



**FRIENDS OF
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BOUNDARY
WATERS**

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February 19, 2026

Via Electronic Mail

Commissioner Sarah Strommen
Minnesota Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155
Commissioner.dnr@state.mn.us

RE: The Minnesota Department of Natural Resources Has the Authority and Duty to Protect the Boundary Waters by Canceling Twin Metals' Mineral Lease

Dear Commissioner Strommen:

The purpose of this letter is to urge the Minnesota Department of Natural Resources ("DNR") to exercise its authority and cancel one of the state mineral leases held by Twin Metals, a subsidiary of the Chilean mining conglomerate, Antofagasta. This letter outlines DNR's authority for taking this action and explains why DNR should take this action to protect the clean waters of the Boundary Waters Canoe Area Wilderness ("Boundary Waters") from the existential threats posed by Twin Metals' proposed copper-nickel sulfide mine.

In recent weeks, the federal government has inflicted untold damage to Minnesotans. This same reckless and aggressive federal government also threatens Minnesota's land and water.

The Trump administration and its congressional allies have deployed a novel and unprecedented application of the Congressional Review Act in an attempt to overturn the 20-year mineral withdrawal that protects some 225,000 acres of public land near the Boundary Waters from copper-nickel sulfide mining. This contorted legal gambit will nullify protections that were put in place following two years of scientific study and over 675,000 public comments, the vast majority of which were overwhelmingly in support of the mineral withdrawal.

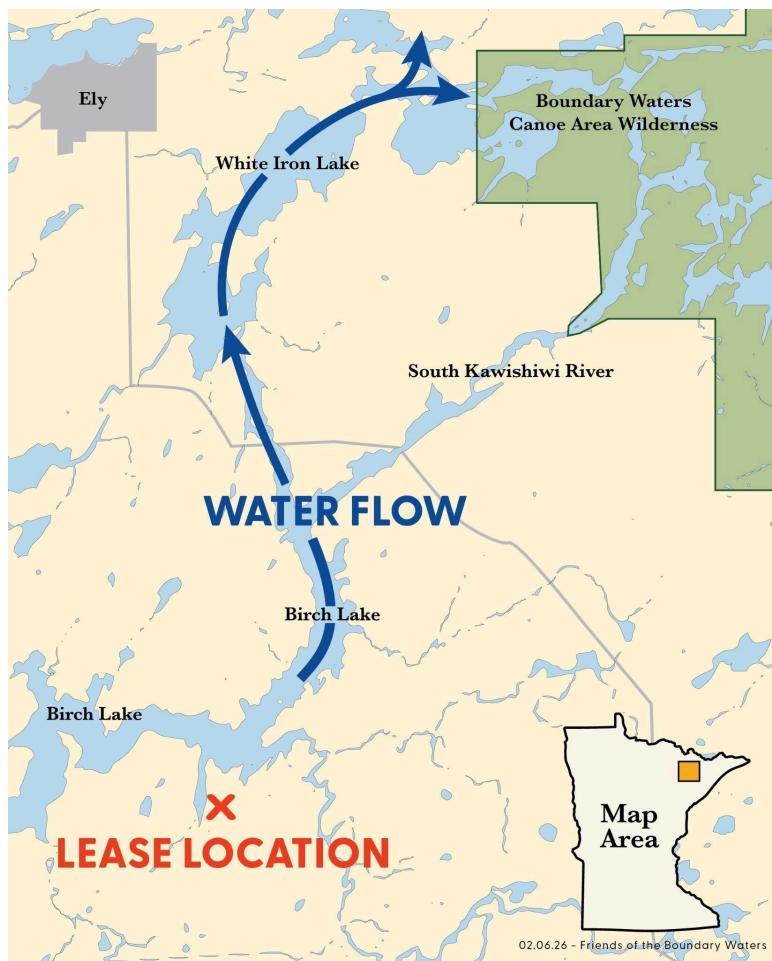
The Trump administration's extra-legal actions ignore science and threaten our democratic process. They will chiefly benefit a Chilean-owned mining conglomerate that has profits and shareholder interests in mind, not Minnesota.

Minnesota can push back. We are not passive actors in this fight. We can be the agents of our own future and determine how to manage and protect our land and water.

I. DNR Can Cancel Twin Metals' Lease in 2026.

To operate, Twin Metals' copper-nickel sulfide mine would require mineral leases from the State of Minnesota, the United States government, and private entities. Approximately 36% of the ore reserves would come from state leases.¹

On June 7, 1990, the State of Minnesota entered into a mineral lease ("Lease") for copper-nickel sulfide mining with Lehmann Exploratory Management, Inc. *See Exhibit A.* The Lease was subsequently transferred to Twin Metals.²



¹ Twin Metals Minnesota, Mine Plan of Operations, Document No. TMM-ESSS-115-0001, Revision 0A at p. 30, Section 2.10, lines 1047-1049 (Dec. 18, 2019), available at <https://www.twin-metals.com/resource/twin-metals-minnesota-mine-plan-of-operations/>.

² Paragraph 35 of the Lease provides that all "covenants, terms, and conditions of this [L]ease run with the land and extend to and bind all assignees and other successors in interest of the lessee." *See Lease, Ex. A, at ¶ 35.*

The Lease has a 50-year term that expires on June 7, 2040. Paragraphs 29 and 30 of the Lease provide DNR with the authority to cancel the Lease in the 36th calendar year of the Lease – in 2026 – unless Twin Metals is *both* actively engaged in mining and has paid the State of Minnesota at least \$100,000 in royalty payments during a single calendar year.³

Twin Metals has done neither.

In both the plain and unambiguous language of paragraph 29 of the Lease and DNR's justifications supporting that Lease provision, DNR has concluded that 35 years is a reasonable and sufficient time for Twin Metals to explore and begin production.⁴ Because Twin Metals has defaulted on the Lease, DNR has the legal authority to cancel the Lease.⁵

II. DNR Has the Legal Authority and Fiduciary Duty to Prevent Mining Pollution.

Beyond these clear provisions of the Lease, DNR has strongly affirmed its authority and fiduciary duty in this matter. In 1995, in an official response to calls to repudiate its right to cancel leases, DNR asserted:

The Commissioner does not wish to surrender the right of cancellation of the lease. The cancellation right protects the state's interest in having the property developed *if it is environmentally sound to do so*. The Commissioner believes that *the right of cancellation can serve legitimate policy needs of the state as landowner and as trust manager.*⁶

Here, DNR clearly maintains that it can cancel state leases for copper-nickel sulfide mining in situations where ore production and royalty payments have not been timely made and potential environmental risks from a mining project would negatively impact DNR's role as landowner and trust manager.

The U.S. Environmental Protection Agency has listed sulfide mining as the most polluting industry in the United States. In a water-rich environment, such as northeastern Minnesota, this type of toxic mining would be particularly dangerous. U.S. Forest Service Chief Tom Tidwell wrote in his 2016 decision not to consent to the renewal of Twin Metals' federal mineral leases that:

³ See Lease, Ex. A, at ¶ 29 ("The state may cancel this [L]ease as provided in paragraph 30 if the lessee [i]s not . . . both actively engaged in mining ore under this [L]ease . . . [and has not] paid to the state at least \$100,000 in earned royalty under a metallic minerals lease . . . during a single calendar year.").

⁴ See In the Matter of the Proposed Amendments of the Rules Regarding Permits to Prospect for and Leases to Mine Copper, Nickel, and Associated Minerals (Minnesota Rules, Parts 6125.0100 - .0700), Department of Natural Resources, Statement of Need and Reasonableness, at p. 91 (Jan. 18, 1988) ("[t]wenty years, or 35 years if the state does not exercise its right to cancel in the twenty-first year, *is a reasonable amount of time to explore the mining unit and commence production in the quantities necessary to satisfy the performance requirement.*"') (emphasis added), available at <https://www.lrl.mn.gov/archive/sonar/SONAR-01249.pdf>

⁵ See Lease, Ex. A, at ¶ 30.

⁶ In the Matter of the Proposed Permanent Rules Relating to the Lease of State Lands for Metallic Minerals, Department of Natural Resources, Statement of Need and Reasonableness, at pp. 74-75 (Jan. 27, 1995) (emphasis added), available at <https://www.lrl.mn.gov/archive/sonar/SONAR-02525.pdf>.

Based on this analysis, I find unacceptable the inherent potential risk that development of a regionally-untested copper-nickel sulfide ore mine within the same watershed as the [Boundary Waters] might cause serious and irreplaceable harm to this unique, iconic, and irreplaceable wilderness area.⁷

Time after time, when put before the public and subjected to scientific scrutiny, the conclusion has been clear: An industry with such an alarming track record of environmental degradation has no place in this vulnerable and beloved area.

Given the terms of the Lease, DNR's authority, and its role as the state's landowner and trust manager, now is the time for the State of Minnesota to take action. This would not be unprecedented. The U.S. Forest Service and Department of Interior have taken deliberate, methodical measures to protect this area from copper-nickel sulfide mining. DNR can – and should – exercise its legal authority and push back against the Trump administration.

Conclusion: DNR Should Stand Up for Minnesota and Cancel Twin Metals' Lease.

Copper-nickel sulfide mining presents an existential threat to the Boundary Waters.⁸ Mining operations will produce elevated levels of mercury in the water, creating health hazards for humans as mercury bioaccumulates in plants, fish, and wildlife. Elevated sulfate levels will damage wild rice, or manoomin, threatening an irreplaceable food source and essential component of Anishinaabe culture in Minnesota. The threat of acid mine drainage poses catastrophic risks to an irreplaceable wilderness.

Now, when the Trump administration seeks to arbitrarily overturn protections, dismiss science, and ignore public comments, it is imperative for DNR to cancel this Lease and protect the Boundary Waters.

DNR has given Twin Metals and its predecessors 35 years to explore and commence production, more than a reasonable and sufficient amount of time. DNR has both the legal authority and the fiduciary duty to act.

Minnesota is not powerless. We cannot be victims of an unprincipled federal government.

⁷ Letter from U.S. Forest Service Chief Thomas Tidwell to Neil Kornze, Director of the Bureau of Land Management, at p. 1 (Dec. 14, 2016), available at https://knrc.org/Files/SNF/Tidwell_to_Kornze_Non_Consent_121416.pdf.

⁸ DNR need not reinvent this environmental analysis, as it has previously been undertaken by the federal government. *See, e.g.*, U.S. Department of Agriculture, U.S. Forest Service, Rainy River Withdrawal, Environmental Assessment (December 2022), available at https://www.friends-bwca.org/wp-content/uploads/20221120_RevisedEA_FinalRevision-508.pdf; U.S. Department of Agriculture, U.S. Forest Service, Rainy River Withdrawal, Case Studies Report (June 2022), available at <https://www.friends-bwca.org/wp-content/uploads/2022-Rainy-River-Withdrawal-Case-Studies-Report.pdf>.

On behalf of future generations of Minnesotans and the thousands of people from around the world who visit the Boundary Waters each year, we respectfully urge you to exercise your authority and issue a formal order canceling Twin Metals' Lease.⁹

Sincerely,



Christopher D. Knopf, Executive Director
Friends of the Boundary Waters Wilderness
Phone: (651) 999-9565
Email: Chris@friends-bwca.org

cc: Governor Tim Walz
Lt. Governor Peggy Flanagan
President Donald Trump
Vice President J.D. Vance
Senator Amy Klobuchar
Senator Tina Smith
Representative Betty McCollum
Representative Kelly Morrison
Representative Angie Craig
Representative Ilhan Omar
Representative Pete Stauber
Representative Tom Emmer
Representative Brad Finsted
Representative Michelle Fischbach
U.S. Secretary of Interior Doug Burgum
U.S. Secretary of Agriculture Brooke Rollins

⁹ We respectfully request that DNR include the entirety of all hyperlinks and the exhibit cited in this letter as part of its administrative record underlying its formal decision in this matter.

STATE OF MINNESOTA
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF MINERALS

**LEASE TO PROSPECT FOR, MINE AND REMOVE
 METALLIC MINERALS**

ISSUED UNDER AUTHORITY OF
 MINNESOTA STATUTES SECTIONS 93.08 TO 93.12,
 INCLUSIVE, AND SECTION 93.25; AND
 MINNESOTA RULES, PARTS 6125.0100-0700, THE RULES
 ADOPTED BY THE STATE EXECUTIVE COUNCIL
 ON NOVEMBER 8, 1966, AMENDED
 EFFECTIVE SEPTEMBER 7, 1982, AND
 AMENDED EFFECTIVE MAY 23, 1988.

Lease No. MM-9455-N

Mining Unit SL-36-61-12-A

This lease agreement is entered into on the 7th day of June, 1990. The parties to this lease are the State of Minnesota, called the state, and

Lehmann Exploration Management, Inc.
 Suite 790, Kickernick Building
 430 First Avenue North
 Minneapolis, Minnesota 55401, a Minnesota corporation,

called the lessee.

1. **Term; description of mining unit.** The state, in consideration of the sum of Six Hundred Twenty-one and 94/100 (621.94) Dollars, paid by the lessee, being the rental provided in this lease for the unexpired portion of the current calendar year and for the next succeeding two (2) calendar years, the receipt whereof is hereby acknowledged, and in further consideration of the covenants and conditions of this lease to be performed by the lessee, agrees to lease to the lessee for a term of fifty (50) years beginning the 7th day of June, 1990, the following described mining unit, situated in the county of St. Louis, in the State of Minnesota:

The minerals and mineral rights, without warranty of title, in

Southeast Quarter of Southwest Quarter (SE1/4-SW1/4),
 Section Twenty-five (25);

and the surface and minerals and mineral rights in

Northeast Quarter (NE1/4),
 Northeast Quarter of Southeast Quarter (NE1/4-SE1/4),
 Section Thirty-six (36);

and the minerals and mineral rights in

That part of the Northeast Quarter of Northwest Quarter (NE1/4-NW1/4) lying east of the current natural ordinary high water mark of the Birch Lake Reservoir,
 Section Thirty-six (36);

all in Township Sixty-one (61) North, Range Twelve (12) West, containing 242 acres, more or less, but excepting and excluding the lands, minerals, and mineral rights lying in and directly under the bed of the Birch Lake Reservoir below the current natural ordinary high water mark thereof, and subject to special review of exploration plans by the Department of Natural Resources, or its successors or assigns.

2. Definitions. For the purposes of this lease, the following words have the meanings given them:

- a. "Associated mineral products" means those intermingled or associated materials and substances recovered from each ton of crude ore mined from the mining unit that are excluded from the definition of metallic minerals.
- b. "Commissioner" means the commissioner of natural resources of the state of Minnesota, or the commissioner's designated representative.
- c. "Metallic minerals," whether singular or plural, means any mineral substances of a metalliferous nature, except iron ores and taconite ores.
- d. "Ton" means 2,000 pounds avoirdupois after removal of all free moisture from the material weighed, by drying at 212 degrees Fahrenheit.
- e. "Troy ounce" means a unit of mass equal to 480 grains or 31.1035 grams or 1.0971 avoirdupois ounces.

3. Purpose of lease. The mining unit is leased to the lessee for the purpose of prospecting for, mining and removing ores primarily valuable for their metallic minerals content that are found on or in the mining unit.

The lessee has the right to construct or make buildings, excavations, openings, ditches, drains, railroads, roads, and other improvements on the mining unit as necessary or suitable for those purposes. The lessee has the right to mill and concentrate the ore so mined, either upon the mining unit or elsewhere, but the right to mill and concentrate does not include the right to reduce or smelt ore upon the mining unit without an agreement between the lessee and the commissioner, authorizing that use of the surface of the land and providing for the necessary protection of life and property. The lessee may contract with others for doing any work authorized or required under this lease, or for the use of the mining unit or any part of it for the purposes of the lease, but no contract of this type relieves the lessee from any duty, obligation, or liability under the lease. No such contract providing for shipping, handling, or removal of ore-bearing material becomes effective for any purpose until three executed duplicates of the contract have been filed with the commissioner.

4. State's right to lease iron ores, taconite ores, coal, oil, gas, and other liquid or gaseous hydrocarbon substances. The state reserves the right to lease or grant to other persons or corporations the right to explore for, mine, remove, and benefitiate iron ores, taconite ores, coal, oil, gas, and other liquid or gaseous hydrocarbon substances, that are located in the mining unit. The state agrees that any permit or lease granted by it to any person or corporation to explore for, develop, mine, or dispose of the iron ores, taconite ores, coal, oil, gas, and other liquid or gaseous hydrocarbon substances shall contain a provision that the permittee or lessee shall exercise those rights so as not to cause any unnecessary or unreasonable injury or hindrance to the operations of the lessee of this lease in the exploration for, or the development, mining, or removal of metallic minerals other than iron ores, taconite ores, coal, oil, gas, and other liquid or gaseous hydrocarbon substances covered by that permit or lease. The lessee of this lease agrees that it will exercise the rights granted to it by this lease in such manner as not to cause any unnecessary or unreasonable injury or hindrance to the operations of any permittee or lessee of the state in the exploration for, or the development, mining, or removal of iron ores, taconite ores, coal, oil, gas, and other liquid or gaseous hydrocarbon substances.

5. State's right to lease surface and sell timber. The state reserves the right to sell and dispose of all the timber upon the mining unit without hindrance from the lessee and according to the law now or hereafter governing the sale of timber on state lands, and reserves to the state and to the purchaser of the timber, and their agents, the right at all times to enter the mining unit, and to cut and remove timber from it according to the terms of the purchaser's contract with the state. The timber purchaser shall not unduly interfere with the prospecting or mining operations. The state further reserves the right to grant leases, permits, or licenses to any portion of the surface of the mining unit to any person, partnership, corporation, or other association under the authority of Minnesota Statutes, section 92.50, or other applicable laws, after consultation with lessee. The surface leases, permits, or licenses shall not unduly interfere with the

prospecting or mining operations conducted on the mining unit.

6. Annual rental. The lessee agrees to pay to the state rental for the mining unit at the rate of one dollar per acre of land and water area included in the mining unit, per calendar year, payable in advance, for the unexpired portion of the current calendar year from the effective date of this lease and for the next succeeding two calendar years; and after that time at the rate of three dollars per acre per calendar year, payable quarterly for the three succeeding calendar years; and after that time at the rate of eight dollars per acre per calendar year, payable quarterly for the five succeeding calendar years; and after that time at the rate of \$25 per acre per calendar year, payable quarterly for the remainder of the term of this lease.

The mining unit may include state-owned minerals under water, in trust fund lands, in acquired lands, in lands forfeited for taxes, and in lands in which severed mineral interests have forfeited for failure to comply with registration laws, or have been otherwise acquired. Any amount paid for rental, at the time of payment, shall be allocated to the proper fund as determined by the mineral ownership.

Any amount paid for rental accrued for any calendar year must be credited on any royalty that may become due for ore removed under this lease during the same calendar year but no further, and only to the extent that the rental was paid or deposited into the particular fund to which the royalty for the ore is due. Any amount paid for royalty in excess of the credit during that year must be credited on rental, if any, subsequently accruing for that year but no further, and only to the extent that the royalty was paid or deposited into the particular fund to which the rental is due. However, any amount paid for rental in excess of eight dollars per acre for any previous calendar year may be credited on any royalty that may become due for ore removed under this lease during the current calendar year in excess of any credits for current rental, but only to the extent that the rental was paid or deposited into the particular fund for which the royalty is due.

Rental payments must be made on May 20, August 20, November 20, and February 20 for the previous calendar quarters. The first calendar quarter is the first three calendar months of the year, and so on.

Upon surrender of any part or parts of the mining unit by lessee under this lease, the annual rental payment may be discontinued as to those parts for all subsequent calendar years; however, the rentals paid on the parts surrendered must not be credited on any royalties due for ore removed from that part of the mining unit which remains under lease.

Where the state owns only a fractional undivided interest in the minerals in any portion of the mining unit, only that fractional part of the rentals and royalties established in this lease shall be paid for that portion.

If at any time during the term of this lease it is determined in a proper proceeding that the state does not own the minerals in a part of the area included in the mining unit, the commissioner shall delete from the description of the mining unit the part not owned by the state, and only if that determination is made prior to the fifth anniversary date of this lease is the lessee entitled to a refund, or in the case of tax forfeited minerals to receive credit on future payments due the same fund, for payments made to the state on that part prior to the determination. If the commissioner deems it necessary, additional time to make the determination may be granted.

7. Tonnage for royalty purposes. Royalty must be computed on the dry weight of the crude ore. The dry weight of the crude ore shall be calculated from natural crude ore weights and moisture percentages from samples taken at the time the crude ore is weighed.

8. Royalty.

a. The royalty to be paid to the state by the lessee for the metallic minerals and associated mineral products recovered from each ton of ore mined from the mining unit is the sum of the base rate described in this paragraph and an additional bid rate of 2.60 percent multiplied by the value of the metallic minerals and associated mineral products recovered in the mill concentrate from each ton of dried crude ore.

b. The base rate must not be less than 3-1/2 percent nor more than 20 percent and varies with the value of the metallic minerals and associated mineral products recovered from each ton of ore mined from the mining unit. The base rate must be calculated as provided in clauses (1) to (4):

(1) If the value of the metallic minerals and associated mineral products recovered in the mill concentrate is equal to or less than \$75, the base rate is 3-1/2 percent.

(2) If the value of the metallic minerals and associated mineral products recovered in the mill concentrate is greater than \$75 but less than or equal to \$150, the base rate is 3-1/2 percent plus an additional 0.015 percent for each dollar increase in value above \$75.

(3) If the value of the metallic minerals and associated mineral products recovered in the mill concentrate is greater than \$150 but less than or equal to \$225, the base rate is 3-1/2 percent, plus an additional 0.015 percent for each dollar increase in value above \$75, plus a further additional 0.02 percent for each dollar increase in value above \$150.

(4) If the value of the metallic minerals and associated mineral products recovered in the mill concentrate is greater than \$225, the base rate is 3-1/2 percent, plus an additional 0.015 percent for each dollar increase in value above \$75, plus a further additional 0.02 percent for each dollar increase in value above \$150, plus a further additional 0.025 percent for each dollar increase in value above \$225.

In computing the base rate, there must be no rounding before calculating the total royalty due. The values of \$75, \$150, and \$225, as used above, must be escalated each calendar quarter in accordance with the formula set forth in paragraph c.

For example, assume the value (v) of metallic minerals and associated mineral products recovered in the mill concentrate from a ton of dried crude ore was \$100. The base rate would be calculated as follows:

$$\begin{aligned}\text{Base rate} &= .035 + (.00015 \times [v - 75]) \\ &= .035 + (.00015 \times [100 - 75]) \\ &= .035 + (.00015 \times 25) \\ &= .035 + .00375 \\ &= .03875 \\ &= 3.875 \text{ percent}\end{aligned}$$

If the value (v) of the metallic minerals and associated mineral products recovered in the mill concentrate from a ton of dried crude ore was \$250, then the base rate would be calculated as follows:

$$\begin{aligned}\text{Base rate} &= .035 + (.00015 \times [v - 75]) + (.0002 \times [v - 150]) + (.00025 \times [v - 225]) \\ &= .035 + (.00015 \times [250 - 75]) + (.0002 \times [250 - 150]) + (.00025 \times [250 - 225]) \\ &= .035 + (.00015 \times 175) + (.0002 \times 100) + (.00025 \times 25) \\ &= .035 + .02625 + .02 + .00625 \\ &= .0875 \\ &= 8.75 \text{ percent}\end{aligned}$$

c. The values of \$75, \$150, and \$225 as used in the base rate must be increased each calendar quarter as follows:

If the unadjusted Producer Price Index for All Commodities (1967 equals 100), as originally published (unrevised) by the Bureau of Labor Statistics of the United States Department of Labor, or any succeeding federal government agency publishing the Index, in the monthly publication titled Producer Price Indexes, for the first month in the calendar quarter for which royalty payment is to be made, exceeds 310.5, which was the level of the index for August 1987 (hereinafter called the "Base Index"), an additional amount, computed in the manner hereinafter provided, must be added to the values of \$75, \$150, and \$225 to be used in the base rate for the calculation of the royalty to be paid by the lessee on the ore removed from the mining unit during any quarter.

The increase in the values of \$75, \$150, and \$225 must be computed by multiplying each value by a fraction, the denominator of which is the Base Index and the numerator of which is equal to the amount by which the Producer Price Index for All Commodities for the first month of the calendar quarter in question exceeds the Base Index. The resulting products must be carried to two decimal places and then rounded to the nearest whole dollar.

For example, the Base Index under this lease is 310.5 and if the Producer Price Index for All Commodities for January 1990 was 325.5, the increase in the values of \$75, \$150, and \$225 would be computed as follows:

$$\$ 75 \times \frac{(325.5 - 310.5)}{310.5} = \$3.62, \text{ rounded to } \$4.00$$

$$\$150 \times \frac{(325.5 - 310.5)}{310.5} = \$7.24, \text{ rounded to } \$7.00$$

$$\$225 \times \frac{(325.5 - 310.5)}{310.5} = \$10.86, \text{ rounded to } \$11.00$$

The indexed values to be used in the calculation of the base rate that would be used in the calculation of royalty payable on the metallic minerals and associated mineral products recovered during the first calendar quarter of 1990 would be:

$$\begin{aligned} \$ 75 + \$ 4 &= \$ 79 \\ \$150 + \$ 7 &= \$157 \\ \$225 + \$11 &= \$236 \end{aligned}$$

If some period other than 1967 is used as a base of 100 in determining the Producer Price Index for All Commodities, for the purposes of this lease provision the index must be adjusted so as to be in correct relationship to the 1967 base. In the event the index is not published by any federal agency, the index to be used as previously provided must be the index independently published, which, after necessary adjustments, if any, provides the most reasonable substitute for the Producer Price Index for All Commodities during any period after August 1987, it being intended to substitute an index that most accurately reflects fluctuations in the prices of commodities in the all commodities index in the manner presently reported by the Producer Price Index for All Commodities (1967 equals 100), published by the Bureau of Labor Statistics of the United States Department of Labor.

The values of \$75, \$150, and \$225 as used in the base rate must never be less than the minimum values prescribed in paragraph 8b of this lease.

d. The lessee may apply to the commissioner and the commissioner may grant the lessee a partial deferral of the lessee's obligation to pay royalties under this lease. Up to 50 percent of royalties due and payable less any credits against royalties as provided in paragraph 6, may be deferred by the commissioner. Any deferral granted applies only to the royalties due and payable during the first consecutive years, up to a maximum of the first five consecutive years, beginning with the first year that any royalties are due and payable under this lease, or to royalties due and payable during the first one-half of the expected operational life of the first mine established under this lease in the mining unit, whichever is less.

The amount of royalties deferred for each calendar quarter as provided above, plus interest at the rate of eight percent per year, becomes finally due and payable on the future date that is determined by adding the total number of years of deferral granted under this section to the date on which royalties would have been due and payable had there been no deferral.

The commissioner in considering the lessee's application for deferral of royalties may consider factors including, but not limited to, the expected operational life of the mine producing the royalties, the express purposes for which the money deferred is proposed to be used by the lessee, the cash flow analysis of the mine, the amount of either the capital invested or to be invested, or both, by the lessee in exploration and mining operations under this lease, and the technical and financial capabilities of the lessee.

9. Value of metallic minerals and associated mineral products.

a. The value of metallic minerals and associated mineral products recovered in the mill concentrate from each ton of dried crude ore must be determined monthly as follows: Multiply the total pounds respectively of each metal and associated mineral product recovered during the month in the mill concentrate from the mining unit, by the average market price per pound respectively for that month of each fully refined metal and of each associated mineral product. Subtract from that total, the smelter charges, as later defined in this lease, to obtain the value of each metallic mineral and each associated mineral product. Add the values thus obtained for each metallic mineral and each associated mineral product for the month, and divide the sum by the total number of tons of dried crude ore from the mining unit concentrated in the mill during the month, to obtain the value of the metallic minerals and associated mineral products recovered from each ton of dried crude ore. The value must be carried to four decimal places and rounded to the nearest one-hundredth of a dollar.

b. When metallic minerals and associated mineral products recovered during the month in the mill concentrate are sold during the same month, only those metallic minerals and associated mineral products recovered from that concentrate that are actually paid for by the smelter, refiner, or other purchaser must be valued as part of the metallic minerals and associated mineral products recovered during the month. When metallic minerals and associated mineral products recovered during the month are not sold during the same month, the value of the metallic minerals and associated mineral products recovered during the month must be adjusted, if necessary, at the time they are sold to reflect the market price at the time of sale, and to reflect any metallic minerals and associated mineral products recovered in a concentrate that are not actually paid for by a smelter, refiner, or other purchaser. Any prior payment of royalty that becomes an overpayment of royalty as a result of the adjustment of value under this paragraph is a credit against future royalty payments due under this lease.

c. Metallic minerals and associated mineral products sold by the lessee to a nonaffiliate shall be deemed sold at the time the metallic minerals and associated mineral products are delivered to the nonaffiliate. Metallic minerals and associated mineral products sold or transferred by lessee to an affiliate shall be deemed sold by lessee at the time of delivery to the affiliate and value must be calculated on the basis of the market prices at the time of the deemed sale of the metallic minerals and of the associated mineral products sold or transferred to the affiliate. Metallic minerals and associated mineral products retained by the lessee for its own internal use and consumption shall be deemed sold when they are removed from the mining unit and value must be calculated on the basis of the market prices at the time of the removal of the metallic minerals and of the associated mineral products retained for internal use and consumption. For the purpose of this lease "affiliate" means the lessee, or any business entity that is effectively owned or controlled directly or indirectly by the lessee or that directly or indirectly effectively owns or controls the lessee, or any business entity operated by or that operates the lessee.

d. If material is recovered and sold on a basis other than for the purpose of recovering the fully refined metals and the associated mineral products contained in the material, such as the recovery and sale of titanium dioxide for paint pigment uses, then the value of the material recovered and sold, for royalty calculation purposes, is subject to agreement between the commissioner and the lessee.

e. "Smelter charges" means the base smelter treatment charge assessed by the smelter for treating each ton of the mill concentrate plus the smelter losses that are deducted from the assay or market values to arrive at the gross payment to the lessee for each of the metallic minerals and associated mineral products paid for by the smelter. Smelter charges do not include the following: mining or milling, or similar beneficiation costs or charges; refinery losses; refinery charges; penalties for impurities; freight and transportation charges either to or from the mill, concentrator, smelter, or refinery; weighing and sampling charges; handling charges; selling charges; taxes of any kind; processing charges; or any other charges, other than the base smelter treatment charge and smelter losses, assessed by the smelter or purchaser of the metallic minerals or associated mineral products. If the mill concentrate is treated at a smelter owned by, or directly or indirectly effectively controlled by, the lessee or its affiliate, or that the lessee or its affiliate operates or manages, then the smelter charges allowed are equal to the smelter charges that the smelter would assess or charge an unaffiliated third party desiring to have a substantially similar mill concentrate treated at the smelter. If the smelter owned by, operated by, or effectively controlled by the lessee or its affiliate does not provide smelter

treatment services to unaffiliated third parties, then the smelter charges allowed are equal to the mean of the smelter charges assessed and charged for substantially similar mill concentrates in smelter contracts between unaffiliated parties. If any metallic minerals or associated mineral products produced under this lease from the mining unit are sold, or otherwise disposed of, without smelter treatment, as, for example, in the production of gold dore, then no deduction for smelter charges, nor any other charges, is allowed in the computation of the value of the metallic minerals and associated mineral products recovered in the mill concentrate. If the state disagrees as to the smelter charges, the lessee has the burden of proof of substantiating the smelter charges.

f. The average market price of copper per pound for each month is that quoted for MW US Producer Cathode (MW US PROD CATH), as reported in Metals Week. The average market price of nickel per pound for each month is that quoted for New York Dealer Cathode (NY DEALER CATH), as reported in Metals Week. The average market price of gold per troy ounce for each month is that quoted for the London Final, as reported in Metals Week. The average market price of silver per troy ounce for each month is that quoted for Handy & Harman, as reported in Metals Week. The average market price of zinc per pound for each month is that quoted for MW US High Grade (MW US HG), as reported in Metals Week. The average market price of lead per pound for each month is that quoted for North American Producer Low (NA PRODUCER L), as reported in Metals Week. The average market price of other metallic minerals and of associated mineral products per pound for each month shall be that quoted for their usual and customary shipping quantities, f.o.b. the usual and customary place of shipment, United States import duty (if any) included, as reported in Metals Week. If Metals Week does not or ceases to report an average monthly market price for any metallic mineral or associated mineral product, then the average monthly market price of that metallic mineral or associated mineral product is the arithmetic average of the daily market prices for the metallic mineral or associated mineral product for that month as reported in Metals Week. If Metals Week or its successors cease to furnish such quotations, or its quotations cease to be recognized in the trade, or a particular metallic mineral or associated mineral product is not listed, then the quotations of such other source as the parties may agree upon shall govern.

10. **Commingled ores.** The lessee has the right to commingle ore from the mining unit with other ore, either in the mine, in stockpile, in the mill, or in the smelter, but the ores must be kept entirely separate and distinct until their quantities and metal and mineral contents have been separately measured and determined. Ratios of concentration, percent mill recoveries, and any other factors necessary for determining the beneficiating amenability of the commingled ores, the allocation of values and the royalties, must be separately measured and determined by methods approved by the commissioner and shall be reported on a monthly basis. "Ratio of concentration" means the dry weight of the crude ore divided by the dry weight of the concentrate derived from the crude ore. "Percent mill recovery" means the dry weight of the metal in the concentrate divided by the dry weight of the metal in the crude ore, expressed as a percent.

11. **Quarterly payment on ore removed.** The lessee agrees to pay to the state, on or before May 20, August 20, November 20, and February 20 in each year during the period this lease continues in force, royalty at the rates specified in paragraph 8 for all of the ore removed from the mining unit during the previous calendar quarter. The lessee also agrees to pay to the state on or before May 20 of each year all royalty due and payable as a result of the adjustment to value of the metallic minerals and associated mineral products sold during the previous calendar year as provided for in paragraph 9b.

The lessee is liable for payment of royalty when due on all ore removed from the mining unit for concentration elsewhere or for any other purpose, from the actual time of removal; and if the royalty due on the ore is not determined and accounted for as provided by the next royalty payment date, the commissioner may determine the royalty by any method as the commissioner deems appropriate and consistent with the royalty rates set forth in this lease. Any amount paid for royalty must be allocated to the proper fund as determined by the mineral ownership.

12. **Lessee to transmit statement of ore removed and royalty due.** The lessee shall transmit to the commissioner with each royalty payment an exact and truthful statement of the tonnage and royalty value of the ore mined and removed from the mining unit during each of the three months for which the payment is made, and the amount of royalty due on the ore, separated as to the various state fund ownerships. The lessee shall provide for all the operations required for these determinations except as otherwise specified.

13. Weighing. The methods of obtaining the weights used to determine tonnage for the calculation of royalty, or to determine other weights required by the state, are subject to the approval of the commissioner.

14. Sampling. Samples for royalty purposes must be taken of the ores and their products at places and intervals subject to the approval of the commissioner. A portion of each sample or composite sample must be delivered to the commissioner unless, by mutual agreement, it has been decided that certain of such portions are not needed by the state. Except as otherwise permitted by the commissioner, all ore mined from this mining unit must be sampled and its weight determined before being commingled with any other ores.

Each royalty sample must be analyzed at the expense of the lessee by competent chemists or assayers approved in writing by the commissioner. The elements in the royalty sample for which analytical determinations will be made are subject to agreement between the commissioner and the lessee.

15. Monthly reports. Except as otherwise permitted by the commissioner, the lessee shall transmit within 30 days after the end of each calendar month, statements for that calendar month in the form the commissioner may require, covering the tonnages and analyses of the following: all material mined from the mining unit, all material milled from the mining unit, all material stockpiled from the mining unit, all concentrates produced from the mining unit, all material mined from any source and commingled with material from the mining unit, all commingled material concentrated, all commingled material stockpiled, all commingled concentrates produced during that calendar month, and such other information as may reasonably be required by the commissioner for the purpose of verifying the amount of royalty due.

The weight of ore as set forth in the monthly statements shall *prima facie* be binding as between the parties, but the state has the right to sample the ore, check the analyses, and inspect, review and test the correctness of the methods, books, records and accounts of the lessee in sampling, analyzing, recording, and reporting the weights, and to inspect, review, and test the correctness of the weights and scales and other equipment used in measuring the amount of ore, it being understood that any errors in these reports, when ascertained, shall be corrected.

16. Additional monthly and annual reports to be furnished by lessee; exploration; mine samples required. Except as otherwise permitted by the commissioner, in addition to other reports or statements required in this lease, the lessee shall furnish the following:

a. Copies of all exploration data, including, but not limited to, all logs and drill hole records; all maps and coordinates showing drill holes, geophysical grids, geochemical and geologic sampling, trenching, and survey data; all chemical and analytical data and information; all laboratory test data; all geophysical, geochemical, and geologic records; all results of mine and metallurgical testings; and all periodic mine maps, analyses maps, cross-sections, and development plans. All material required under this subparagraph must be available to the commissioner, or the commissioner's representative, at all reasonable times. Copies must be submitted annually to the commissioner when the data is in the form customarily prepared for permanent record of the operations on the mining unit. Material available to and furnished to the commissioner under this subparagraph and subparagraph b. shall be considered confidential during the life of this lease or any extension of it.

b. At least a quarter-portion of all exploration samples, and when requested by the commissioner in writing, a quarter-portion of mine or mill samples. In the event that the lessee requires certain exploration samples in their entirety, the commissioner or the commissioner's representative may waive the requirement for a quarter-portion of such exploration samples, provided that the lessee grants the state an opportunity to examine and classify such samples before they are crushed or processed.

c. A monthly report showing the estimated weights and analyses of all materials stockpiled, including lean ore, waste and tailings, and divided as to property of origin and deposition.

d. Certified copies of smelter statements, schedules, agreements, and settlement sheets or receipts from sales involving materials produced from this mining unit showing the product sold and factors relevant to the calculation of royalties.

e. Not later than March 1 of each year during the term of this lease, a summary statement of the tonnage of all ore mined and all ore milled from the premises and all ore materials placed in or removed from stockpile during the previous calendar year, divided as to the property of origin and the disposition of the ore materials and showing such analyses of them as the commissioner may require.

17. **How remittances and reports are to be transmitted.** All remittances by the lessee under this lease must be made payable to the state treasurer. All such remittances and all reports, notices and documents required under this lease must be transmitted to the commissioner through the director of the division of minerals at Saint Paul, Minnesota.

18. **State inspection; inspectors at plants and mines.** The commissioner may at all reasonable times enter the mining unit and any other premises used or operated by the lessee in connection with the operation of the mining unit, inspect the operations conducted under this lease, and conduct such engineering and sampling procedures and other investigations as the commissioner may require, not unreasonably hindering or interrupting the operations of the lessee.

The lessee shall provide, upon written request of the commissioner, a suitable room in the dry or wash house or in some other suitable place on the mining unit or elsewhere when necessary, with water, light, and heat, all without cost to the state, for the use of state inspectors. The room must be at least equal in size and equipment to that customarily furnished for the use of the mine engineer.

Whenever royalties or rentals due the state are required to be distributed to more than one fund, or when ore from the mining unit is commingled with other ore, or when ore from the mining unit is concentrated at the same plant as other ore, the commissioner may appoint special inspectors as the commissioner considers necessary to insure proper accounting and protect the interests of the state. The lessee shall reimburse the state monthly for the cost of this inspection service upon notification by the commissioner.

19. **Removal of ore for experimental purposes.** Notwithstanding paragraph 11, upon written application of the lessee, the commissioner may authorize the removal of ore from the mining unit for experimental purposes without payment of royalty; and it is further understood that the removal of samples obtained by drilling, trenching, or testpitting, for the purposes of exploration, is not subject to the payment of royalty.

20. **Stockpiled materials.** All materials mined and not shipped from the mining unit remain the property of the state and shall be stockpiled only in such manner and on such sites as may be authorized by the commissioner in writing. When, however, the commissioner agrees that substantially all minerals of value have been extracted from the mill tailings, the material may be used for stope filling on the mining unit or elsewhere, and the tailings material used shall be considered abandoned, and title to the material shall revert to the mineral owners of the property in which it is deposited.

21. **Reversion of title on land conveyed to the state for stockpiling purposes.** When the commissioner determines that it is necessary and that the interests of the state will be fully protected, the lessee may convey land to the state upon the condition that it be used for the storage of ore or other materials having present or potential value belonging to the state, and that the state's interest in the land terminates and title reverts to the lessee when the land is no longer needed or used for that purpose. No consideration shall be paid for the conveyance unless authorized by law.

22. **Cross-mining rights.** The lessee is hereby granted the right to mine and remove any ores from the mining unit through any shafts, openings, or pits that may be made upon adjoining and nearby premises controlled by the lessee; and the lessee may, if it so desires, use the mining unit and any shafts, openings, pits, made on it for the mining or removal of any ores from adjoining or nearby premises, not, however, preventing or interfering with the mining or removal of ore from said mining unit. The ores taken from the mining unit must at all times be kept entirely separate and distinct from any other ores until measured and sampled as provided in this lease so that the rights of the lessor are at all times preserved and protected. The lessor recognizes the rights and liens of the owners of any nearby or adjoining premises in any ores mined from them and transported through the mining unit.

23. Lessee's obligations under state and federal laws and regulations. The provisions of this lease are subject to all applicable state and federal statutes, orders, rules and regulations, and all operations under this lease shall be conducted in conformity with them. No interference, diversion, use or appropriation of any waters over which the commissioner or any other state agency has jurisdiction, may be undertaken unless authorized in writing by the commissioner or the state agency.

24. Operations to be conducted in accordance with good mining and metallurgical engineering. The lessee shall advise the commissioner when exploration drilling, trenching, or testpitting on the mining unit is about to begin. The lessee shall open, use, and work the mine or mines on the mining unit and conduct metallurgical operations in such manner only as is usual and customary in skillful and proper mining and milling operations in accordance with the requirements, methods, and practices of good mining and metallurgical engineering, and in such manner as not to cause any unnecessary loss of minerals, or unusual permanent injury to the mining unit. Surface lands owned by the state in the mining unit are not to be cleared or used for construction or stockpiling purposes until the plan for such use has been approved by the commissioner. The surface use of the mining unit must be conducted in such manner as to prevent or reduce scarring and erosion of the land and pollution of air and water.

25. Lessee's obligation for damages. It is understood and agreed that in case any interest in the land or minerals covered by this lease is owned by anyone other than the state, this lease shall not be construed as authorizing any invasion of or trespass upon such other interest. The lessee is obligated to save the state harmless from all damages or losses caused directly or indirectly by operations under this lease, whether to land, timber, minerals, growing crops, or buildings, or to any person or other property, including damages suffered by that other owner of the surface or mineral rights, and the state shall not be liable for them.

26. Lessee to pay all taxes. The lessee agrees to pay when due all taxes, general and specific, personal and real that may be assessed against the mining unit and the improvements made on it, and the ore materials in it or mined from it, and any personal property on the mining unit owned, used, or controlled by the lessee. This covenant does not apply to taxes assessed against any part of the mining unit as a result of any other lease granted by the state to other parties. The cancellation, termination, or expiration of this lease does not relieve the lessee of the obligation to pay taxes assessed during the continuance of the lease, even though such taxes may be due or payable after the cancellation, termination, or expiration date.

27. State lien for unpaid sums due. The state reserves and shall at all times have a lien upon all ore mined from the mining unit, all ore concentrated from it, smelter returns due the lessee for the ore, and all improvements made under this lease for any sums not paid when due.

28. Lessee's right to terminate lease. The lessee may at any time deliver to the commissioner written notice of intention to terminate this lease, and this lease shall terminate 60 days after the delivery unless the notice is revoked by the lessee by further written notice delivered to the commissioner before the expiration of 60 days. On December 31 following the tenth anniversary date of this lease, and on any succeeding December 31, the lessee may surrender its rights and privileges granted in this lease on any governmental descriptions or on beds of public waters included in the mining unit, by giving the lessor written notice of its intention so to do at least 60 days before the date of such surrender. All sums due to the state under this lease up to the effective date of termination must be paid by the lessee.

29. Lessor's right to cancel lease upon lessee's failure to meet production requirements. The state may cancel this lease as provided in paragraph 30 if the lessee has not met both of the following conditions by the end of the 20th full calendar year of this lease:

- (a) The lessee must be actively engaged in mining ore under this lease from:
 - i. the mining unit;
 - ii. a metallic mineral mine within the government township in which the mining unit is located; or
 - iii. a metallic mineral mine within a government township that has at least one point in common along its boundary line with the government township in which the mining unit is located.

(b) The lessee must have paid to the state at least \$100,000 in earned royalty under a metallic minerals lease. This amount must be paid during a single calendar year.

The state may exercise its option to cancel the lease during the 21st calendar year of the lease. If it does not do so, and if the conditions have not been met by the end of the 35th full calendar year of this lease, it may exercise its option to cancel during the 36th calendar year of the lease. The commissioner shall take the lessee's financing needs and the state's proportional ownership interest into consideration in determining whether the requirements of this paragraph have been met.

30. Lessor's right to cancel lease upon default. This lease is granted upon the express condition that, if any sum owed under it by the lessee for rental, royalty, or otherwise remains unpaid after the time when it became due, or if the lessee or its agent or servant knowingly or willfully makes any false statement in any report, account, or tabulation submitted to the state or to the commissioner, or any of the commissioner's agents pertaining to any matter under this lease, or if the lessee fails to perform any of the conditions required by this lease, the commissioner may cancel this lease by mailing or delivering to the lessee 60 days' notice of the cancellation in writing, specifying such nonpayment or other default as the case may be. This lease shall terminate at the expiration of the 60 days, and the lessee and all persons claiming under the lessee shall be wholly excluded from the mining unit except as hereinafter provided in paragraph 31. Termination does not relieve the lessee from any liability for payment or other liability incurred under this lease. If the default consists of a nonperformance of an act required under this lease other than payment of royalty or rental, the lessee may perform within the period of 60 days and the lease continues in effect. If the correction of any such default requires more time than 60 days after the notice has been received by the lessee, the commissioner, upon written request of the lessee and for good cause shown, may, at his or her discretion, grant an extension of the period of 60 days. If the default consists of a nonpayment of royalty or rental and the lessee performs within 15 days from the mailing or delivery of notice of cancellation, the lease continues in effect; and if the lessee performs at any time thereafter within the period of 60 days, the commissioner, at his or her discretion, may continue the lease in effect.

31. Rights of lessor and lessee during 180-day period following termination. Upon termination of this lease, whether by expiration of its term or by act of either party, except as necessary to comply with applicable mineland reclamation statutes and rules, the lessee has 180 days after termination in which to remove all equipment, materials, railroad tracks, structures and other property placed or erected by the lessee upon said mining unit. Property not removed within that time shall, at the discretion of the commissioner, either be removed by the state at the lessee's expense or become the property of the state. The lessee shall not remove or impair any supports placed in any mine or mines on the mining unit, or any timber or framework necessary to the use or maintenance of shafts or other approaches to such mine or mines or tramways within the mining unit, all of which become the property of the state. During the period of 180 days, the lessee shall, at its own expense, properly and adequately fence all pits, level banks, and refill all test pits and cave-ins that may be deemed dangerous or are likely to cause damage to persons or property, and the lessee shall do all other work which the commissioner deems necessary to leave the premises in a safe and orderly condition to protect against injury or damage to persons or property, and shall restore the premises as nearly as the commissioner deems practicable to the natural conditions of the surrounding area and shall reclaim the premises in accordance with the applicable mineland reclamation statutes and rules. Subject to the foregoing, upon the termination of this lease, whether by expiration of the term hereof or otherwise, the lessee shall quietly and peaceably surrender possession of the mining unit to the state. During the period of 180 days, the lessee shall not be relieved of any obligation or liability resulting from the occupancy of the mining unit unless the lessee has wholly vacated the mining unit prior to the expiration of that period and has notified the commissioner thereof in writing.

32. Recovery of expenses. If it is necessary for the state to incur expenses by court action or otherwise for the ejectment of the lessee, or removal from the leased premises of the lessee's property, or recovery of rent or royalties, or for any other remedy of the state under this lease, and the state prevails in the court action or otherwise, then the lessee shall pay to the state all expenses, including attorney's fees, thus incurred by the state.

33. Mining of minerals other than metallic minerals. If any ore found on or in the mining unit is primarily valuable for other than its metallic minerals content, the terms and conditions upon which the ore may be mined or products recovered from it shall be as may be agreed upon by the lessee and the commissioner and approved by the state executive council. This provision does not apply to iron ores, taconite ores, coal, oil, gas, and other liquid or gaseous hydrocarbon substances.

34. Agreements, assignments, or contracts. All assignments, agreements, or contracts affecting this lease must be made in writing and signed by all parties thereto, witnessed by two witnesses, properly acknowledged and must contain the post office addresses of all parties thereto, and when so executed must be presented in quadruplicate to the commissioner for record. No such instrument is valid until approved in writing by the commissioner and approved as to form and execution by the attorney general. No assignment or other agreement relieves the lessee of any obligation or liability imposed by this lease, and all assignees, sublessees, and subcontractors are also liable for all obligations or liabilities imposed by this lease.

35. Lease binding on assignees and successors. The covenants, terms, and conditions of this lease run with the land and extend to and bind all assignees and other successors in interest of the lessee.

36. Notices. For the purposes of this lease, the addresses of the parties are as follows, unless changed by written notice to all parties: For the state -- Commissioner of Natural Resources, State of Minnesota, 500 Lafayette Road, Saint Paul, Minnesota 55155-4037; for the lessee --

Lehmann Exploration Management, Inc.
Suite 790, Kickernick Building
430 First Avenue North
Minneapolis, Minnesota 55401

37. THIS LEASE IS ISSUED UNDER ALL APPLICABLE PROVISIONS OF MINNESOTA STATUTES CHAPTER 93; AND MINNESOTA RULES, PARTS 6125.0100 THROUGH 6125.0700, THE RULES ADOPTED BY THE STATE EXECUTIVE COUNCIL ON NOVEMBER 8, 1966, AMENDED EFFECTIVE SEPTEMBER 7, 1982, AND AMENDED EFFECTIVE MAY 23, 1988.

IN TESTIMONY WHEREOF, the state, by and through its commissioner of natural resources, has caused this instrument to be executed, with the commissioner's official seal attached, and the lessee has hereunto set its hand the day and year first above written.

Signed in Presence of:

Karen L. Singer

Alie Vega

As to State

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

John D. Odegard
Commissioner of Natural Resources

01/01/00

Signed in Presence of:

Ernest K. Lehmann

John D. Odegard

Ernest K. Lehmann

John D. Odegard

As to Lessee

LEHMANN EXPLORATION MANAGEMENT, INC.

By Ernest K. Lehmann
Ernest K. Lehmann, President

By Jeane K. Moore
Jeane K. Moore, Vice President

Signed in Presence of:

As to Lessee

By _____

By _____

Signed in Presence of:

As to Lessee

By _____

By _____

STATE OF MINNESOTA)
) SS
COUNTY OF RAMSEY)

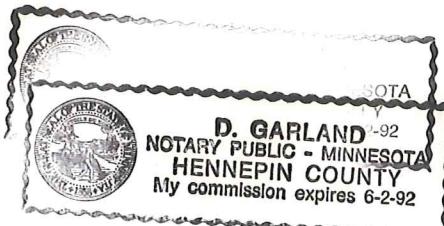
This instrument was acknowledged before me this 2nd day of July, 1990, by
Joseph N. Alexander, Commissioner of Natural Resources.



Karen L. Singer
Notary Public
My Commission Expires May 16, 1991

STATE OF Minnesota)
) SS
COUNTY OF Hennepin)

This instrument was acknowledged before me this 12th day of June, 1990, by
Ernest K. Lehmann, President and
Jeane K. Moore, Vice President of
Lehmann Exploration Management, Inc., a Minnesota corporation,
on behalf of the corporation.



D. Garland
Notary Public
My Commission Expires 6-2-92

This instrument was drafted by:
DEPT. OF NATURAL RESOURCES
500 Lafayette Road
St. Paul, Minnesota 55155-4045

and

OFFICE OF ATTORNEY GENERAL
Suite 200
520 Lafayette Road
St. Paul, Minnesota 55155

This Mining Lease has been examined and approved
as to form and execution this 9th day of
July, 1990.

Hubert H. Humphrey, III
Attorney General

Philip Offelt
Spec. Asst. Attorney General
Department of Natural Resources

Office of Commissioner of Natural Resources
STATE OF MINNESOTA

I hereby certify that this instrument was filed in this
office for record on July 10, 1990
and was duly entered in Mineral Lease Royalty Record
Book MM on page 9455-N.

Joseph N. Alexander
Commissioner of Natural Resources
By *Mark B.*

RESOLVED, by the Executive Council of the State of Minnesota, at its meeting on June 6, 1990, that the Commissioner of Natural Resources enter into an agreement with Lehmann Exploration Management, Inc. for a Metallic Minerals Lease covering:

The minerals and mineral rights, without warranty of title, in

Southeast Quarter of Southwest Quarter (SE1/4-SW1/4), Section Twenty-five (25);

and the surface and minerals and mineral rights in

Northeast Quarter (NE1/4), Northeast Quarter of Southeast Quarter (NE1/4-SE1/4), Section Thirty-six (36);

and the minerals and mineral rights in

That part of the Northeast Quarter of Northwest Quarter (NE1/4-NW1/4) lying east of the current natural ordinary high water mark of the Birch Lake Reservoir, Section Thirty-six (36);

all in Township Sixty-one (61) North, Range Twelve (12) West, containing 242 acres, more or less, but excepting and excluding the lands, minerals, and mineral rights lying in and directly under the bed of the Birch Lake Reservoir below the current natural ordinary high water mark thereof, and subject to special review of exploration plans by the Department of Natural Resources, or its successors or assigns;

for a period of fifty years, in accordance with Minnesota Rules, parts 6125.0100-.0700, the rules covering permits to prospect for and leases to mine metallic minerals, on the terms set forth in the proposed lease agreement, which was submitted and filed with the Secretary of the Council for the Council's June 6, 1990 meeting; and the Commissioner of Natural Resources is hereby authorized and directed to execute such Metallic Minerals Lease on behalf of the State of Minnesota.


Sandra J. Hale
Executive Secretary
State Executive Council

**Co-signatories to the Letter to DNR Commissioner Sarah Strommen Urging the DNR to
Cancel Twin Metals State Mineral Lease**

Minnesota Legislators

Senator Doron Clark	Representative Esther Agbaje	Representative Jess Hanson
Senator Steve Cwodzinski	Representative Patty Acomb	Representative Heather Keeler
Senator Scott Dibble	Representative Robert Bierman	Representative Liish Kozlowski
Senator Peter Fischer	Representative Shelley Buck	Representative Tina Liebling
Senator Foung Hawj	Representative Ethan Cha	Representative Fue Lee
Senator Amanda Hemmingsen-Jaeger	Representative Brion Curran	Representative Liz Lee
Senator Mary Kunesh	Representative Alex Falconer	Representative Kelly Moller
Senator Alice Mann	Representative Leigh Finke	Representative Kristi Pursell
Senator John Marty	Representative Sandra Feist	Representative Lucy Rehm
Senator Jen McEwen	Representative Mary Frances-Clardy	Representative Kari Rehrauer
Senator Ann Rest	Representative Aisha Gomez	U.S. Representative Kelly Morrison
Senator Ann Johnson Stewart		

Friends of the Boundary Waters Clean Water Coalition of Businesses and Organizations

Austin Chapter 10 IWLA

Hungry Jack Outfitters LLC

Save Our Sky Blue Waters

Bang Brewing

Indivisible North Metro

Sawbill Canoe Outfitters

Bicycle Alliance of
Minnesota

Java Moose

Starry Skies North

Black Hills Clean Water
Alliance

League of Women Voters of
Minnesota

Sustainable Farming
Association

Boreal Bliss Yoga Retreats

Loon Lake Lodge

Tamarack Water Alliance

Bryan Hansel Photography
LLC

Lutefisk Technologies, Inc.

The Borglum Corporation

Cafe Imports

Malach Consulting

Thomas Nelson Properties,
Inc.

Camp Menogyn

Minnesota Center for
Environmental Advocacy

Three Waters Pipeline
Resistance Team

Cedar and Stone Nordic
Sauna

Minnesota Division Izaak
Walton League of America

True North Map Company

Cherokee Concerned Citizens

Minnesota Environmental
Partnership

Uranium Watch

Clean Water Action

MN350

VandeTech LLC

Cook County Coalition of
Lakes Association

Mukwa

Vikre Distillery

Crooked Water Spirits

North American Water Office

Vote Climate

CURE	Northern Waters Smokehaus	Vote Solar
Democracy Defenders-Indivisible	Pollinator Friendly Alliance	Voyageurs Conservancy
DFL Environmental Caucus	River Alliance of Wisconsin	Voyageurs Maps
Friends of Minnesota Scientific and Natural Areas	Rock Creek Alliance	Walden Coffee
Garden Community Church	Save Lake Superior Association	WaterLegacy
Gunflint Trail Historical Society	Sierra Club Northstar Chapter	Wilderness Watch

**Supporters and Individual Members of the Friends of the Boundary Waters Clean Water
Coalition**

Jeanne Abraham	Sharon Hattenberger	Karren Perkins
Brian Adams	Jack Haugen	Catherine Perme
Forrest Ahrens	Christina Hausman Rhode	Allen Perry
Paul Alexander	Jessica Haverly	Megan Person
Monica Allen	Sally Henderson	Karen Peters
Tim Andersen	Nancy Henderson-Korpi	Edith Peterson
Lynn Anderson	Mark Hennessy	Annalisa Peterson
Ellen Anderson	Linda Herron	Peter Peterson
Melinda Antisdel	Doug Heuer	Mark Petraitis
Angie Arden	Cathy Higgins	Joyce Pfaff
Jerd Arlich	Rebecca Higgins	Katrina Phillips

Annie Arnold	Susan Hill	Ann Pifer
David Atchison	Mark Hirschboeck	Steven Pincus
Michael Badinger	Andrea Hofeldt	Cristina Pippa
Johan S Bakken	Dave Holt	Robin Pliml
Ann Bancroft	Hannah Holtegaard	Catherine Podeszwa
Rosanne Bane	Anna Houston	Rick Ponthan
Nicholas Banovetz	Patrick Hughes	Craig Poorker
David Barrett	Deborah Huskins	Corey Popp
Christopher Barth	Anne Ireland	Pamela Postiglione
Jesse Bearheart	Elizabeth Jackson Kirchhoff	Margi Preus
Jan Bensen	Karin Jacobson	Catherine Preus
Judith Bergh	Chris Jacobson	Elizabeth Preus
John Bingea	CJ Jacobson	Janet Preus
Emily Blain	Leslee Jaeger	Martha Preus
LuAnn Bleiler	Jeffrey Jaeger	Ann Price
Betsy Blume	George Janson	Thomas Probst
Rachel Bly	Lilias Jarding	Kevin Proescholdt
Katharine Bogen	Emily Jerve	David Quist
Wayne Bogen	Stephanie Johnson	Jim R
Megan Bond	Karen Janice Johnson	Brittany Rawlings
Emily Borgestad	Lena Johnson	Martin F Reeck
Scott Borgestad	Cindy Johnson	Anne Reich
Jeffrey Borglum	Lynn Johnson	Linda Reiff
Sandy Boss Febbo	Jayne Johnson	Jeffrey Reihle

Barbara Bottger	Katie Johnston-Goodstar	Jill Riley
John Bottger	Tom Jones	Mary Riley
Gelina Boyer	Kelsey Jones-Casey	Leah Rogne
Daniel Brennan	Ryan Jones-Casey	William Rom
Johnson Bridgwater	Steve Jorissen	Phyllis Root
Ben Brochtrup	Dave Jossi	Maery Rose
Benjamin Brochtrup	Ethan Jossi	Ken Rosemark
Rebecca Bromelkamp	Mary Kalkbrenner	Laura Rosendahl
Linda Brooks	Keelin Kane	Jean Ross
Melissa Brown	Karl Karst	Elizabeth Sainio
Claudia Bruber	Andrew Karst	Nancy Salminen
Todd Burlet	Kathleen Kelnberger	Rachel Saturn
Collin Burns	Robyn Keyport	Kathy A Schaaf
James Calder	Robert King	Jason Schlesener
Clare Cardinal-Pett	Rev. Rick King	Laurie Schneider
Megan Carney	Nancy Kjellberg	Bob Schuchardt
Gwynn Carver	Steven Klar	Steve Schultz
Tom Casey	Garrett Klein	Lenore Healey Schultz
Patricia Castellano	Aaron Klemz	David Seaton
Siobhan Chantigian	Stuart Knappmiller	Bradley Segall
Lissa Chipeco-Colton	Sherri Knuth	Meredith Seminerio
Jaci Christenson	Marit Knutson	Steve Semmer
Sandy Christie	Karin Knutson	Kirsten Semmer
Barbara Clark	Kimberly Kokett	Andreea Seusan

Jeff Cluever	Georganne Krause	Caroline Sévilla
Joshua Colton	Richard Kreibich	Christina Shaw
Greg Conley	Steven Kuross	Michael Shemanske
Bryana Cook	Erik Kuross	Sean Sherman
Nancy Copeland	Greg Laden	Clare Shirley
Nan D Corliss	Sylvia Lambert	John Siekmeier
Mary Costello	Greg Larson	Suzanne Silverman
Joseph Cottew	Rebecca Lawrence	Dushan Skorich
Patti Craddock	Madelyn Lawrence	Eóin Small
Chris Crider	Sara Lefebvre	Jackie Smolen
Sam Crosby	Chloé Leisure	Emma Springer
Nathan Crymble	Samuel Levar	Fred Sproat
Dennis Cuchna	Kevin LeVoir	Amy Sproat
Twyla Cuchna	Natalie Lilja	Avonna Starck
Timothy Current	Aaron Lilly	Molly Stawarz
Rhonda Current	Kathy Litt	Margaret Stern
Mae Davenport	Jason Lockefeer	Lee Stocking
Roger Davies	Kirsten Long	Elizabeth Storaasli
Catherine Day	Jason Long	Marlene Stottrup
Diana Dean	Sophie Long	Michelle Strangis
Judith Derauf	Ruth Lovander Foley	Sam Streukens
Melia Derrick	Lise Lunge-Larsen	Nancy Sudak
Benita Dieperink	Paula Maccabee	Cher Sulerud
Renee Dietz	Gary Maciejewski	Robert Swanson

Matt Doll	Alice Madden	Dan Swenson-Klatt
Robert Donaho	Laura Mahutchin	Mary T Tackett
Stephanie Donaho	Heather Manley	Alan Thometz
Emily Doskey	Deborah Marcero	Rolf Thompson
Jennifer Dresselhaus	Laurel March	Kelly Thompson
Lois Drontle	Denise Marlowe	Michael Thompson
Anne Dugan	Beverly Martin	Elayna Thompson
William Durbin	James Martin	Jon Tilp
Mary Eckman	Tee McClenty	Gary Titusdahl
Elizabeth Edinger	Julie McGlincey	Diane Titusdahl
Lester B Edinger	Kathleen McQuillan	Helen Torrens
David Edinger	Courtney Merritt	Nan Toskey
Bill Edinger	Emily Meyer	Susan Truman
DeeDee Edlund	Julie Miedtke	Ellen Trygstad
Joe Eggen	Barbara Miller	Meredith Tuntland
Joshua Elfering	Stephen Mineck	Aaron Upin
Steven H Emerman	Peter Mitchell	Allison Van Dyk
Karen Emerson	Jacob Molloy	Daniel Van Dyk
Tory England	Margot Monson	Mathew Vandestouwe
Kathie Erbes	Larry Montan	Mike Vant
Joseph Estlie	Sarah Mooradian	Martha Vetter
Sarah Fields	Fred Morris	Emily Vikre
Franklin Firestone	Bonnie Morris	Joel Vikre
Betty Firth	L Morrison	Colleen Vitek

Janet Fisher	Steve Morse	Mary H. Vlazny
Kathryn Flory	Phoenix Muchowski	Mary Vrabel
Lea Foushee	Andrea Nadeau	Michael Vrabel
Kirk D Fowler	Tim Neary	Patricia Wallert
Edward France	Lisa Neary	Diana Wallert
Lizabeth Fundingsland	Thomas Nelson	Chris Watson
Linda Funk	Mason Nelson	Richard Watson
Ashley Galchutt	Robert Nesheim	Adrian Watt
Ian Galchutt	Terran Neve	Sue Watt
Cathy Gallagher	Leah Nicholson	Martha Wavrin
Katie Gillette	Robin Nicholson	Amanda Weberg
Mary E Gilroy	Christopher Norbury	Barbara Weckesser
Bert Goldstein	Alexandra Nyberg	Dawn Wenck
River Gordon	Eric Nyberg	Kristen Wesloh
Erica Gossard	Lisa Ohnstad	Barbara Wessen Chang
Karen Grangaard	Susan Ohnstad	Fran Whitman
Marion Greene	Kathy Okeson	Janet Wilmes
Wolfgang Greiner	Lori Olinger	Lucinda Winter
Maxime Groen	Chris Olson	Michael Wojcik
Ellen Hadley	Kathrin Olson Rutz	Ben and Barry Wolfe
Thomas Hafnor	Ernest Oppegaard-Peltier	Scott Wolff
Elaine Hagen	Carrie Overgaard	Sarah Wood
Beth Hall	Tom Overstreet	Cynthia Wrinkle
Sarah Hallberg	Mark Owens	Curt Wrinkle

Bryan Hansel	Michael Pach	Seth Wrinkle
Carly Anne Hansen	Elanne Palcich	Anne Ylvisaker
Nancy Hassett	Ethel Pastarr	Andrea Yoch
Holly Hatch-Surisook	Dan Pauly	Janet Yoe
Joe Hatch-Surisook	Michael Paymar	Anika Zaccardi