



Michigan Department of Natural Resources – Office of Minerals Management

NO.

METALLIC MINERALS LEASE

By authority of Part 5, Section 502, Act 451 of 1994, as amended.

This Lease, made and entered into this _____ of _____ in the year 20____,

By and between the DIRECTOR OF THE DEPARTMENT OF NATURAL RESOURCES for the STATE OF MICHIGAN, hereafter called "Lessor", whose address is P. O. Box 30452, Lansing, Michigan 48909-7952 and _____, whose address is _____, hereafter called "Lessee".

The State of Michigan is the owner of rights to any metallic minerals and/or mineral products lying on, in, or under the lands described below, and has the authority to lease the lands for exploration, mining, and taking away of the minerals and/or mineral products under authority of Part 5, Section 502, 1994 Public Acts 451, as amended.

Now therefore, the Lessor for and in consideration of a cash bonus in hand paid, and of the covenants and agreements hereinafter contained on the part of the Lessee to be paid, kept, and performed, has granted, demised, leased, let, and by these presents does grant, demise lease, and let without warranty, express or implied, unto the said Lessee all of those certain tracts of land situated in the State of Michigan, and more particularly described below for the sole and only purpose of exploring, mining and producing minerals, and/or mineral products therefrom, for selling the same and with the reasonable right to ingress and egress, the right to construct buildings, make excavations, stockpiles, impoundments, tailings basins, roads, railroads, power lines, and other improvements as may be necessary to produce, save, and take care of such minerals and/or mineral products on or from the leased premises, subject to all highways, surface conveyances, leases, licenses, or easements of public record, to wit:

County

Parcels

Description	Section	Acres	Equity

Stipulations
None

Containing _____ net acres, more or less.

A. GENERAL

1. Addresses

The address of the Lessor is the Michigan Department of Natural Resources, Minerals Management, P.O. Box 30452, Lansing, Michigan 48909-7952, and the address of the Lessee is as shown on page one (1) of this lease, or other address designated in writing by either party. Periodic reports, statements, and payments under this lease may be sent to the designated address by regular mail. Any formal notices required under this lease, including notices of surrender, cancellation, default, or termination, shall be complete upon mailing by certified or registered mail, return receipt requested, addressed to the last designated address of the party being given such notice.

2. Insurance

- a. Lessee shall obtain and maintain all Worker's Compensation Insurance as required by State law in accordance with P.A. 317 1969 as amended, as well as liability insurance and policies of insurance against fire and other risks in amounts customarily obtained in similar mining operations and shall furnish Lessor proof of insurance prior to the commencement of any operations.
- b. All insurance shall be maintained by Lessee at its own expense. The companies issuing such policies shall also be required to furnish the Lessor written notice thirty (30) days prior to cancellation, termination, or material change of any insurance.

3. Indemnification

- a. In connection with all of its operations under this lease, the Lessee will save, protect and hold harmless the Lessor against any and all claims, demands, or judgments for loss, damage, death, or injury to persons or property arising out of the Lessee's activities or operations on the leased premises, except with respect to claims of the Lessor, its assigns, contractors, employees, successors, or agents unless the claims arise as a result of negligence or other tortious conduct of the Lessee or violations of the terms of this lease by Lessee. This provision shall not be applicable to liability for damages arising out of bodily injury, death, or damage to property of others not resulting from the negligence of the Lessee, its officers, employees, agents, or contractors.
- b. The Lessee shall, at Lessee's expense, during the term of the lease and any extensions thereof, obtain and maintain insurance which insures the premises for public liability in amounts not less than those set forth below naming the State of Michigan, its several departments, commissions, boards, officers and employees as an additional insured and protecting against all claims, demands, actions, suits or causes of action, and judgments, settlements or recoveries, for bodily injury, death, or property damage arising out of Lessee's use or occupancy of or operations conducted upon the leased premises. Lessee agrees to maintain minimum policy limits in the amount of \$1,000,000.00 per occurrence for property damage and \$1,000,000.00 per occurrence for bodily injury or death, and to provide the State with a certificate of insurance prior to final execution and delivery of this lease to Lessee. The companies issuing such policies shall also be required to furnish the Lessor written notice thirty (30) days prior to cancellation, termination, or material change of any such insurance. The Lessor shall periodically review the level of the indemnification insurance and may require the amount of such insurance to be increased or decreased to reflect changes in risk exposure.

4. Assignments and Contracts

- a. No assignments of this lease, or any rights hereunder, shall be valid except upon written approval of the Lessor, and upon payment of an administrative fee as established by the Lessor in a published schedule. The Lessor will approve or deny requested assignments with reasons stated within 90 days receipt of written request by Lessee.
- b. Assignments by Lessee of any portion of the leased premises shall be construed as creating a separate lease agreement as to the acreage or portions assigned. Development on the assigned acreage, after the assignment has been made, shall not affect the rate of rental or term of the lease on the unassigned acreage; and, conversely, development on the unassigned acreage, after the assignment has been made, shall not affect the rate of rental or term of the lease on the assigned acreage.
- c. If the Lessee's interest or any part thereof is assigned, each and every clause and covenant hereof shall extend to the assignee, its or their heirs, executors, administrators, successors, or assigns.

5. Taxes

- a. Lessee shall pay all taxes and assessments, whether general, special or specific, levied upon the leased premises, on any part thereof, on any minerals and/or mineral products, or any property or improvements on the leased premises.
- b. Upon the termination of this lease, for any cause and with respect to any of the leased premises, Lessee shall pay the taxes and assessments whether general, special or specific assessed or levied on all of the leased premises for the entire calendar year.
- c. Lessee shall have the right, consistent with statutes, in such cases made and provided to contest the validity of any tax and assessment whether general, special or specific, and may seek its cancellation, reduction, readjustment, or equalization.
- d. Lessee shall not permit the leased premises, any part thereof, any minerals and/or mineral products, or any improvements or personal property thereon, to be sold at any time for any taxes or assessments whether general, special, or specific.

6. Protection of Property, Fencing Safeguards

- a. Lessee shall not alter, or authorize others to alter, the leased premises except as authorized by the lease.
- b. Lessee shall maintain for the term of this lease, proper fences or other protective barriers around any open pits, shafts, or other openings on the leased premises created by Lessee. Lessee shall further employ all reasonable and practical safeguards for the protection of all persons entering in or upon such leased premises used or occupied by Lessee in conjunction with operations under this lease.
- c. At the termination of this lease, in whole or in part, for whatever reason, Lessee shall surrender the leased premises to Lessor in a safe condition. All caves, openings, stopes, shafts, underground openings, and other dangerous conditions created by Lessee shall be fenced, filled, or protected so as to leave a condition, which will adequately protect public safety.

7. Laws, Rules, and Regulations

- a. Any operations under this lease shall be subject to all applicable federal, local and State laws, rules, and ordinances now or hereafter in force. This lease is not in itself an authorization to explore or mine. In addition to compliance with the provisions of this lease, and particularly Sections I and J thereof, Lessee must obtain all permits which may be or are required under federal, local, and State law or any rules or ordinances adopted thereunder.
- b. No rules adopted by the State of Michigan or any agency thereof after the approval of this lease shall operate to affect the term of lease, rate of production royalty, rental, Minimum Royalties, or acreage, unless agreed to by both parties.
- c. Prior to the mining of mineral and/or mineral products containing fissionable materials Lessee shall secure all required authorizations from any applicable federal and state regulatory agencies. Lessee shall conduct all mining operations, processing or transportation of minerals and/or mineral products containing fissionable materials or radioactive source materials in accordance with all applicable federal and state laws and rules of the Department of Environmental Quality now or hereafter in force.

B. TERM OF LEASE

- 1. This lease shall remain in force for a primary term of ten (10) years from this date and as to those portions of the leased premises included within a mining operation area, so long thereafter as there is production of minerals and/or mineral products in paying quantities by Lessee from lands within such mining operation area.
- 2. The primary term of this lease may be extended automatically from the 11th through 20th years by payment of a minimum royalty pursuant to Section C2. Lessor may, at its sole discretion, upon written application of Lessee, agree to additional extensions beyond the 20th year by payment of a minimum royalty pursuant to section C2.

C. ECONOMIC TERMS

1. Rentals

Lessee shall pay to Lessor rental as follows:

- a. Rental for the first (1st) through fifth (5th) year shall be paid at the rate of \$3.00 per acre per lease year, and for the sixth (6th) through tenth (10th) year at the rate of \$6.00 per acre per lease year.
- b. Rental for the first year shall be paid upon execution of the lease, and thereafter rental shall be paid annually in advance of the lease anniversary date. The Lessor's receipt and deposit of a late rental payment shall not constitute a waiver of, or otherwise affect the Lease termination that shall automatically occur whenever any rental payment is unpaid for a period of fifteen (15) calendar days or more after the lease anniversary date. The Lessee shall file a Notice of Termination with the Lessor should the lease terminate. Lessor may, at its sole discretion, in writing, waive termination of the lease for unpaid rental upon Lessee's submission in writing of proper and satisfactory proof as to cause, along with payments due. Any payments by Lessee after the due date shall include interest at the rate of 1.5 percent per month or at the maximum legal rate, whichever is less, on the amount unpaid.
- c. Payment of either Production Royalties or Minimum Royalties from a mining operation area shall abate the rental on that part of the leased premises contained in that mining operation area. The abatement shall be effective on the rental due date following the rental period in which the abatement is granted.

2. Minimum Royalties

Lessee shall pay to Lessor Minimum Royalties as follow:

- a. In the event the primary term of the lease is extended, pursuant to Section B2, a Minimum Royalty shall be paid at the rate of \$10.00 per acre for the eleventh (11th) year, and thereafter, the rate shall increase an additional \$5.00 per acre per year up to a maximum of \$55.00 per acre per year.
- b. Minimum Royalty payments shall be paid annually in advance of the lease anniversary date. This Lease shall terminate and the Lessee shall file a Notice of Termination with the Lessor whenever these payments remain unpaid for a period of fifteen (15) days after the lease anniversary date. Lessor may, at its sole discretion, waive in writing termination of the lease for unpaid Minimum Royalties upon Lessee's submittal in writing of proper and satisfactory proof as to cause, along with payments due. The Lessor's receipt and deposit of a late Minimum Royalty payment shall not constitute a waiver of the Lessor's right to claim default under the provisions of Section H. In addition to any remedies available to the Lessor under the lease, any payments by Lessee after the due date shall include interest at the rate of 1.5 percent per month or at the maximum legal rate, whichever is less, on the amount unpaid.
- c. Establishment of a mining operation area shall abate all increases in the Minimum Royalty on that portion of the leased premises contained in the mining operation area. The abatement shall be effective on the next annual Minimum Royalty due date. Thereafter, Minimum Royalties shall be paid at that constant rate until production of minerals and/or mineral products in paying quantities begins on that portion of the leased premises included in the mining operation area.
- d. Should the production of minerals and/or mineral products in paying quantities commence on the leased premises, the Minimum Royalties paid for that lease year for those lands included in the mining operation area shall be credited against the Production Royalties payable hereunder to the Lessor. Minimum Royalties received for a lease year in which production of minerals and/or mineral products in paying quantities has commenced, will be credited on a pro-rata basis for the term of the lease year which coincides with the first calendar year of production.
- e. Lessee may, during the term of this lease, and at its sole discretion, suspend production of minerals and/or mineral products from a mining operation area established under the terms of this lease for up to four (4) cumulative years, or three (3) consecutive years, or longer, respectively, at the discretion of Lessor and may in such case maintain this lease as to those portions of the leased premises contained in a mining operation area by the payment of Minimum Royalties in lieu of Production Royalties. During such periods of suspended production, this lease shall not, as to those portions of the leased premises included in a mining operation area, be subject to expiration under the provisions of Section B of this lease. Lessee shall notify Lessor prior to or at the cessation of

production and include such information as to the reason for the cessation and anticipated date when production will resume.

- f. The amount of the Minimum Royalties paid in lieu of Production Royalties shall be determined according to the schedule in Part C2a of this lease, and shall be on a per acre basis prorated for the period of suspended production.
- g. Minimum Royalties in lieu of Production Royalties shall be paid within 30 days after the suspension of production and annually thereafter. This Lease shall terminate and the Lessee shall be required to file a Notice of Termination with the Lessor whenever these payments remain unpaid for a period of fifteen (15) days after the payment is due. Lessor may, at its sole discretion, waive in writing termination of the lease for unpaid Minimum Royalties in lieu of Production Royalty payments upon Lessee's submittal in writing of proper and satisfactory proof as to cause, along with payments due. The Lessor's receipt and deposit of a late Minimum Royalty payment made in lieu of Production Royalty shall not constitute a waiver of the Lessor's right to claim default under the provisions of Section H. In addition to any remedies available to the Lessor under the lease, any payments by Lessee after the due date shall include interest at the rate of 1.5 percent per month or at the maximum legal rate, whichever is less, on the amount unpaid.
- h. When Lessee resumes the production of minerals and/or mineral products in paying quantities on the leased premises, the Minimum Royalties paid in lieu of Production Royalties for that lease year and for those lands included in the mining operation area, shall be credited against the Production Royalties payable under this lease to the Lessor. Minimum Royalties received for a lease year in which production of minerals and/or mineral products in paying quantities has resumed, will be credited on a pro-rata basis for the term of the lease year which coincides with the calendar year in which production resumed.
- i. Payment of Minimum Royalties in lieu of Production Royalties shall not serve to abate or affect any other Minimum Royalties, which may be assessed for portions of the leased premises where a mining operation area has not been established.
- j. During periods for which payment of minimum royalties are required under C2, lessee's tax obligations, if any, continue as if production were underway.

3. Production Royalties

Lessee shall pay to the Lessor a Production Royalty calculated as follows:

- a. Determine the gross sales value per ton of all minerals and/or mineral products from this lease sold during the past calendar quarter. Such sales value shall be based on the actual sales value on the open market of the first arms length transaction to a non-affiliated entity as shown by sales receipts, plus any subsequent payments, which were held back or are rebated back to the Lessee. If mineral or mineral products are not sold to an independent consumer on the open market at fair market value, or are processed further by a plant which is operated by the Lessee, or in which the Lessee has an interest, the gross sales value shall be determined using prices for the metallic form or for normally accepted form as published by Platt's 'Metals Week' or other mutually acceptable form or reference price, as the last closing price of the middle month of the quarter. The gross sales value shall then be divided by the tons of materials mined in that production of minerals and/or mineral products sold to determine the gross sales value per ton.
- b. Determine the price index factor by dividing the constant price index by the current price index, fractions shall be expressed to five (5) decimal places. Both price indexes shall be obtained from the producer price index for all commodities, or its successor index, as published monthly by the U.S. Department of Labor, Bureau of Labor Statistics. The constant price index shall be the Producers Price Index rate published by the Bureau of Labor Statistics, established as of the date of execution of this lease. The current price index shall be the Producers Price Index of the middle month of the quarter.
- c. Determine the adjusted sales value per ton by multiplying the gross sales value per ton by the price index factor.

- d. The base Production Royalty rate shall be two percent (2%) for underground mines and two and one-half percent (2.5%) for surface or open pit mines. The Production Royalty rate shall increase based on the adjusted sales value per ton of ore mined in the following manner:

Each calendar quarter the adjusted sales value per ton of ore shall be calculated as described in 3a-3c for the number of tons of ore mined during that period. Starting at a base price bracket of \$0.01-\$25.00 per dry short ton, or other mutually agreed upon weight basis, of ores containing minerals and/or mineral products that are mined from the leased premises and sold, the royalty rate shall be increased by four tenths of one percent (.4%) for each 25 dollar increase in the adjusted sales value per ton as indicated on the following royalty rate schedule. The maximum royalty rate is ten percent (10%) for underground mines and ten and one-half percent (10.5%) for above ground mines as indicated on the following royalty rate schedule.

Royalty Rate Schedule

Adjusted Sales Value Per Ton	Underground Mine Royalty Rate	Surface Mine Royalty Rate
\$0.01 - \$25.00	2.0%	2.5%
\$25.01 - \$50.00	2.4%	2.9%
\$50.01 - \$75.00	2.8%	3.3%
\$75.01 - \$100.00	3.2%	3.7%
\$100.01 - \$125.00	3.6%	4.1%
\$125.01 - \$150.00	4.0%	4.5%
\$150.01 - \$175.00	4.4%	4.9%
\$175.01 - \$200.00	4.8%	5.3%
\$200.01 - \$225.00	5.2%	5.7%
\$225.01 - \$250.00	5.6%	6.1%
\$250.01 - \$275.00	6.0%	6.5%
\$275.01 - \$300.00	6.4%	6.9%
\$300.01 - \$325.00	6.8%	7.3%
\$325.01 - \$350.00	7.2%	7.7%
\$350.01 - \$375.00	7.6%	8.1%
\$375.01 - \$400.00	8.0%	8.5%
\$400.01 - \$425.00	8.4%	8.9%
\$425.01 - \$450.00	8.8%	9.3%
\$450.01 - \$475.00	9.2%	9.7%
\$475.01 - \$500.00	9.6%	10.1%
Above \$500.01	10.0%	10.5%

- e. The Production Royalty is the product of the royalty rate and the adjusted sales value of minerals and/or mineral products sold from the leased premises.

- f. Production Royalties shall be paid on a quarterly basis of the calendar year. If payments specified are not made on or before the twenty-fifth (25th) day of April, July, October, and January (or other mutually agreed schedule) of every year during the term of this lease for all minerals and/or mineral products sold during the preceding calendar quarter, Lessor may claim default under the provisions of Section H herein. In addition to any remedies available to Lessor under the lease, payments made after the due date shall include interest at the rate of 1.5 percent per month, or at the maximum legal rate, whichever is less, on the amount of royalty unpaid.
- g. Lessee agrees that all royalties accruing to the Lessor herein shall be without deduction of any costs incurred by the Lessee except as specified in this lease or as agreed to in writing by the Lessor.
- h. The Lessor is not liable for any taxes incurred by the Lessee and no tax deductions may be taken in computing the royalty.
- i. Production Royalties may, by mutual agreement of the Lessee and Lessor, be negotiated at any time during the term of this lease and may include consideration of rate and method of calculation, including but not limited to method of processing or refining. Any such agreement must be approved by the State Administrative Board before it is effective.
- j. Notwithstanding any other provision in this lease, if copper, nickel, lead, zinc, gold, and/or silver and their byproducts are produced from the leased premises and are processed at a smelter and/or refinery owned, operated or controlled by the Lessee, or where they are treated on a toll basis for the Lessee, the Production Royalty shall be based on the sale value of the refined product and the smelter returns method shall be used to calculate gross sales value.

D. SURFACE DAMAGE PAYMENTS

- 1. Lessee shall pay or agree upon payment to the surface owner, or any person holding under the owner, for all damages or losses (including any loss of the use of all or part of the surface), caused directly or indirectly by operations hereunder, whether to growing crops or buildings, to any person or property, or to other operations.
- 2. Before mining operations may be commenced on the on the surface of the land in which the State of Michigan owns mineral rights only, and as described in this lease, proof shall be submitted to the Lessor, in writing, that either voluntary agreement or stipulated settlement relative to surface use and damages has been reached between the Lessee or Lessee's authorized agent and the surface owner or D3 is invoked.
- 3. When a mutually satisfactory agreement relative to surface use and damages cannot be reached, either party can inform the Lessor, in writing, that a dispute exists and Lessor will grant a negotiation period of thirty (30) days in which no mining operations may be conducted by the Lessee. This time period is to allow for the resolution of the dispute. If, at the end of this period proof of the agreement is not submitted in writing to the Lessor, mining operations will not be prohibited by the Lessor and resolution of the dispute rests solely with the Lessee and the surface owner independent of the Lessor.

E. BONDING

- 1. Before a lease will be executed for any State lands, unless waived by the Lessor, the Lessee shall file a performance bond, in a form and amount acceptable to the Lessor, conditioned that Lessee, its heirs, executors, administrators, successors, and assigns, shall faithfully perform the covenants, conditions, and agreements specified in the lease, and the laws and rules of the State of Michigan which apply.
- 2. The Lessor shall determine, and set forth in a published schedule, the initial acceptable amount required for the performance bond. The Lessor shall annually review the level of the performance bond and shall require the amount of the bond to be increased or decreased to reflect changes in the cost of future reclamation of the leased premises. A review of the performance bond shall be made within thirty (30) days of receipt of Lessor of written notice of termination by the Lessee and shall consider adequacy of bond for removal of personal property not desired by either Lessee or Lessor.
- 3. Lessee shall keep in full force and effect a sufficient performance bond to cover the acreage held under lease as heretofore specified. If the amount of performance bond in effect becomes depleted or partially depleted because of any claim or claims, Lessee shall file a new performance bond as required by the Lessor.
- 4. Liability under the bond shall be for the duration of exploration, mining and reclamation operations and for a period coincidental with Lessee's responsibility under the approved reclamation plan.

5. Lessor may invoke part or the entire performance bond when it determines that part or all of the covenants, conditions, or agreements specified in the lease are not being fulfilled and shall so notify Lessee. Invoking the performance bond is not necessarily related to any action taken by Lessor under part H of this lease.

LESSOR RIGHTS

1. Lessor retains all of its timber, sand and gravel, and other nonmetallic mineral interests in the leased premises and reserves the rights to make any use of the leased premises, which may be undertaken without detriment to the rights and privileges herein specifically granted to the lessee.
2. Lessor shall not be liable for any damages resulting from failure of its title to rights included herein; provided, however, that if the Lessor's title fails as to any or all of the rights covered by this lease, the Lessor shall refund to the Lessee all bonus, rental, Minimum Royalties, or Production Royalties made by the Lessee attributable to that part or portion of, or interest in, the title which has failed.
3. All materials mined from the leased premises and not shipped from the mining unit after production of minerals and/or mineral products has ceased for three consecutive years, or after the lease has terminated, remain the property of the Lessor. Lessor may direct or authorize how these materials shall be stored or disposed.
4. Should Lessor be prevented from complying with any express or implied covenant of this lease because of a force majeure (i.e., for any cause beyond the reasonable control of the Lessor such as, but not limited to, acts of God, legislation, rules of any other governmental body, budgeting constraints, any judgment or injunctive order entered by a court of competent jurisdiction, acts of the public enemy, riots, strikes, labor disputes, labor or material shortages, fire, or flood) then such covenant shall be suspended to the extent made necessary by the aforesaid force majeure.
5. Lessor, and any of its authorized employees, consultants, or contractors, may at all times enter upon the leased premises and ascertain compliance with any condition of this lease and the kind, qualities, and quantities of minerals and/or mineral products on the leased premises or removed therefrom. Lessor shall also have the right to check the movement of minerals and/or mineral products from the workings of the leased premises to storage and to the mill, smelter, and refinery; to be present at all weighing and sampling stations; and to take samples and observe the flow of minerals and/or mineral products from the leased premises through the mill, smelter, and refinery. The Lessor, consultants, or contractors shall have the right upon reasonable notice to examine the books, records, and supporting documents, and to conduct audits of those records of the Lessee insofar as they relate to the amount of production, value, and sale of minerals and/or mineral products derived from the premises herein leased.
6. Lessor reserves the right to deny the Lessee from operations on the leased premises in connection with Lessee's operations on any adjoining or nearby property or properties except if the leased premises and the adjoining or nearby properties are within a common mining operation area. Lessor may, at its sole discretion, and after payment of surface use fees by Lessee as determined by Lessor, allow Lessee to use the premises hereby leased and any part thereof, and any shafts, openings, pits, and stockpile grounds sunk or made thereon, for the mining, removal, and stockpiling of any ores from any such adjoining or nearby premises, or for any purpose or purposes connected therewith, not however preventing or interfering with the mining or removal of ore from the leased premises. Lessor recognizes the interest of Lessee and/or other owners of any nearby or adjacent premises in any ores mined therefrom and stockpiled upon the leased premises.
7. Lessor may require Lessee to barricade entrance to the roadway(s) on surrendered leased premises, to seed the roadway(s) or leave the roadway(s) as constructed.

F. LESSEE RIGHTS

1. Lessee may from time to time surrender all or any part of the premises herein leased by giving notice in writing to the Lessor. Lessee shall not escape any prior obligation of the lease by filing a release. Upon surrender, Lessee shall execute and deliver to the Register of Deeds in the county wherein the land is situated, for recording, a proper and sufficient Notice Of Termination of this lease and of all of Lessee's rights and interest under this lease, insofar as they apply to the premises surrendered, and shall have said instrument delivered to the Lessor within thirty (30) days after recording with Register of Deeds,
2. Lessee may at any time remove all machinery and fixtures placed on the leased premises, provided, however, that said Lessee has complied with and fulfilled all other provisions of the lease as herein provided.

3. At the termination of the lease by any means, and with Lessee's fulfillment of all lease obligations, covenants, and agreements, Lessee shall have one hundred eighty (180) days, or longer at the discretion of Lessor, after termination in which to remove all tools, machinery, railway tracks, structures, and all other property situated on the leased premises as to which this lease is being terminated, except any supports placed in shafts, drifts, or openings or any timber, framework, or fences necessary to the use and maintenance of shafts or approaches to mines or tramways within mines. If Lessee fails to remove its property within the specified period, the property shall, at the sole option of the Lessor, become the property of Lessor and may be removed by Lessor with expenses recovered from the performance bond. By agreement of the parties, any of Lessee's property on the leased premises may become the property of Lessor.
4. In the conduct of approved mining operations on the leased premises, the Lessee is hereby granted the right, if it so desires, to mine and remove any ores existing thereon, or on any part or parts thereof, through, or by means of, shafts, openings or pits which may be sunk or made upon adjoining or nearby premises owned or controlled by the Lessee, and may stockpile any ores from the leased premises or any part thereof upon stockpile ground situated upon any such adjoining or nearby premises.
5. Lessee may maintain and use roads, pipelines, electric transmission lines, and other facilities, which are located on surrendered portions of the leased premises, with written consent of Lessor, and payment of surface use fees as determined by the Lessor so long as they are reasonably necessary to Lessee's operations on leased premises remaining under this agreement.
6. Lessee may mix minerals and/or mineral products taken from the leased premises with any other minerals and/or mineral products from other premises after the minerals and/or mineral products from the leased premises have been measured and sampled to determine and preserve the rights and liens of the Lessor therein.

G. DEFAULT OF LEASE

1. In the event Lessor shall determine a default in the performance by Lessee of any express or implied covenant of the lease, Lessor shall give notice in writing by certified mail, addressed to Lessee's last address filed with Lessor, specifying the facts by which default is claimed. Except as to rental, heretofore provided, Lessee shall have thirty (30) days from date of receipt of notice to satisfy the obligation of Lessee, if any, with respect to Lessor's notice, or provide Lessor satisfactory proof that Lessee is not in default or if in default and Lessee is not able to cure within thirty (30) days, Lessee shall submit for Lessor's approval a performance schedule with a date certain to satisfy or cure default of Lessee.
2. If Lessee fails to voluntarily satisfy the claim of default as herein provided relative to any condition and/or any expressed or implied covenant of this lease, the Lessor may proceed, at its sole discretion, with forfeiture of all or part of said leased premises in accordance with 1929 P.A. 81, MCL 554.281, et seq.
3. If the default is not cured, as provided above, Lessor may take possession of the leased premises or any part thereof, and all minerals and/or mineral products, machinery, fixtures, improvements, and personal property on the leased premises. Lessor may then exclude Lessee from the leased premises and declare this lease terminated and Lessee's rights forfeited. Re-entry by Lessor does not eliminate any other legal remedy for Lessor. No tools, fixtures, machinery, or other property of the Lessee shall be removed from said premises by the Lessee, if any royalties, damages, or other payments are due to the Lessor, and all sums due on royalties, damages, or other payments, shall be a lien on all implements, tools, movable machinery, and all other chattels used in operating said property, and also upon all of the unsold mineral and/or mineral products obtained from the land herein leased, as security for the payment of royalties, damages, or other payments. This lien may be foreclosed in the same manner as chattel mortgages are foreclosed.
4. Default or termination of the lease does not relieve the Lessee from closure, post closure, or environmental requirements established under this lease or under a mining permit pursuant to Part 632 of NREPA, or other applicable permits or laws.
5. Should Lessee be prevented from complying with any express or implied covenant of this lease, after effort made in good faith, for any cause beyond the reasonable control of the Lessee, such as, but not limited to: war, rebellion, riots, strikes, acts of God, or an order or rule of governmental authority, and not including economic budgetary or financial constraints or conditions, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended upon proper and satisfactory proof presented to the Lessor in writing in support of Lessee's contention but Lessee is not excused from payment according to provisions of the lease for all rentals, Minimum Royalty, or Production Royalty reserved and payable to the Lessor.

6. Should Lessee be prevented from conducting exploration or mining operations or from mining minerals and/or mineral products under this lease, after effort made in good faith, for any reason beyond the reasonable control of Lessee (not including economic, budgetary or financial constraints, or conditions), this lease will be extended as to portions of the leased premises affected by such force majeure so long as Lessee is prevented from exploration, conducting mining operations or from mining minerals, and/or mineral products there from.

H. EXPLORATION OPERATIONS

1. Exploration Plan

- a. No exploration activity shall take place on leased premises without an Exploration Plan developed by Lessee and approved by Lessor.
- b. Prior to commencement of exploration and annually thereafter on the lease anniversary, the Lessee shall submit to the Lessor for approval a plan outlining Lessee's proposed exploration activities on the leased premises during the ensuing year and exploration conducted to date, if any.
- c. The Exploration Plan shall contain the following:
 - (1) A description of proposed exploration activities and locations of sites where such exploration activities were, or are proposed to be conducted; and
 - (2) Locations and depths of any known existing exploration holes, trenches or pits; and
 - (3) Locations of roads which were, or are proposed to be, constructed to carry forth exploration activities.
- d. Lessor shall approve or reject the plan, for reasons stated, within 45 business days of receipt of a complete Exploration Plan from Lessee. If Lessor rejects this plan, Lessee may resubmit a plan(s) without prejudice.
- e. Any change in the approved plan during any year which is likely to result in substantial disruption of the surface shall be submitted and confirmed in writing to the Director of the Department of Natural Resources for approval. The Director may authorize named officers or individuals on the Department staff to receive, review and either approve or reject changes to the Exploration Plan, which staff shall act to approve or reject changes within twenty (20) business days after they have been notified of the request for change. Written notification shall be made to the Lessee of such approval or rejection with representatives of both parties conferring promptly, if rejected, to resolve differences in the plan.
- f. Upon the conclusion of exploration activities at a site, Lessee shall leave the site in a condition satisfactory to the Lessor.

2. Exploration Reports

- a. For the exploration conducted under this lease, the Lessee shall retain and store all factual exploration data and records at a location(s) within Michigan that is mutually agreeable with Lessor and Lessee. The Lessor retains the right to examine all such data and records, including cores, cuttings, samples, logs, maps, cross-sections, assays, geological, geophysical, and geochemical data.
- b. Upon termination of this lease or surrender of any part of the leased premises, Lessee shall furnish to Lessor any samples, cuttings, and cores requested by Lessor, and an up-to-date report of all exploration conducted by Lessee on that part of the leased premises. Final reports shall contain copies of all factual data generated from exploration activities on the leased premises as of the date of surrender.

I. MINING AND RECLAMATION OPERATIONS

1. Mining and Reclamation Plan

- a. No mining shall take place on leased premises without a Mining and Reclamation Plan developed by Lessee and approved by Lessor.
- b. Lessee shall reclaim the surface of the leased premises in accord with the approved Mining and Reclamation Plan. The reclamation shall proceed concurrently with mine production to the extent practical and shall be completed following termination of mine operation.

- c. A Mining and Reclamation Plan for the leased premises shall be developed to insure to the maximum extent practicable that waste areas and lean ore are located, designed and utilized to maximize aesthetic attractiveness and promote reclamation; mining is conducted in a manner which will prevent or mitigate hazardous conditions resulting from but not limited to slumping, heaving, leaching, and subsidence; and that post-mining conditions of the premises possess ecologic values consistent with the pre-mining conditions or as are approved by the Lessor. The Mining and Reclamation Plan shall include the following:
- (1) Accurate plan maps, with appropriate scale, aerial and ground photographs, and other supporting data showing:
 - (a) Location of the proposed mining operation area.
 - (b) Lands proposed to be affected throughout the mining phase, including existing streams, lakes, wetlands, and impoundments.
 - (c) Description of proposed development of open pit(s) and/or underground workings including materials handling and overburden stripping plans on the leased premises.
 - (d) Product and raw materials storage areas and loading facilities.
 - (e) Proposed and alternative locations where feasible, and designs of waste and lean ore piles, and tailings basins.
 - (f) Existing and proposed buildings, utility corridors, railroads, roads, and auxiliary facilities to be used and/or constructed on leased lands.
 - (g) A chemical analysis of the groundwater at the mining operation area, which includes metals, nonmetals, and organic content.
 - (h) A qualitative and quantitative analysis of the potential for stockpiled tailings, lean ores, and producible ores to leach into groundwater or surface water, and measures that will be taken to prevent degradation of groundwater and surface water during and after operation of the mine.
 - (i) Method and frequency of surveys used to determine the location of Lessor's minerals and method used to allocate royalties to the Lessor from areas of commingled production.
 - (2) A description of proposed reclamation of the mining operation area on the leased premises including:
 - (a) A description of the capacity of the land to support its anticipated use or uses following reclamation, including a discussion of the capacity of the reclaimed land to support alternative uses.
 - (b) Provisions for grading, establishing self-sustaining re-vegetation and stabilization that will minimize erosion and sedimentation and public health and safety problems of pit banks, waste and lean ore piles, roads and tailings basins during and upon completion of the mining phase.
 - (c) Provisions for buffer areas, landscaping and screening.
 - (d) A qualitative and quantitative analysis of the potential for remaining tailings and waste rock disposal or storage facilities to leach into groundwater or surface water, and measures that will be taken to prevent degradation of groundwater and surface water.
 - (e) Estimated timetables necessary for accomplishing the events contained in the Mining and Reclamation Plan.
 - (3) The Lessor shall approve or reject the plan within one hundred twenty (120) days of receipt of complete Mining and Reclamation Plan from the Lessee. If the Lessor rejects the plan, Lessor shall identify those elements of the plan involving activities on the leased premises which are likely to pollute, impair or destroy the air, water or other natural resources or the public trust therein, and shall identify areas of the plan which are inaccurate or incomplete. The Lessor shall also identify those alternatives or mitigating measures (if any) which could make the plan acceptable. A meeting shall be held between the Lessee and the Lessor within sixty (60) days

of the rejection of the plan in an attempt to resolve differences in the plan, should either party request it. If Lessor denies the plan, Lessee may resubmit a plan(s) without prejudice.

- (4) Any change in the approved plan, which is likely to result in substantial disruption of the surface, shall be submitted in writing to the Director of the Department of Natural Resources for approval. The Director may authorize named officers or individuals on the Department staff to receive, review, and either approve or reject changes within thirty (30) days after they have been notified of the request for change. Notification shall be made to the Lessee of such approval or rejection with representatives of both parties conferring promptly, if rejected, to resolve differences in the plan.

2. Production Reports

- a. Lessee shall keep an accurate account of all mining operations under this lease, including production, sales, assays, prices and dates of same, and shall submit to Lessor at the time of each quarterly payment of Production Royalties on forms prescribed by the Lessor, a statement, showing the quantities of minerals and/or mineral products produced in the past quarter, the quantities sold and quantities otherwise disposed of from the leased premises and methods used to determine same. Lessee's statement shall include the following:
 - (1) The tonnage and average grade of all ore mined from the leased premises, calculated from both mine measurements and at the first point at which an actual weight measurement is taken.
 - (2) The tonnage and average grade of all commingled ore calculated from both mine measurements and at the first point at which an actual weight measurement is taken.
 - (3) The tonnage of materials mined from the leased premises used to calculate the gross sales value per ton mined.
 - (4) The tonnage of ore from the leased premises, and the tonnage of ore from all premises treated in a mill, less losses which can be accounted for by Lessee.
 - (5) The tonnage and average grade of mill concentrates, dry basis, derived from the leased premises and derived from all premises.
 - (6) Tonnage of ore from which refined metals were produced from the leased premises and from all premises.
 - (7) Amount of refined metals produced in tons, pounds, or ounces from the leased premises and from all premises.
 - (8) Copies of receipts from sales of minerals and/or mineral products.
 - (9) Such additional data on production and sales as may be necessary to determine royalty.
 - (10) Current mine surveys, cross-sections, and maps of the leased premises and premises from which commingled ores are mined, showing the area and volume mined.
- b. The Lessee shall, at the sole discretion of the Lessor, submit to an audit of all transactions, contractual relationships, volume, production, weight, valuation, sales, or such other records as Lessor may determine appropriate which are related to establishment of gross proceeds, deductions, the Lessor's decimal interest and corresponding correctness of the royalty payments or any other types of payments due to the Lessor. The audit may be performed by the Lessor, or contracted for by the Lessor, at the Lessor's discretion. The Lessee shall be responsible for the cost of the audit if, based upon the final audit report, any underpayment calculated before interest is in excess of five percent (5%) of the payment made for the audit period.
- c. If any minerals and/or mineral products produced from the leased premises are transported to a point outside of the mining operation area before being weighed, Lessee will have all the material weighed by the transporting firm and will furnish Lessor with the transporter's statements of the weights of all shipments during the preceding quarter. Any written certificate or statement of any transporter concerning any shipment from the leased premises and its weight and any copies of transcripts from the books of any transporter concerning shipments or their weights shall be prima facie evidence of those facts in any suit or controversy between Lessee and Lessor.

- d. Upon termination of this lease or surrender of any part of the leased premises, Lessee shall furnish to Lessor an up-to-date report of all mining development and reclamation efforts conducted by Lessee on that part of the leased premises. This report shall contain suitable maps and information on the location and extent of surface and underground workings, and other pertinent information.
 - e. Lessee shall also furnish Lessor with annual reports on the anniversary date of the lease of the status of mining development and reclamation efforts to date.
3. Mill Waste Rejects Reports
- a. Lessee shall keep an accurate and cumulative record of the operation of the mill producing the mill waste rejects, and Lessee shall annually before March 1st furnish Lessor a mill waste reject report for the preceding calendar year.
 - b. Any proportioning of the commingled mill waste rejects shall be made on the following terms:
 - (1) The proportioning shall be based upon dry short ton units of mineral values as determined by assay, tonnage measurement and/or metallurgical balances.
 - (2) The total units of mineral values in the commingled mill waste rejects shall be determined by subtracting the total units of mineral values in the concentrate produced from the total units of mineral values in the crude ore entering the mill.
 - (3) The units of mineral values in the mill waste rejects from this lease shall belong to the Lessor.
4. Mining-Milling Tailings Disposal
- a. Waste materials resulting from the mining or concentration operations shall be deposited by the Lessee in accordance with the approved Mining and Reclamation Plan. Waste materials shall not be deposited on other premises without mutually agreeable methods of accounting for the Lessor's interest.
 - b. If mill waste rejects from minerals and/or mineral products mined from the leased premises are deposited or commingled with other mill waste rejects off the leased premises, Lessee will upon termination of this lease deliver to Lessor a document recognizing the interest of Lessor in the mill waste rejects.
5. Stockpiling
- Minerals and/or mineral products taken from the leased premises, whether stockpiled or otherwise, shall at all times be kept separate and distinct from any other mineral and/or mineral products until measured and sampled to determine and preserve the rights and liens of the Lessor therein.

J. DEFINITIONS

- 1. Commingled Mill Waste Rejects means mill waste rejects from property of the Lessee mixed in conjunction with mill waste rejects from other property of the Lessor.
- 2. Constant Price Index means the producers price index for all commodities rate published by the Bureau of Labor Statistics, or its successor index, established as of the date execution of this lease.
- 3. Current Price Index means the producers price index for all commodities rate published monthly by the Bureau of Labor Statistics, or its successor index, reflecting up-to-date trends in producer prices.
- 4. Dollars means U.S. dollars.
- 5. Exploration means the processes involved in the search for and delineation of a mineral deposit.
- 6. Exploration Activities means those actions conducted upon the leased premises as a necessary part of exploration including geological, geochemical and geophysical surveys, preparation of necessary roads and drill sites, drilling, sampling, assaying, test pitting, trenching, metallurgical testing, feasibility and environmental studies or other approved activities.
- 7. Gross Sales Value means the value of all marketable products at the point of sale, and after which sale the Lessee no longer holds an economic interest in the marketable products. Gross Sales Value may not be reduced by the cost of transporting marketable products to the point of sale. For purposes of this lease, the

sale of minerals and/or mineral products in-place, or without extraction, is not considered production, and any sales value at that point shall not be used as the basis for calculation of Production Royalties.

8. Lease year means a period of one year commencing on the date of the lease or its anniversary.
9. Lessor means the Director of the Department of Natural Resources for the State of Michigan.
10. Lean Ore means rock containing minerals which are not economically recoverable under existing market or technologic conditions.
11. Leased Premises means the land, property and/or mineral rights of the Lessor herein leased to the Lessee.
12. Mill Waste Rejects means materials having no present mineral value, separated from the concentrate of minerals and/or mineral products as the result of processing of ore in a mill concentration plant.
13. Minerals and/or Mineral Products means all metallic minerals, metallic mineral products, ores and concentrates including, but not limited to, the following metallic elements: Aluminum, Antimony, Arsenic, Beryllium, Bismuth, Cadmium, Cesium, Chromium, Cobalt, Columbium, Copper, Diamonds, Gallium, Germanium, Gold, Indium, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Osmium, Palladium, Platinum, Radium, Rare Earth Elements, Rhenium, Rhodium, Rubidium, Ruthenium, Selenium, Silicon, Silver, Strontium, Tantalum, Tellurium, Thallium, Thorium, Tin, Titanium, Tungsten, Uranium, Vanadium, Yttrium, Zinc, Zirconium; and nonmetallic products which result from processing, smelting, or refining metallic minerals and are subsequently sold or have commercial value.
14. Minimum Royalty means a set rate of royalty paid prior to the establishment of a mine, prior to the production of minerals in paying quantities, or when the production of minerals in paying quantities ceases for a period greater than a year. Minimum Royalty may, pursuant to the terms of the lease, be used to extend the lease beyond its original term.
15. Mining means part or all of the process involved in the removal of minerals and/or mineral products including development, extraction, beneficiation, water storage, agglomeration and production of waste.
16. Mining Operation Area means the land area where active mining operations are, have been, or are projected to take place, and as delineated in the Mining and Reclamation Plan. Areas include, but are not limited to, pits, stockpiles, shafts, roads, processing facilities, water and tailings basins, and shipping facilities.
17. Ounce means a troy ounce (31.103 grams) when used to measure precious metals.
18. Paying Quantity means production in a calendar year sufficient to return royalties to the Lessor equal to or exceeding the Minimum Royalty.
19. Production means the extraction, processing, stockpiling and/or sales of minerals, and/or mineral products from the leased premises. For purposes of this lease, the sale of minerals and/or mineral products in place without extraction is not considered production, and shall not be used to calculate Production Royalties.
20. Reclamation means reconditioning or rehabilitation of the affected leased premises as delineated in the Mining and Reclamation Plan or portions thereof by the Lessee for useful purposes and the protection of the natural resources, including the control of erosion, leaching and subsidence, and the prevention of land or rock slides and air and water pollution.
21. Short Ton means 2,000 pounds avoirdupois dry weight.
22. Smelter Returns means the proceeds received from the sale of refined mineral and/or refined mineral products after deducting the actual cost of (1) base smelting and refining charges (2) sampling and/or assay charges assessed by the smelter (3) penalties for impurities that are deducted from the assay value of the ore. No deductions resulting from the operation of the mine, on-site enrichment of ore, or transportation to the smelter will be allowed in calculating smelter returns.
23. Tailings mean mill waste rejects that have been placed in a confined waste or storage basin.
24. Tailings Basin means land on which tailings are deposited including surrounding dikes constructed to contain the tailings.

25. Waste means soil and vegetation, overburden, waste rock, mill waste rejects directly resulting from, or displaced by, mining and deposited on the surface (of the leased premises and other property under control of the Lessee). "Waste" shall not include lean ore.

L. NON-DISCRIMINATION

The Lessee shall comply with the Elliott-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2101 et seq, the Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq, and all other federal, state and local fair employment practices and equal opportunity laws and covenants that it shall not discriminate against any employee or applicant for employment, to be employed in the performance of this real estate contract, with respect to his or her hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of his or her race, religion, color, national origin, age, sex, height, weight, marital status, or physical or mental disability that is unrelated to the individual's ability to perform the duties of a particular job or position. The Lessor agrees to include in every subcontract entered into for the performance of this metallic minerals lease this covenant not to discriminate in employment. A breach of this covenant is a material breach of this metallic minerals lease.

Lessee shall comply with the Employers Engaging in Unfair Labor Practices Act, 1980 PA 278. as amended, MCL 423.321 et seq. If the Lessee or any subcontractor, manufacturer or supplier of the Lessee appears in the register of persons engaging in unfair labor practices that is compiled by the Department of Labor & Economic Growth or its successor, Lessor may terminate this lease by providing Lessee at least 30 days written notice prior to the effective date of cancellation .

M. RECLASSIFICATION OF LAND UNDER LEASE

1. The Lessee understands and agrees that the Lessor may at any time prior to an approved exploration plan, reclassify this Lease as "nondevelopment" as defined as "a lease that does not allow any use of the land surface for metallic mineral exploration, development or production". In the event of such reclassification, the Lessee agrees that its sole remedy, to the exclusion of any other at law or in equity, is to surrender this Lease or a portion thereof to the Lessor in exchange for a refund of all bonus and rental payments made by the Lessee attributable to the Lease or portion thereof surrendered. Where the land subject to the Lease is reclassified as "nondevelopment", the Lessee at its option may be entitled to a refund equal to the difference between the average per acre bonus paid for State development leases and for State nondevelopment leases at the time of leasing and in the same vicinity of said nondevelopment leases were direct leased for less than the development lease. Upon surrender, the Lessee shall execute and deliver to the Register of Deeds a proper and sufficient release of the Lessee's rights as set forth in Section G1.
2. For nondevelopment lease tracts other than those formally dedicated by the Lessor as State parks, State recreation areas, or wilderness and natural areas, the Lessor may grant a change of classification from a nondevelopment lease, or tracts therein, to a development lease classification if the Lessor finds that the existing nondevelopment classification is in error or that there is a change in circumstances. In the event that a lease is reclassified as development, the Lessee shall pay compensation to the Lessor at least equal to the difference between the average per acre bonus paid for State development leases and for State nondevelopment leases at the same time of leasing and in the same vicinity.
3. Notwithstanding the provisions of Section M, the Lessor shall not reclassify a lease, as development if there will be impairment of any of the following: wetlands, endangered species habitat, historic, archaeological or cultural sites, and areas of special wildlife, ecological, or recreational significance.

N. NONDEVELOPMENT LEASE RESTRICTIONS

(This section pertains to nondevelopment leases only. A nondevelopment lease is identified by the prefix N in front of the Lease Number shown on page 1 of this document.)

1. All other provisions of this Lease notwithstanding, it is understood that no exploration or development work shall be conducted on the surface of the land described in this Lease without reclassification and/or the specific authorization of the Lessor. Reclassification or such authorization for this Lease or any portion of the lands contained herein will be granted at the sole discretion of the Lessor.
2. No operations shall be conducted until written instructions for the proper protection of any and all natural resource interests and/or surface values are issued by the Lessor.

The said Lessor, by its Director, Office of Minerals Management, has signed and affixed the seal of the State of Michigan by virtue of action taken by the Lessor on _____, 20_____, and the Lessee has signed and affixed its seal the day and year written below.

ACKNOWLEDGEMENT BY LESSOR

NATURAL RESOURCES DIRECTOR FOR
THE STATE OF MICHIGAN

By: _____
_____, Director
Office of Minerals Management
Department of Natural Resources

Acknowledged before me in Ingham County, Michigan, on _____, 20_____, by _____, Director, Office of Minerals Management, of the Department of Natural Resources for the State of Michigan.

Prepared By: _____, Notary Public
Office of Minerals Management State of Michigan _____ County of _____
Michigan Department of Natural Resources My Commission Expires: _____
PO Box 30452 Lansing, Michigan 48909-7952 Acting in County of Ingham

ACKNOWLEDGEMENT BY LESSEE

LESSEE: _____

By: _____

Its: _____

Before me, the undersigned, a notary public in and for said county and State, on this _____ day of _____, 20_____, personally appeared _____ to me personally known, who being duly sworn did say that they are authorized to sign on behalf of the Lessee named in the foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed.

_____, Notary Public
State of _____ County of _____
My Commission Expires: _____
Acting in County of _____

This Lease was approved by the Michigan State Administrative Board on: