 577 | 904,916 | 10 |
| UNI | TED TACONITE LLC | | 5,253,923 | 15,916,475 | 22,594,722 | 525 | 1,347,861 | 12 |
| | | | | | | · | | |
| | | | | | | | | |

Page 9

REPORT OF THE COUNTY INSPECTOR OF MINES — PER MS 180.11 OPERATIONAL SUMMARY YEAR ENDING DECEMBER 31, 2020

| MINES | TONS OF CONCENTRATE SHIPPED | TONS OF TACONITE PRODUCTS SHIPPED | TOTAL TACONITE MINED | TONS STRIPPING WASTE (ROCK & OVERBURDEN) | AVERAGE NUMBER PEOPLE EMPLOYED PLANTS / PITS | EMPLOYEE HOURS | MONTHS WORKED |
|---|-----------------------------------|--|----------------------------|---|--|-------------------|------------------|
| USS CORPORATION M.O.O. KEEWATIN TACONITE CO. ST. LOUIS ITASCA | 3,560 | 1,857,932 | 6,548,518 | 10,662,215 | 184 | 386,837 | 5 |
| USS CORPORATION M.O.O. MINNTAC | | 12,589,362 | 43,552,380 | 56,933,678 | 1,217 | 2,493,893 | 12 |
| TOTALS | 3,560 | 31,921,917 | 107,153,931 | 129,230,131 | 3,562 | 7,036,130 | |

Fage 1

MINING COMPANIES, MINE OPERATIONS, SAFETY PERSONNEL AND OTHER AGENCIES

UNITED STATES STEEL CORPORATION

Minnesota Ore Operations KEETAC PO Box 217 Keewatin, MN 55753

Reewatin, MN 55/53 Phone: 218-778-8700

| Lukas Klemke | Plant Manager - Mine |
|---------------|--|
| Travis Kolari | Plant Manager - Plant |
| Tim Kalisch | Senior Area Manager Operations & Maintenance |
| Susan Wiire | Manager Employee & Labor Relations |
| Mark Salo | Senior Manager Safety & Security |
| Kent Swanson | Manager Safety & Industrial Hygiene |
| Gerry Orrell | Safety & Industrial Hygiene Specialist |

* * * * * *

UNITED STATES STEEL CORPORATION

Minnesota Ore Operations MINNTAC PO Box 417 Mt. Iron, MN 55768 Phone: 218-749-7200

| Lukas Klemke | Plant Manager - Mine |
|---------------------|--|
| Travis Kolari | Plant Manager - Plant |
| Chad Buus Senior Ar | ea Manager Operations & Maintenance |
| Cory Hertling | Senior Area Manager Maintenance |
| Susan Wiire | . Manager Employee & Labor Relations |
| Mark Salo | Senior Manager Safety & Security |
| Kent Swanson | Manager Safety & Industrial Hygiene |
| Mike Levar | Safety & Industrial Hygiene Specialist |
| Jeffrey Tomsich | Safety & Industrial Hygiene Specialist |
| Christie Dixon | Safety & Industrial Hygiene Specialist |

CLEVELAND CLIFFS MINORCA MINE, INC.

5950 Old U.S. Highway 53 North PO Box 1 Virginia, MN 55792

(218) 749-5910

Managers

| Robb A. Peterson | General Manager |
|---------------------|---------------------------------------|
| | Manager - Mine / Crushing |
| | Manager - Concentrator / Pellet Plant |
| Dan Vidmar | Manager - HR / LR |
| Matthew W. Zimmer | Manager - Assets |
| Joyce A. Vesel | Manager - Safety |
| | Manager - Finance |
| Todd M. Sarazine | Manager - Process Auto / IT |
| Thomas R. Cossalter | Manager - Purchasing |
| Jaime L. Johnson | Manager - Environmenta |

* * * * * *

HIBBING TACONITE COMPANY

PO Box 589

Hibbing, Minnesota 55746 Phone: 218-262-5950

| Ed Latendresse | General Manager |
|------------------|-----------------------------------|
| Joe Marturano | Manager - Asset Management |
| Brenda Czeck | Manager - Financial Control |
| Rally Hess | Manager - Mining |
| Dan Aagenes | Manager - Plants |
| William Dittrich | Manager - Human Resources |
| Andrea J. Bakk | . Manager - Safety & Loss Control |
| Julie C. Lucas | Manager - Environmental |
| Tim Angelo | Manager - Procurement |

* * * * * *

UNITED TACONITE, LLC

PO Box 180 Eveleth, MN 55734 Phone: 218-744-7800

| Chad Asgaard | General Manager |
|-----------------|--------------------------------|
| Nick Beukema | Area Manager - Plant |
| Jared Lubben | Area Manager - Mine |
| Conor McCue | Area Manager - Maintenance |
| Adam Radel | Area Manager - Finance |
| Joseph Mattson | Area Manager - Human Resources |
| Ryan Bogart | Area Manager - Safety |
| Candice Maxwell | Area Manager - Environmental |
| Jon Lamusga | Section Manager - Materials |

NORTHSHORE MINING COMPANY

10 Outer Drive Silver Bay, Minnesota 55614 Phone: 218-226-4125 Fax: 218-226-6037

NORTHSHORE MINING BABBITT MINE BABBITT, MINNESOTA 55706

Phone: 218-827-2101

| General Manager |
|-----------------------------|
| Plant Manager |
| Mine Manager |
| Railroad Manager |
| Safety Manager |
| Environmental Manager |
| Maintenance Manager |
| Human Resource Manager |
| Purchasing Manager |
| Finance Manager |
| Safety Section Manager |
| Plant Safety Representative |
| Plant Safety Associate |
| Mine Safety Representative |
| |

POLYMET MINING

PO Box 475 6500 County Road 666 Hoyt Lakes, MN 55750

Phone: 218-471-2150

| Jon Cherry | President and Chief Executive Officer | |
|--|--|--|
| LaTisha Gietzen | Director of Public and Community Relations | |
| James Tieberg | Division Manager - Mining | |
| Kevin Pylka Manager of Environmental Permitting & Compliance | | |
| Christie Kearney | Environmental Site Director | |

* * * * * *

TWIN METALS MINNESOTA, LLC

400 Miners Drive Ely, MN 55731

| Kelly Osborne | CEC |
|----------------|--------------------------------|
| - | Chief Regulatory Officer |
| Derek Heinecke | V.P. Finance |
| Glenn Barr | V.P. Engineering |
| Dean DeBeltz | Director Operations and Safety |
| Chris Anderson | Director Legal Affairs |

PIONEER FOUNDERS, LLC

306 W. Superior Street, Suite 1605 Duluth, Minnesota 55802-1816 Phone: 218-722-0816

Nicholas B. Alworth Managing Director

* * * * * *

CONGDON MINERAL MANAGEMENT, INC.

1035 7th Ave. E.
Hibbing, Minnesota 55746-3675
Phone: 218-262-0799

Fax: 206-203-0098

* * * * * *

EVELETH FEE OFFICE. INC.

301 McKinley Avenue PO Box 521 Eveleth, Minnesota 55734-0521 Phone: 218-744-4646

Fax: 218-744-2149

* * * * * *

GLACIER PARK IRON ORE PROPERTIES, LLC

CORPORATE OFFICE

755 E. Mulberry Avenue, Suite 600 San Antonio, TX 78212 Phone: 210-821-6523

| Mr. David Schlagel | President |
|--------------------|------------|
| Matt Gonzales | Controller |

HIBBING OFFICE

801 E. Howard Street PO Box 429 Hibbing, MN 55746 Phone: 218-262-3886

| Jeff Tromp | Chief Mining Engineer |
|--------------|-----------------------------|
| Austin Dusek | Geologist / GIS Specialist |
| Robert Crowe | Mining Engineer / Inspector |
| John Reed | Geological Engineer |
| Matt Walto | Manager of Mines |

* * * * * *

MERISTEM TRUST CO.

212 South Main Avenue, Suite 131 Sioux Falls, SD 57104 Phone: 952-838-3564

IRON MINING ASSOCIATION OF MINNESOTA

324 West Superior Street Suite 502 Duluth, Minnesota 55802 Phone: 218-722-7724 Fax: 218-720-6707 www.taconite.org

2020 IMA Staff

Kelsey Johnson President

2020 IMA Board of Directors

| Marci Knight | American Bank of the North |
|------------------|---|
| Bruce Mars | Mars Supply Conveyor Belt Services |
| Jim Perry | Furin & Shea Welding & Fabricating Inc. |
| Randy Abernethy | Industrial Weldors & Machinists |
| Jon Anderson | RMS Equipment |
| David Bednarz | Steel Dynamics |
| Mark Lorenz | Steel Dynamics |
| Jeff Lipovetz | TKDA |
| | Duluth Seaway Port Authority |
| Allyz Kramer | Short-Elliott-Hendrickson, Inc. |
| | Minnesota Power |
| | U.S. Steel Minnesota Ore Operations |
| Tim Kalisch | U.S. Steel Minnesota Ore Operations |
| Travis Kolari | U.S. Steel Minnesota Ore Operations |
| Lukas Klemke | U.S. Steel Minnesota Ore Operations |
| | Jasper Engineering |
| Nels Ojard | Krech Ojard & Associates |
| Bruce Richardson | PolyMet Mining |

* * * * * *

ONONDAGA IRON, LLC

Managed by Meristem Trust Co. 212 South Main Avenue, Suite 131 Sioux Falls, SD 57104 Phone: 952-838-3564

| David Adams | Chief Executive Officer |
|---------------|------------------------------------|
| Jane Kingston | Chief Financial Officer |
| | Vice President, Meristem Trust Co. |
| | |

MINING MINNESOTA

P.O. Box 16666 Duluth, Minnesota 55816 Phone: 218-393-2301

E-Mail: fongaro@miningminnesota.com

Frank Ongaro Executive Director

MERIDEN ENGINEERING, LLC

A Wholly-Owned Subsidiary of Superior Mineral Resources LLC 1910 East 8th Avenue P.O. Box 650 Hibbing, Minnesota 55746 Phone: 218-262-6127

SUPERIOR MINERALS RESOURCES, LLC

1910 East 8th Avenue P.O. Box 650 Hibbing, Minnesota 55746 Phone: 218-262-6127 www.superiormineral.com

Greg D. Lindahl President and Chief Executive Officer

MESABI MINERAL ASSOCIATION

1605 Alworth Building 306 W. Superior Street Duluth, Minnesota 55802 Phone: 218-722-0816

GLOBAL MINERALS ENGINEERING, LLC

1035 7th Ave. E. Hibbing, Minnesota 55746-3675 Phone: 218-262-0799 Fax: 206-203-0098

David G. Meineke President & CEO Dorothy M. Meineke CFO

* * * * * *

MINNESOTA DEPARTMENT OF NATURAL RESOURCES 500 Lafavette Road

St. Paul, Minnesota 55155 (651) 259-5959 FAX (651) 296-5939

Sarah Strommen Commissioner
Barb Naramore Deputy Commissioner
Jess Richards Assistant Commissioner
Joseph Henderson Director, Division of Lands and Minerals (LAM)
Mike Liljegren Assistant Director of Mine Permitting

Division of Lands and Minerals 1525 Third Avenue E. Hibbing, Minnesota 55746 (218) 231-8443 FAX (218) 262-7328

Peter Clevenstine Asst. Director, Division of Lands and Minerals Ted Anderson Manager, Engineering and Operations

* * * * * *

STATE OF MINNESOTA DEPARTMENT OF IRON RANGE RESOURCES & REHABILITATION MINELAND RECLAMATION 1003 Discovery Drive

Chisholm, Minnesota 55719 Phone: (218) 274-7000 Fax: (218) 274-7002

* * * * * *

DEPARTMENT OF IRON RANGE RESOURCES & REHABILITATION 4261 HIGHWAY 53 SOUTH P.O. BOX 441

EVELETH. MN 55734

Phone: (218) 735-3000 or 800-765-5043

| Mark Phillips | Commissioner |
|-------------------------|-------------------------------------|
| Jason Metsa | Deputy Commissioner |
| Matt Sjoberg | Executive Director of Development |
| Marianne Bouska | Chief Operating Officer |
| Linda Johnson Mining Re | eclamation and Property Development |

* * * * * *

RGGS Lands & Minerals LTD., L.P. P.O. Box 1266 Virginia, MN 57792 Phone: (218) 749-1291

Fax: (218) 749-1294

Page 21

ST. LOUIS COUNTY SAFETY AND RISK MANAGEMENT 2503 RICE LAKE ROAD DULUTH MN 55811-4819 PHONE: 218-726-2139

| Joseph J. Austin | Director |
|------------------|------------------------|
| Karen Matvey | Information Specialist |

Government Services Center 201 South 3rd Avenue West Virginia MN 55792 Phone: 218-742-9841

| Derek Harbin | Inspector of Mines |
|------------------|--------------------------|
| David Hamalainen | |
| Micah Hovet | Assistant Mine Inspector |

ST. LOUIS COUNTY LAND AND MINERALS GOVERNMENT SERVICE BUILDING 320 West 2nd Street Duluth MN 55802

Mark Weber Director

7820 Hwy 135 Virginia, MN 55792 Phone: 218-742-9885

Julie Marinucci Deputy Director - Land Asset Management

* * * * * *

UNITED STATES DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION

515 W. First Street, Room 323 Duluth, MN 55802-1302 Phone: 218-720-5448 Fax: 218-720-5650

DISTRICT OFFICE

| Christopher A. Hensler | District Manager |
|--------------------------|--------------------------------------|
| | Assistant District Manager |
| Daniel J. Goyen | Assistant District Manager |
| Wilbert W. Koskiniemi Jr | Supervisory Special Investigator |
| Scott E. Salo | Conference Litigation Representative |
| Stephen D. Cotie | Health Specialist |

DULUTH FIELD OFFICE

| William H. Soderlind Supervisory | Mine Safety & Health Inspector |
|----------------------------------|--------------------------------|
| Richard D. Galamo | Mine Safety & Health Inspector |
| Mindy A. Meierbachtol | Mine Safety & Health Inspector |
| Cory C. Niemi | Mine Safety & Health Inspector |
| Terrance J. Norman | Mine Safety & Health Inspector |
| Jeffrey J. Rausch | Mine Safety & Health Inspector |
| Rufus L. Taylor | Mine Safety & Health Inspector |

HIBBING FIELD OFFICE

522 East Howard Street, Suite 201A Hibbing, MN 55746 Phone: 218-262-5205

Fax: 218-262-1296

| Richard V. Boeckermann Supervisory | Mine Safety & Health Inspector |
|------------------------------------|--------------------------------|
| Jerome A. Cuffe | Mine Safety & Health Inspector |
| Luke E. Jarvi | Mine Safety & Health Inspector |
| Ryan D. Moberg | Mine Safety & Health Inspector |
| Kevin N. Ouke | Mine Safety & Health Inspector |

MINNESOTA DEPARTMENT OF REVENUE

600 North Robert Street

St. Paul. Minnesota 55101

Phone: (651) 556-6003 Fax: (651) 297-1939

| Robert Doty | Commissioner |
|--------------|----------------------------------|
| Jack Mansun | Director, Special Taxes Division |
| Steve Helmen | Minerals Tax Supervisor |
| Nick Norris | Revenue Tax Specialist |

Minerals Tax Office 230 1st St. S., Suite 102 Virginia, Minnesota 55792

Phone: (218) 744-7424 Fax: (218) 742-9153

Bob Wagstrom Production Tax Robert Pecchia Production Tax

INTERNATIONAL UNION OF OPERATING ENGINEERS

Local No. 49

8381 Enterprise Drive N

Virginia, MN 55792

Phone: 218-741-8190 - Virginia 2829 Anthony Lane South Minneapolis, Minnesota 55418-3285

Phone: 612-788-9441 - Minneapolis

Jason George Business Manager, Financial Director, Minneapolis Ryan Davies Area Business Representative, Virginia

Dan Snidarich Area Business Representative, Virginia Dan Manick Area Business Representative, Virginia

UNITED STEEL WORKERS OF AMERICA DISTRICT 11

MINNEAPOLIS OFFICE

Phone: 612-623-8045

Emil Ramirez Director

EVELETH SUB-DISTRICT OFFICE

Phone: 218-744-2757 Fax: 218-744-7926

Cathy Drummond Assistant to the Director John Arbogast Staff Representative Michele Frederickson Staff Representative

UNITED STEEL WORKERS OF AMERICA LOCAL UNITS

LOCAL #6860 UNITED TACONITE, LLC

Phone: 218-744-4480

| Dan Hill | President |
|-----------------|-----------------------|
| Jamie Winger | Vice President |
| Candace Sprague | Recording Secretary |
| Kris Kuhlmey | Financial Secretary |
| Gary Butala | Treasurer |
| Larry Roberts | Safety Coordinator |
| Larry Simonson | Plant Safety Chairman |
| Gary Butala | Mine Safety Chairman |
| Bryan Sandnas | Training Coordinator |

LOCAL #2660 KEEWATIN TACONITE

Phone: 218-778-6909

| Dan Pierce | President |
|-------------------|--------------------------------------|
| Joe Ferris | Safety Chair / Safety Representative |
| Carl Jeranek | Safety Representative |
| Pat Savage | Area Chair, Concentrator |
| Jeff Stalboerger | Area Chair, Shop |
| Steve Krasaway | Area Chair, Pit |
| Lorne Middlestead | Area Chair, Pond |
| Tawnya Gustafson | Area Chair, Crusher |
| Carl Jeranek | Area Chair, Pellet Plant |
| Eric Staydohar | Area Chair, Electrical |

LOCAL #2705 HIBBING TACONITE COMPANY

Phone: 218-254-2492 Fax: 218-254-7100

115 W. Lake Street, Chisholm, MN 55719

| Chris Johnson | President |
|----------------|-----------------------------|
| Steve Rancourt | Vice President |
| Mike Mandich | Financial Secretary |
| Bill Fredette | Recording Secretary |
| Wade Bexell | Treasurer |
| Jeff Walters | Union Safety Representative |
| Bill Fredette | Safety Chairman |

LOCAL #6115 CLEVELAND CLIFFS MINORCA MINE, INC.

Phone: 218-741-3310

| Harold Anderson | President |
|-----------------|----------------------|
| Tom French | Safety Coordinator |
| Reed Milos | • |
| Kyle Lamppa | Training Coordinator |

LOCAL #1938 USS - MINNTAC MINE

Phone: 218-741-0887

| Steve Bonach | President |
|----------------|--|
| Chad Daniels | Vice President |
| Dave Chesser | Recording Secretary |
| Paul Centa | Financial Secretary |
| Rick Niemi | Treasurer |
| Mitch McDonald | Safety Committee Chairman |
| Mark Hagsten | Safety Committee Co-Chairman |
| Matt Robillard | Safety Coordinator - Minntac/Keetac |
| Rick Niemi | . Full-Time Safety Representative, Mine/Shops |
| Mike Hultman | Full-Time Safety Representative, Concentrator/ |
| | Crushers |
| Paul Coombe | Full-Time Safety Representative, |
| | Agglomerators I, II, III |

* * * * * *

BUILDING AND CONSTRUCTION LABORERS LOCAL 1097

712 4th St. North Virginia, MN 55792 Phone: 218-741-3638

| Rick J. Cannata | President |
|----------------------|--------------------------------------|
| Todd Payne | Vice President |
| Shawn Braford | Business Manager/Financial Secretary |
| Aaron C. Jarva | "E" Board Member |
| Patrick D. O'Connell | "E" Board Member |
| Ryan Towner | "E" Board Member |
| Michael G. Warner | Recording Secretary |
| Shelly A. Wiitanen | Office Manager |
| Alfred M. Lung | Sergeant at Arms |

NON-FATAL LOST-TIME AND SERIOUS ACCIDENTS

CLEVELAND CLIFFS MINORCA MINE INC:

Operating Technician (LG 3), Date of Accident – January 21, 2020. Employee was cleaning an area around the shuttle car bin and heard a noise from inside the shuttle car and went in to investigate; upon stepping into the car to look around, the employee placed their right foot against the rail as the wheel was traveling through that exact spot. The wheel ran over the employee's foot resulting in a fracture. Days Lost – 127

Operating Technician (LG 3), Date of Accident – October 10, 2020. Employee was operating a loader and scooped up a large rock causing the right side of the loader to sink into a soft spot in the ground. The operator tried to counter-act the tipping action and lowered the main boom fast causing the loader to tip back to the left; this action resulted in the loader to shift abruptly. This movement resulted in upper body pain to the operator. Days Lost – 2

Utility Person (LG 1), Date of Accident – December 23, 2020. Employee was operating in a skid steer which contacted ice. This caused the skid steer to come to an abrupt stop and jarred operator causing pain in upper body. Days Lost -3

Maintenance Technician Mechanical (LG 4), Date of Accident – December 31, 2020. The employee was reaching down for a set of wheel chocks and felt pain in their lower back. Days Lost – 2

HIBBING TACONITE:

Maintenance Mechanic, Date of Accident – March 30, 2020. The employee had de-boarded the drill via the front retractable staircase carrying a lube hose. The employee placed their foot on the top step of the lower section of retractable stairs. Typically, the stairs fold/extend fully when weight is applied. The stairs did not deploy fully as weight was applied. The employee assumed the stairs would extend and their forward momentum caused them to jump from the stairs 3-4 feet to the ground. They ended up landing on a frozen track rut causing their left ankle to roll. Employee was diagnosed with a left ankle sprain that resulted in lost time. Days Lost – 22

Maintenance Mechanic, Date of Accident – September 14, 2020. Employee was assigned with partner to replace cab windshield of a shovel. While removing the old windshield, employees began removing bolts that held the windshield in place. While removing the last bolt, which cross-threaded, the employee's partner used an impact wrench to unthread the bolt from outside of shovel cab while the injured held the nut. The employee placed a 9/16" wrench on the nut to keep it from spinning during the removal process. The employee placed the wrench on nut again and leveraged the wrench against the window frame. There was a small lip/ledge to help hold the wrench in place while impact wrench spun the bolt out. The wrench began to slip off

HIBBING TACONITE COMPANY (cont)

the nut again so the employee placed pressure on the wrench, flush against the windshield frame. At that time, the wrench slipped and spun upwards pinching the employee's thumb between the windshield frame lip and the wrench. This resulted in a laceration to the tip of the employee's right thumb and a fracture to the right thumb tip as well as lost time. Days Lost – 28

NORTHSHORE MINING COMPANY

Babbitt:

None

Silver Bay:

None

UNITED TACONITE:

Electrician, Date of Accident – November 13, 2020. Employee was struck in the leg by a piece of ice that was ejected from a frozen pit dewatering line that separated on startup. The employee was bruised. Days Lost – 18

Forklift Operator, Date of Accident – December 2, 2020. Employee was walking outside when they rolled their ankle. The employee did not fall, but fractured their ankle. Days Lost – 20

Maintenance Mechanic, Date of Accident – December 21, 2020. Employee was installing 6-inch rubber-lined pipe when the pipe slipped out of one of the three rigging points and shifted 2 feet to the west and struck the employee's left lower foot causing a fracture. Days Lost -8

USS CORPORATION, MINNESOTA ORE OPERATIONS

KEETAC:

None

MINNTAC:

Operating Technician, Mine, Date of Accident – June 7, 2020. The technician was operating the 377 CAT on 15 Dump. The technician stated they were pushing material forward in second gear when they experienced pain in their right knee. A surgical repair is scheduled. Days Lost – 180

Utility Technician, Step 2 Agglomerator, Date of Accident – October 10, 2020. The utility technician was adjusting a guard on the filter floor washdown area when they felt a strain in their right shoulder requiring a surgical repair for a torn rotator cuff. Days Lost – 30