

APPENDIX II

Waste Management Plan

September 2016

**WASTE MANAGEMENT PLAN
FOR THE
BEAR PROPERTY
SUNRISE LAKE AREA
DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES**

**PREPARED FOR:
SILVER BEAR MINES INC.**

**PREPARED BY:
J. Douglas Blanchflower
Project Geologist**

July 22, 2024

INTRODUCTION

Since 1983 the officers of Silver Bear Mines Inc. (the 'Company' or 'Silver Bear') and their predecessor companies, Silver Hart Mines and Solid Resources Ltd., have conducted mineral exploration work on their Bear property near Sunrise Lake. This work has included line cutting, geological, geochemical and geophysical surveying and several diamond drilling campaigns.

a) Corporate Information and Property Location

- **Owner and operator:** Silver Bear Mines Inc., #1- 12 Blackfoot Road, Sherwood Park, AB. T8A 4P4
- **Telephone:** 780-416 7525 Fax: 780-416-7500 email: garneth@silverbearmines.com
- **Office Administrator:** Garnet Harter. 780-416-7525, Email: garneth@silverbearmines.com
- . The on-site geologist will be responsible for supervising this Waste Management Plan.

The Bear property is situated 110 kilometres northeast of the City of Yellowknife in the Beaulieu River area, District of Mackenzie, N.W.T. Its geographic location within NTS 85 I/15 and 16 is centred over 62° 45' North latitude by 112° 27' West longitude (see Figure 1).

Waste Generator No. - NTG000394 from Gerald Enns, Hazardous Waste Specialist, Environment Division, Environment and Natural Resources, Yellowknife, NT.. Appendix 1 of this report contains permission letters from the City of Yellowknife and KBL Environmental Ltd. to dispose of non-hazardous and hazardous wastes respectively.

b) Effective Date of the Plan

The effective date of this Waste Management Plan is July 22, 2024.

c) Environmental Policy

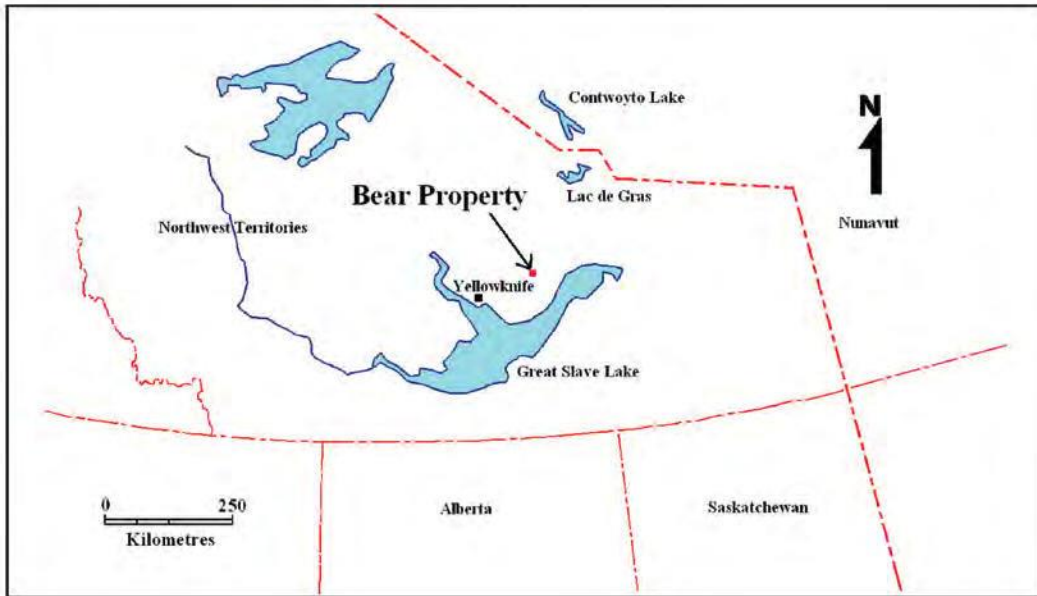
It is and has always been the intent of the Company to carry out its mineral exploration work in an environmentally safe manner. Poor waste management practices often result in direct or indirect adverse environmental impacts and can pose health and safety risks to employees and the general public. They can also result in substantial financial and legal liabilities. Silver Bear Mines Inc. has developed a Waste Management Plan ('WMP') to minimize potential adverse impacts to the environment, and the health and safety of its employees, contractors and the general public.

d) Purpose and Scope of Plan

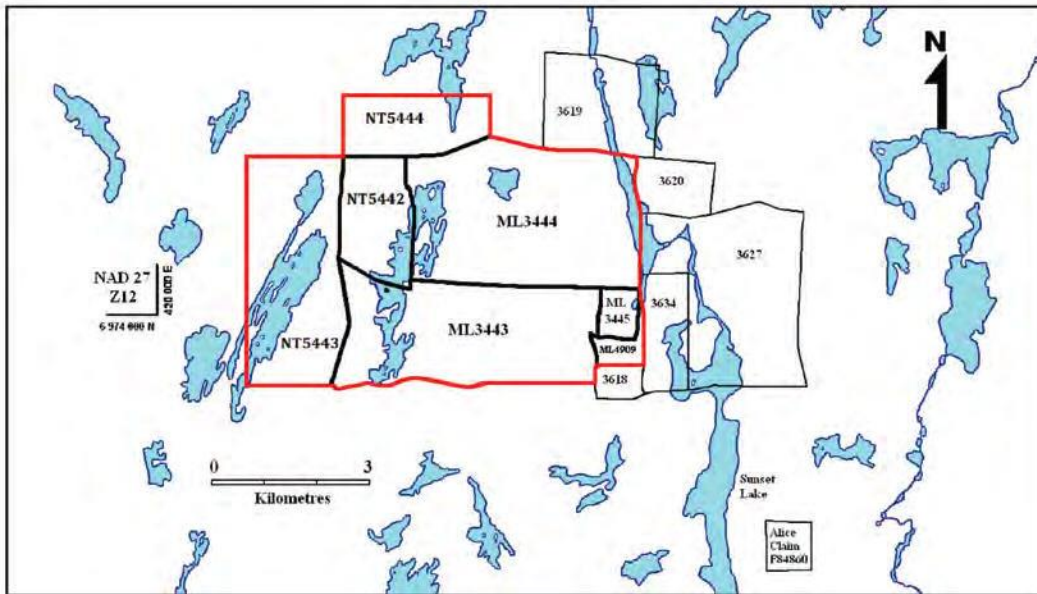
This Waste Management Plan accompanies a new Land Use Permit application by Silver Bear. It has been designed for the safe handling and disposal of mineral, non-mineral and potentially hazardous wastes that may be generated during the mineral exploration activities describes in the Land Use Permit. These activities include the reconstruction of the exploration field camp that was destroyed by a 2014 forest fire and a subsequent winter on-ice diamond drilling program.

Silver Bear's WMP is comprised of the safe handling, segregation and storage of wastes and their later transportation from the field operations to a certified landfill for safe disposal. The Plan involves:

- Handling of Waste – appropriate measures would be taken during the handling of all waste types, including the proper clothing, gloves, masks, etc., especially when handling potentially hazardous hydrocarbon wastes;



Property Location Map



Property Claim Map

SILVER BEAR MINES INC.
Sherwood Park, Alberta

**PROPERTY LOCATION
and MINERAL LEASE MAP
BEAR PROPERTY**

Beaulieu River Area, District of Mackenzie, NWT

Drawn By: JDB

Scale: As Shown

Date: July, 2016

Figure No. 1

Modified after Goodwin, 2011

- Segregation and Minimization of Waste – minimization of waste material can be accomplished largely by segregating non-combustible and potentially hazardous wastes from non-hazardous wastes on site. Non-hazardous wastes would be properly handled and/or disposed of on site while the non-combustible and potentially hazardous wastes would be properly stored for later transportation to Yellowknife for safe disposal;
- Storage of Waste – those non-combustible and potentially hazardous wastes segregated for remote disposal would be safely stored in labelled, airtight, sealed containers to prevent wildlife attraction and possible spills. These containers would be situated within designated waste storage sites that have been properly prepared to prevent any run-off entering the sites or any possible spills leaving the sites;
- Transportation of Waste – sealed containers of non-combustible and potentially hazardous wastes would be transported off site by either regular fixed-wing aircraft flights or ground transport during the demobilization of the winter drilling personnel and equipment.

e) Description of Project

The Bear property is situated 110 kilometres northeast of the city of Yellowknife in the Beaulieu River area, District of Mackenzie, N.W.T. Its geographic location within NTS 85 I/15 and 16 is centred over 62° 45' North latitude by 112° 27' West longitude. The seven mineral leases comprising the Property cover 3,263 hectares within UTM NAD 83, Zone 12, between 6973000 to 6978000 m North by 422000 to 429000 m East; from the Sleepy Dragon Complex - Kryon Lake area in the west to the Sunrise Lake and Beaulieu River in the east, a distance of about 7 km. (see Figure 1).

Year-round access from Yellowknife to the Property is by float- or ski-equipped aircraft, depending upon the season, or by helicopter. An all-weather road, known as Highway #4 or the 'Ingraham Trail', has been constructed from Yellowknife to within 60 km of the property. At its terminus near Tibbett Lake there is a clear-cut trail providing winter-only road access to within 1 km south of Kryon Lake near the western side of the Property. Existing access roads within the property then provide ready access to the camp site and the proposed winter drilling sites on Sunrise Lake.

Elevations within the Property vary from 336 m at Sunrise Lake to 450 m A.M.S.L. on higher hilly outcrops with intervening elongated lakes and muskeg swamp parallel to the rocky hills. The climate is characterized by summers with long daylight hours averaging between +15° to +30° C and long cold winters with temperatures ranging between -25° to -30° C with extremes to -50° C. Precipitation averages 269 mm with 33% falling as snow (1 to 2 m) during October through April.

Most of the vegetation was burnt by the 2014 forest fire but elsewhere the boreal vegetation consists of small black spruce, stunted yellow birch, willow and tag alder. Undergrowth beyond the forest fire area include: low-bush cranberry, prickly rose, red osier dogwood, dwarf red raspberry, meadow-horsetail and various grasses.

Some of the following mammal and bird species were once reported in the area but may not now be in the vicinity of the Property until their habitat regenerates after the 2014 forest fire. Mammal species include: moose, black bear, beaver, fox, wolf, lynx, marten, mink, snowshoe hare, wolverine, weasel and red squirrel. Common bird species include: bald eagles, hawks, falcons, chickadees, northern shrike,

redpolls, ravens, Canada jays, woodpeckers, grouse and owls. Common fish species include northern pike, grayling, walleye, burbot, suckers and whitefish.

The dominant water body is Sunrise Lake situated immediately west of the field camp. In addition, there is a small, seasonal drainage immediately south of the proposed field camp site that flows easterly into Sunrise Lake, and a low marshy area situated just west of the field camp site (see Figure 4).

The proposed exploration work described in the accompanying Land Use Permit and Property Description report is comprised of two phases. Firstly, the field camp on the western shore of Sunrise Lake has to be reconstructed after a 2014 forest fire completely destroyed the old camp, outbuildings and much of the machinery and heavy equipment stored on site. The reconstructed camp capable of housing 20 field personnel must be built before any further exploration work can be carried out on the property, especially a winter drilling program.

Pending completion of a field camp with attendant outbuildings for the camp generator, machinery repair and storage, and drill core handling and storage, a winter on-ice diamond drilling program is proposed to test the silver-bearing massive sulphide mineralization within the 'M Zone' that is located beneath the western shore of Sunrise Lake, just south of the field camp location. See Figure 2 for the locations of the field camp and M Zone relative to the property boundaries.

Both ground and surface water have the potential to be impacted through changes in water quality and water volumes. Primary sources of impacts may include spills, soil erosion, and water withdrawals. Water withdrawals, and the effects and management of withdrawals will be continually addressed and managed during the proposed exploration activities. It is estimated that the water withdrawal from Sunrise Lake to support the field camp operation will be in the order of 2 to 3 m³ per day. The proposed winter drilling program is expected to withdraw less than 40 m³ per day from Sunrise Lake. All of the drilling fluids will be recovered and recycled but make-up water will be continually required due to fluid losses within the bedrock.

Waste generated during these phases of the proposed exploration work will come from camp activities and on-ice drilling; both operations situated along the extreme eastern side of the Bear property within Mineral Lease 3445 (see Figures 1 and 2).

f) Proposed Location for Waste Management Activities

Waste management activities will be limited to two locations, namely: the Silver Bear field camp during the proposed camp re-construction, and the Sunrise Lake on-ice drilling sites during the proposed winter drilling program. See Figure 2 of this report for the locations of the field camp and M Zone relative to the Property.

During the proposed winter drilling program the mineral drilling cuttings, all used machinery fluids and any other garbage will be carefully collected and transported from the various drill sites to the field camp for segregation and subsequent disposal, or storage with the other non-combustible and potentially hazardous wastes from the camp operations.

g) Description of Site Physical, Surface and Subsurface Characteristics

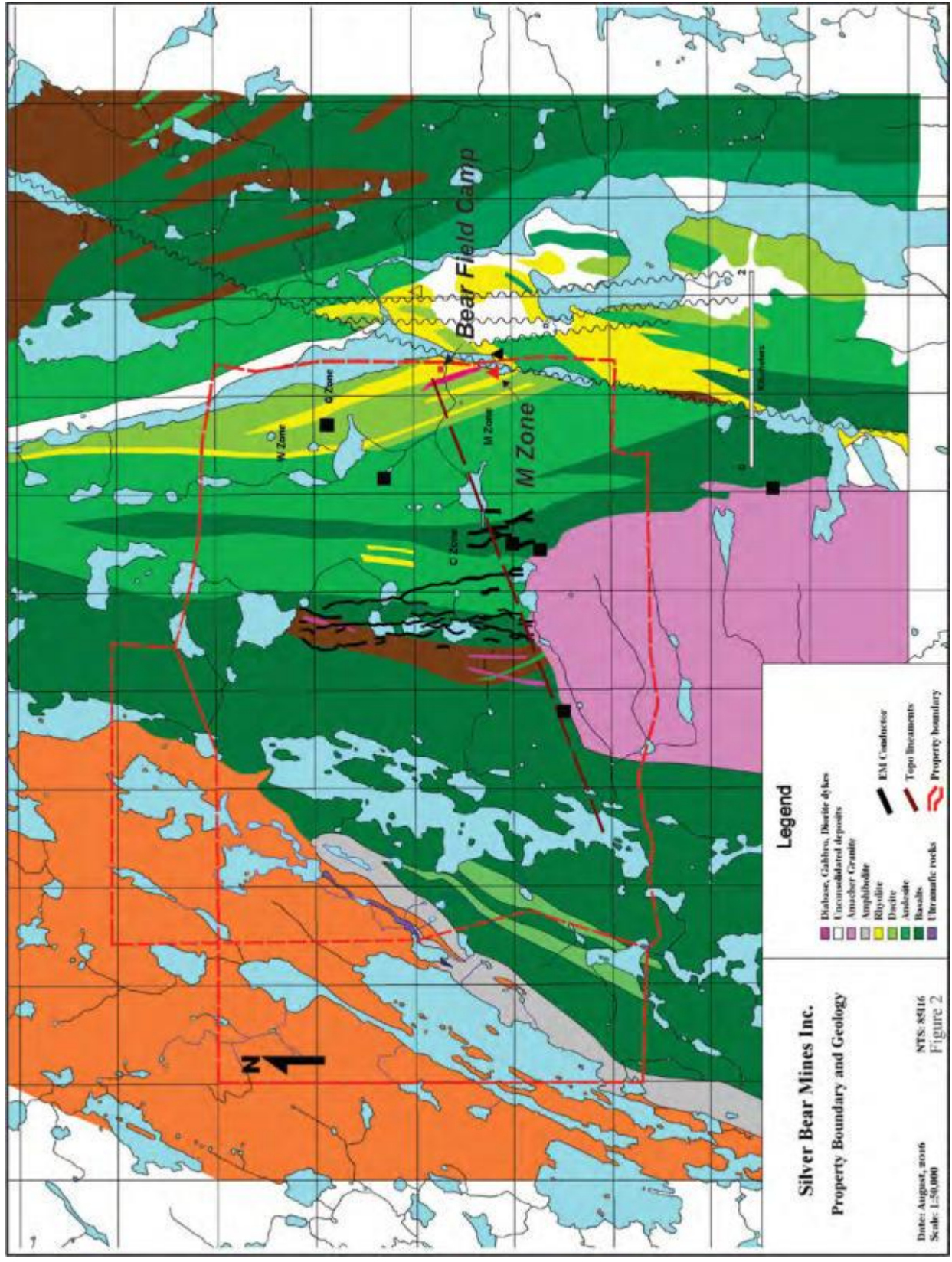
The proposed Silver Bear reconstructed field camp will be at the same site as the burned out camp on the north side of a small east-west valley with an eastwardly flowing creek to the south. The valley is surrounded by rocky hills with little or no soil development. As noted, the relief is quite low from an elevation of 336 m at Sunrise Lake to approximately 400 m on the hills surrounding the field camp location (see Figure 3 and accompanying photograph).

Based on historic drilling reports, the bedrock underlying the field camp location and the proposed drilling sites within the M Zone is very competent. The bedrock has undergone several periods of folding and faulting during its geologic history but remains quite hard, as evident from rather slow reported drilling rates.



2015 photograph of destroyed core racks and field camp looking eastward

The Property is underlain by the Sunset Lake sub-area stratigraphy of the Late Archean-age Beaulieu River volcanic belt, part of the southern Yellowknife Supergroup. The M Zone is a silver-zinc-lead volcanoclastic-hosted massive sulphide deposit with features of a volcanoclastic-hosted exhalite. Historic drilling has outlined three upper and lower massive sulphide bodies down to the 250 m level that trend 340° and plunge -65° northward. The lenses range up to 3 m thick in the upper zone and 15 m thick in the lower portion of the main zone. A lower silver-rich zone up to 2 m thick occurs below the main zone.



PROJECT WASTE TYPES

Based upon the 'Waste Types' table in MVLWB's 'Guidelines for Developing a Waste Management Plan' there are several types of potentially hazardous, non-mineral and mineral wastes that may be generated during the proposed mineral exploration activities at the waste management site. These waste types include the following.

a) Potentially Hazardous Waste

Used motor oil, hydraulic fluid, greases, oil filters and solvents from the regular maintenance of light and heavy equipment, such as the bulldozer, loader, electrical generators, drilling rigs and four-stroke transportation vehicles, would be carefully collected and stored in 210-litre sealed steel barrels. During both the camp construction and drilling program only one or perhaps two 210-litre sealed steel barrels containing used hydrocarbon fluids would be on site at any one time. Sealed 210-litre steel barrels would be regularly flown out to Yellowknife during return supply flights for safe disposal at a permitted hazardous waste facility. Safe collection, storage and transport of potentially hazardous wastes, such as used hydrocarbon fluids, is mandatory since spillage of these fluids could potentially contaminate both the underlying soil and nearby water sources. Thus, all efforts would be directed at their safe handling.

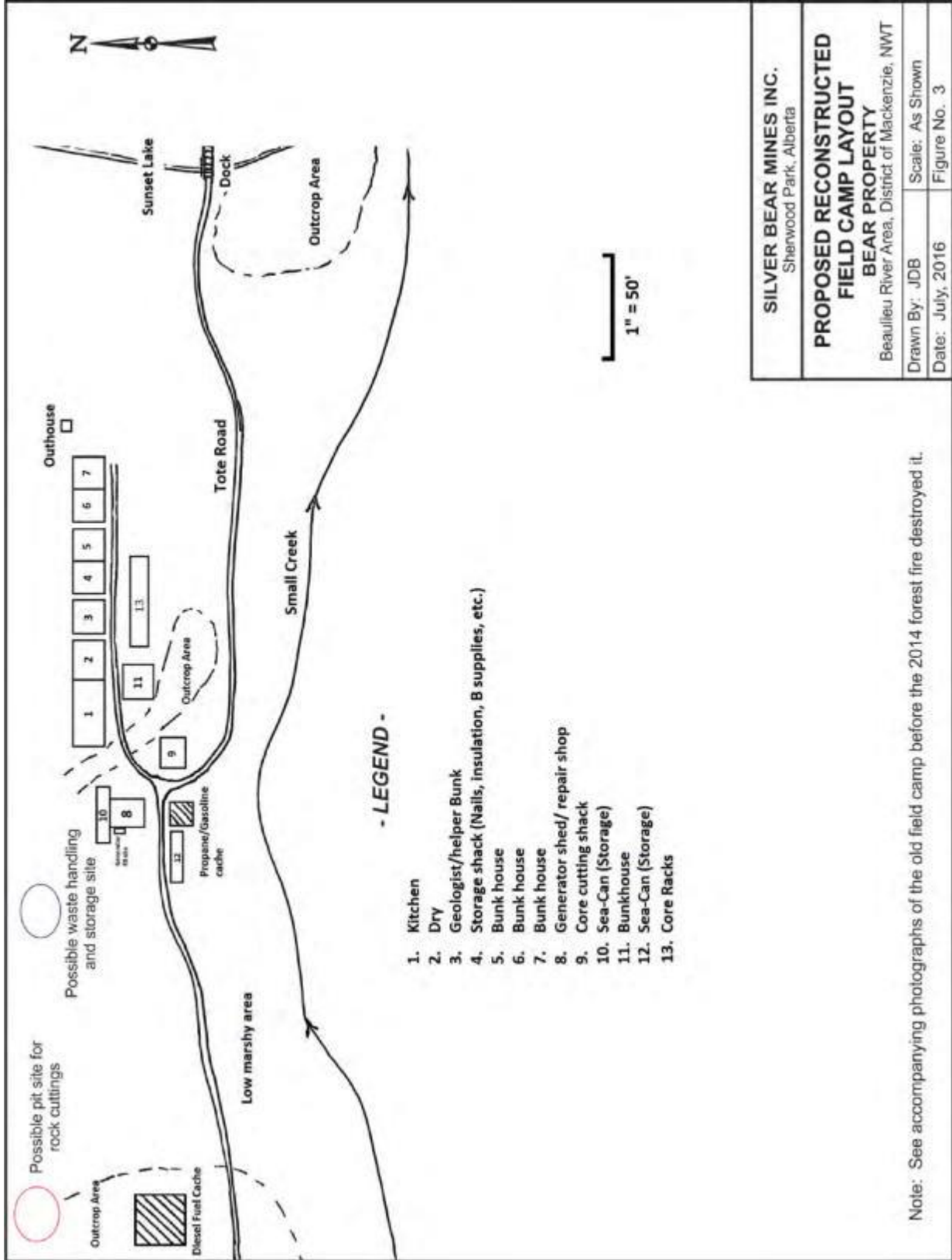
b) Non-Mineral Waste

Ashes and incinerator residues will result from the on-site incineration of non-hazardous combustible wastes, including: wood, paper, cardboard, burnable food containers, and organic materials from camp operation (i.e. kitchen waste, etc.). It is estimated that during the camp construction work perhaps one 210-litre sealed steel barrel might be filled with the resultant ashes and residues. During the proposed drilling program, sealed 210-litre steel barrels will be regularly flown out to Yellowknife during return supply flights. Thus, it is anticipated that perhaps only one or possibly two 210-litre sealed steel barrels containing ashes and residues would be on site at any one time. It is important to incinerate all combustible wastes and organics, and store the resultant waste to prevent animal incursions and possible contamination of the soils at and near the waste storage area.

Non-combustible waste, such as metal and ceramic containers and scrap metal, would be collected and stacked or stored in steel barrels within a designated waste storage site pending transport to Yellowknife for disposal in the Yellowknife landfill. The metal cans that contained food stuffs would be first incinerated to destroy all residual organics to prevent the attraction of wildlife, and then the burned cans would be collected and stored with the other non-combustible waste pending transport to the Yellowknife landfill and recycling facilities (see City of Yellowknife permission in Appendix 1).

Grey waters from the kitchen plus the washing and shower waters from the shower/dry building would be directed into a permeable sump situated north of the camp buildings and well away from the local water sources. It is estimated that about 2 to 3 m³ of grey water may result from these camp operations. The location for the grey water sump would be determined after the camp has been constructed.

An outhouse will be used for human waste. Its location is shown on Figure 3 of this WMP.



c) Mineral Waste

During diamond drilling the returning fluids with the rock cuttings will be collected in a steel tank at each drill site. The cuttings will be allowed to settle in the tank and the cleared drilling fluid would then be recycled. The settled drill cuttings would be regularly and carefully transported for disposal in a prepared and lined pit a short distance from the field camp. It is important to dispose of drill cuttings at an impermeable land site to prevent any possible contamination of the local water sources, even though only non-toxic additives would be added to the drilling media.

The volume of rock cuttings is dependent on the amount of drilling and the moisture content of the cuttings. The drilling of an average diamond bore hole might generate between 0.2 to 0.45 m³ of sand-size rock cuttings, excluding recovered drill core. Thus, if all 34 proposed holes are completed it is estimated that perhaps 15 m³ of rock cuttings may be generated during the on-ice drilling program.

PROJECT WASTE MANAGEMENT

The ashes and residues resulting from the on-site incineration of non-hazardous, combustible wastes and organics will be carefully collected and stored in labelled and sealed water-tight containers for later transport to Yellowknife for safe disposal at the City of Yellowknife landfill site.

The burned-out food containers will be collected after incineration, compressed and stored in water-tight, covered barrels. These barrels and any scrap metal will be stored at the waste handling and storage area pending their transportation to Yellowknife. In Yellowknife the barrels and scrap metal will be separated for disposal or recycle at the City of Yellowknife landfill site. The City of Yellowknife permission letter for the disposal of non-hazardous waste at their facilities accompanies this WMP in Appendix 1.

The potentially hazardous waste, including used motor oil, hydraulic fluid, greases, oil filters and solvents from the regular maintenance of the heavy equipment would be carefully collected and stored in 210-litre sealed steel barrels. These barrels will be stored in in the 'Diesel Fuel Cache' site shown on Figure 3 of this WMP. This secure cache will be bermed and underlain with absorbent material to prevent the escape of any possible spills. During both the camp construction and drilling program the steel barrels would be regularly flown out to Yellowknife during return supply flights for safe disposal at a permitted hazardous waste facility. The permission letter from KBL Enterprises Ltd. for the disposal of hazardous waste at their facilities accompanies this WMP in Appendix 1.

A plastic-lined impermeable pit would be used for the on-site disposal of the drill cuttings. The site of the pit would be a to-be-determined area that is completely surrounded and underlain by bedrock. Upon completion of the drilling program, the pit would be covered with local overburden.

The grey water sump and the pit for the outhouse would each be dug north of the camp buildings away from all water sources. Both pits would be excavated in permeable soil to allow for the decay of their contents by percolating ground waters, and both would be covered with local soil upon the completion of field activities.

PROJECT WASTE MANAGEMENT INFRASTRUCTURE

The on-site waste management infrastructures for the handling, storage and disposal of the anticipated wastes include: one storage site for non-combustible and combustible wastes prior to their transportation to Yellowknife, one lined pit for the disposal of drill cuttings, one grey water sump and one outhouse pit. The storage of potentially hazardous waste materials in sealed barrels prior to their transportation to Yellowknife will be at the designated diesel fuel cache to prevent any environmental impact. The fuel storage sites are also described in the accompanying Project Description report.

The handling and storage site for the barrels containing non-combustible and combustible wastes should be approximately 5 by 5 metres in size, and have an impermeable liner to prevent any contamination of the underlying soil. The site should have an area for filling the storage barrels with waste material and sufficient additional space for barrel storage. A low, permeable soil berm around the periphery of the site, perhaps 30 cm high, is recommended to impede local run-off waters but also allow any accumulate rainwaters within the site to drain. Any escaped ashes or residue would be contained within the site and the steel barrels and scrap metal would not be sitting in stagnant water.

The pit for the disposal of the drill cuttings should be situated within a low area surrounded and underlain by bedrock with ready access from camp. The pit will have to be accessed during the winter drilling program so it should be relatively close to camp and accessible by heavy equipment transporting the tank containing the settled cuttings. The pit should be large enough to accommodate the estimated 15 m³ of cuttings and lined to prevent groundwater seepage and local soil contamination. Upon completion of the field work the pit would be covered with a thick layer of soil.

The grey water sump need only be approximately 2 by 2 metres and perhaps 2 metres deep. It would be dug in permeable soil to allow the solids to settle out and the cleared water to percolate into the surrounding soil. During late Spring to early Fall the grey waters would be piped to the sump, but during freezing temperatures the grey water would be collected in barrels beneath the heated kitchen and dry/shower buildings and the barrels would be regularly emptied into the sump.

Given the minimal overburden in the vicinity of the camp site and the anticipated freezing temperatures during much of the proposed field work, an outhouse for human waste is best suited for this field operation. The outhouse pit will be at the same location as the old outhouse, shown on Figure 3 of this WMP. During the camp reconstruction it will be determined whether the existing outhouse pit has sufficient remaining capacity or a new pit in the immediate vicinity has to be dug. Normally, an outhouse pit for such a field work operation would be approximately 1 by 1 metre and 2 to 3 metres deep. Most outhouse pits are not lined to allow for the decomposition of the contents.

The foregoing Waste Management Plan is designed for intermittent field work from a reconstructed all-weather camp. The proposed exploration work is focused on delineating and defining the mineral resources of the M Zone which have been partially tested but for which no formal mineral resource estimate has been prepared nor any preliminary economic assessment has yet to be determined.

APPENDIX 1

Permission Letters
from the
City of Yellowknife
and
KBL Enterprises Ltd.

July 22, 2024



CITY OF YELLOWKNIFE

June 27, 2024

Attention: Mr. Garnet Harter
Per: Silver Bear Mines Inc.
Via email to: garneth@silverbearmines.com

RE: Request for Permission to Dispose of Non-combustible Waste from Silver Bear Mines at the City of Yellowknife Solid Waste Facility

In response to your email request dated June 18, 2024 regarding waste disposal at the City of Yellowknife Solid Waste Facility, the City has reviewed the request and hereby grants permission for the disposal of non-hazardous solid waste from the proposed mineral exploration work on the Bear property, with the following conditions:

1. Commercial hazardous waste is not accepted at the Solid Waste Facility. Please contact KBL environmental Ltd or another hazardous waste disposal provider for hazardous waste disposal. Hazardous wastes include (but are not limited to) batteries, paints, solvents, oils, chemicals, oil tanks, animal waste, propane tanks.
2. Silver Bear Mines Inc. shall separate the non-hazardous solid waste in accordance with the City's bylaw. This includes separating scrap steel, wood, recyclables, and any other materials listed in the City bylaws.

This waste will be subject to the Commercial Waste from Outside of City Limits tipping fee as outlined in the [Fees and Charges By-Law 4436](#). The City reserves the right to refuse waste from the project in question, at its sole discretion, at any time. This agreement is valid until December 31, 2025.

Please feel free to contact the Solid Waste Facility if you have any further questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Vaughn', is placed above the printed name.

Chris Vaughn, P. Eng.
Manager, Sustainability and Solid Waste
Public Works and Engineering

DM: #768569

KBL Environmental LTD.

#17 Cameron Road
P.O. Box 1103
Yellowknife, NT X1A 2H8

P 867 873 5253
F 867 609 5559
kblenvironmental.com

June 3rd 2024

Attention: Garnet Harter
Silver Bear Mines Inc.
24 Blackfoot Road,
Sherwood Park, AB T8A 4P4

Subject: Bear Site c/o Silver Bear Mines Inc. – Letter of Waste Acceptance

KBL Environmental Ltd. (KBL) owns and holds a regulatory approval to operate an Industrial Waste Transfer Facility located at #17 Cameron Road in Yellowknife, Northwest Territories. The facility is permitted and regulated through the jurisdiction of the Northwest Territories Department of Environmental and Natural Resources under approval number NTR000123. Under this approval KBL is an end receiver of hazardous and non-hazardous wastes.

KBL has been contacted to provide services to manage acceptance of waste generated through exploration activities from Silver Bear Mines Inc., Bear project in the Northwest Territories. More specifically waste material that we may receive at KBL's Yellowknife Industrial Waste Transfer Facility is as follows but not limited to:

- Metal drums
- Tank or barrel sludge and solids
- Batteries
- Gas cylinders
- Hazardous and non-hazardous liquid hydrocarbon or chemical waste
- Leachable and non-leachable soils impacted with: hydrocarbons and/or metals
- PCB Amended Paint (PAP) coated construction waste
- Lead Paint coated metal

If there are any questions regarding content included herein please contact our office as required.

Regards,



Caitlyn Thompson
KBL Environmental LTD.