Landfill Management Plan

Ulu Gold Project

Kitikmeot Region, Nunavut

March 2024

BLUE STAR GOLD CORP.

SUMMARY

This Plan describes activities associated with construction and management of the non-hazardous waste landfill at the Ulu Gold Project in the Kitikmeot region of Nunavut.

REVISION HISTORY

Revision #	Date	Section	Summary of Changes	Author	Approver
2BM-ULU2030					
3	Nov 2023	4.4	Removed dust study paragraph	D.Lindsay	
2	Mar 2021	As detailed below	Fixed typographical errors and numbering, updated to reflect party comments and outcomes from engagement with the KIA, CIRNAC and the GN, updated to reflect amended water licence, updated with new Blue Star contact info.	S. Hamm	D. Lindsay
		Section 1.2	Added Construction phase.		
		Section 1.4	Added description of landfill foundation conditions.		
		Section 1.5	Added the need for Plan updates arising as a result of facility-specific operational and monitoring experience.		
		Figures 1 & 2	Replaced.		
		Section 1.6	Updated to more clearly reflect document storage locations.		
		Section 2.3	Added inspection sheet review.		
		Section 2.4	Added sequencing of material placement, monitoring waste volumes and directing sump management.		
		Section 3.0	New.		
		Section 4.1	New.		
		Tables 2 & 3	Clarified wood, lighting and putrescible wastes.		
		Section 4.2	Added discussion around sequencing of waste placement. Added consideration of localized leveling of soil.		
		Section 4.3	Clarified construction material, added discussion of esker stockpile.		
		Section 4.3.1	Clarified discussion, defined ‘ground surface’ in relation to the criteria.		

			Criteria largely remain unchanged (see note for Table 4).		
		Table 4	Revised subsurface soil criteria for Xylenes (typo).		
		Section 4.4	New.		
		Section 4.5	Added consideration for sump construction as needed.		
		Section 5.0	Added closure objective for consolidation of waste in one place. Added consideration of future use and additional waste placement.		
		Section 6.0	New title. Added reference to the ICRP and water licence requirements.		
		Section 6.1	Updated to reflect water licence requirements.		
		Section 6.2	Added measures to address cover instability and related repairs.		
		Section 7.0	New.		
		Section 9.0	Updated to reflect water licence terms		
		Section 9.2	Added construction records, inspection checklists, fill material tracking, compaction monitoring, equipment flushing results, wildlife issue tracking and seepage observations, waste volume tracking.		
		Appendices B and C	New.		
1	Mar 2020	-	Approved May 15, 2020	Blue Star Gold Corp.	

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1.0 INTRODUCTION

The *Landfill Management Plan* (the Plan) is intended exclusively for use by Blue Star Gold Corp. (Blue Star) and its contractors to ensure that best practices for minimizing potential environmental impacts and potential environmental liabilities are employed during the use and closure of a non-hazardous waste landfill (the Landfill) during progressive reclamation at its Ulu Gold Project (the Project), and that the conditions of the water and land use licences are met. The Plan should be read in conjunction with the documents listed in Table 1, which may be updated from time to time.

Table 1 Related project documents, permits and licences.

Document	Authors
Interim Closure and Reclamation Plan	Blue Star Gold Corp.
Soil Treatment Facility Management Plan	Blue Star Gold Corp.
Engagement Plan	Blue Star Gold Corp.
Spill Response Plan	Blue Star Gold Corp.
Waste Management Plan	Blue Star Gold Corp.
Wildlife Protection Plan	Environmental Dynamics Inc.
Interim Water Management Plan	Gartner Lee Ltd.
Mining Lease	Government of Canada
Screening Decision Report	Nunavut Impact Review Board
Water Licence	Nunavut Water Board
Land Use Licence	Kitikmeot Inuit Association

1.1 SCOPE

This Plan addresses how the Landfill will be constructed, operated and closed, and outlines how the facility will be inspected and managed to ensure compliance with authorizations.

1.2 OBJECTIVES

The objectives of the Plan are to:

- Provide guidance for construction of the Landfill, waste placement, closure and monitoring (during the construction, operational and post-closure phases);
- Describe the responsibilities and tasks involved with the Landfill construction, operation and closure; and
- Support safe and compliant waste facility operations and maintenance.

1.3 SITE DESCRIPTION

The Project is located approximately 200 km southeast of Kugluktuk, Nunavut (see Figure 1), and consists of existing Ulu site infrastructure, including a camp, roads, pads, and airstrip and underground mine development as well as a larger study area including regional exploration areas of interest; the majority of activities are based out of the Ulu camp and undertaken in the local vicinity. The site is accessible by air, utilizing the nearby existing airstrip or an adjacent lake. The site has historically been accessed by a winter trail and may be accessed overland in the future by the same route to support resupply.

The Project is located within the Southern Arctic Ecozone and the Takijuq Lake Upland Ecoregion. Much of this region is composed of unvegetated rock outcrops. Vegetative cover is characterized by shrub tundra, consisting of dwarf birch, willow, northern Labrador tea, avens species and blueberry species. Organic Cryosols are the dominant soils in the lowlands and permafrost is deep and continuous (ECCC 2019).

Based on regional normals from Lupin A station between 1980 and 2010 (ECCC 2020), average yearly rainfall in the region is 160 mm, mostly occurring during July and August, and average yearly snowfall is equivalent to 138 mm of water, most of which falls during autumn and spring. The average annual temperature is -10.9 ° Celsius.

1.4 OVERVIEW

The Landfill is a new waste management facility intended to receive legacy waste arising from historic works on site, the construction and operation of which is part of progressive reclamation works being undertaken at the Ulu site. The Landfill will have the capacity to receive approximately 20,000 m^3 of non-hazardous solid waste, located in an area covering approximately 6,500 m^2 situated between what was the Ulu Camp tank farm and the existing portal access road (as shown in Figure 2). The orientation and topography of this area allows for construction using the depression method for constructability and occurs on an area of exposed bedrock with only a minor cover of soils. It is also situated in proximity to all consolidated waste stockpiled by the previous site operator in 2018/2019. The Landfill is intended to operate until all of the existing non-hazardous waste on site has been suitably disposed of, which is expected to take 1-2 years.

1.5 PLAN MANAGEMENT

The Plan is to be reviewed annually by the Project Manager updated as needed following receipt of amendments to licences and permits, to ensure alignment with relevant terms and conditions and to reflect changes to the operation or monitoring of the facility based on experience with the facility to date. When material changes to the Plan are made, the updated document will be provided to parties in accordance with the Engagement Plan.

1.6 PLAN IMPLEMENTATION

This Plan is effective upon approval and is valid throughout all phases of the Project.

The Project Manager, Reclamation Manager, Site Engineer or designate, is responsible for Plan implementation.

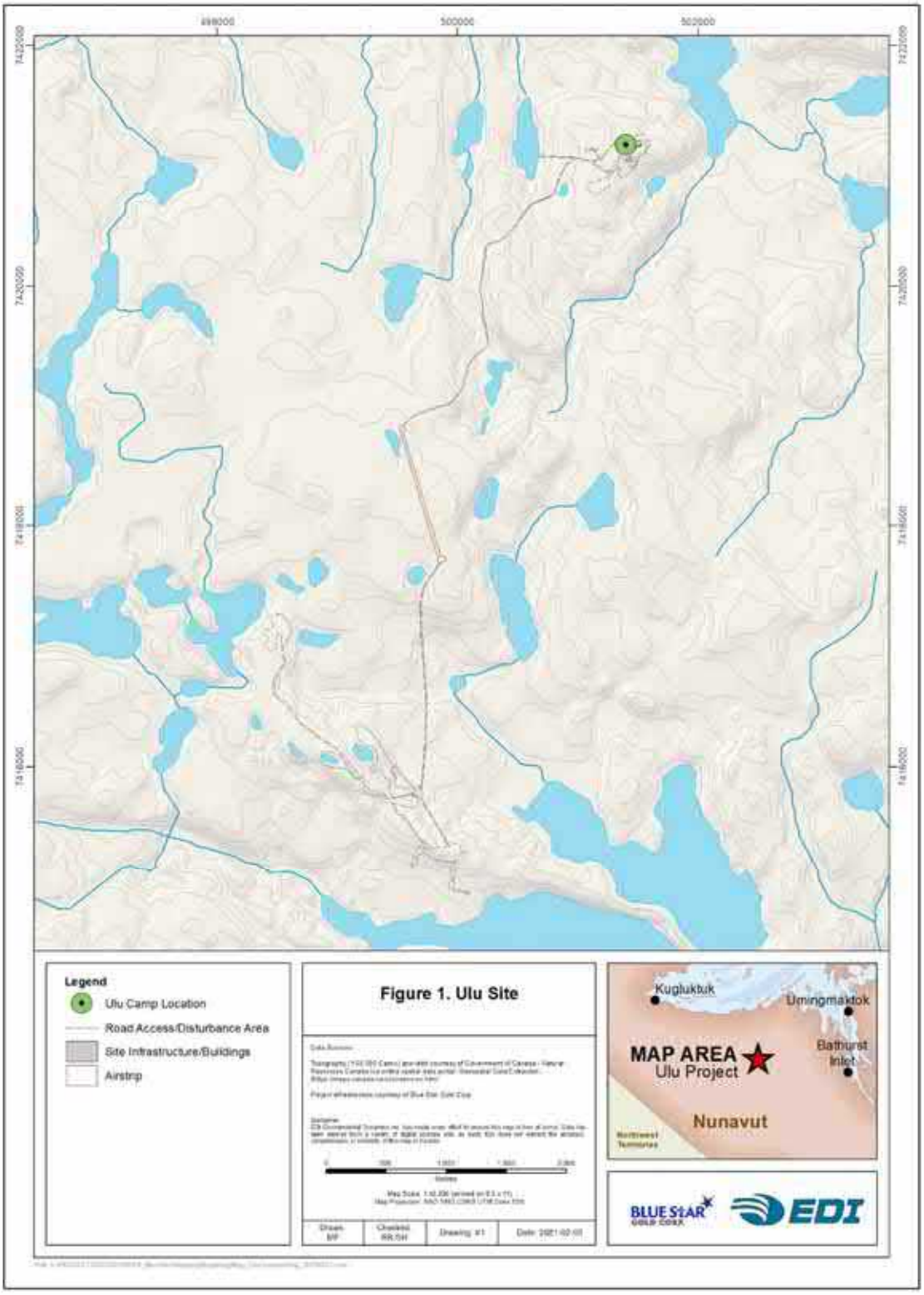

Figure 1 Ulu Gold Project site map

Figure 2 Ulu Landfill and waste staging areas.

Both a hardcopy and soft copy of this Plan and related documentation, such as inspections and forms, is maintained on site in the Camp Manager's office while the camp is open and otherwise in Blue Star's main office and on the Blue Star server.

2.0 ROLES AND RESPONSIBILITIES

Blue Star is responsible for activities associated with the Project, including implementation and management of this Plan. Blue Star's contact information is provided below.

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The Project Manager, Site Engineer and/or Reclamation Manager may be reached through the Blue Star main office.

2.1 STAFF, CONTRACTORS, SUPPLIERS AND VISITORS

All personnel conducting activities on site, including staff, contractors, suppliers and visitors, are required to be guided by this Plan as it pertains to their activities on site. Specifically, these responsibilities include:

- Taking all necessary steps to minimize negative effects to water, land and air;
- Cooperating fully with your supervisor and/or Blue Star management to implement an environmental protection program in your work area;
- Only carrying out duties and tasks that you are experienced at and trained to perform;
- Where there is uncertainty, asking questions and bringing concerns to the attention of your supervisor when working with products or conducting tasks that may pose potential environmental risks;
- Reporting wildlife observations, spills and emergency situations in accordance with relevant management plans.

2.2 MANAGERS AND SUPERVISORS

Managers and supervisors have a responsibility to ensure that staff, contractors, consultants and visitors have been trained in Blue Star Landfill operations in a manner relevant to their activities on site, environmental and any other relevant procedures. Additional supervisor and manager responsibilities include:

- Maintaining a no blame work environment in implementing mitigation measures and follow-up actions;
- Ensuring site-, task- and material-specific training is provided to all departments and staff;
- Ensuring there are appropriate and sufficient supplies on site to support implementing mitigation measures and follow-up actions;
- Providing assistance in responding to environmental hazards;
- Maintaining records regarding inspections, personnel training, equipment testing and maintenance; and
- Engaging with relevant parties in a timely and transparent manner, where appropriate.

2.3 RECLAMATION MANAGER

In addition to the responsibilities listed above the Reclamation Manager is responsible for:

- Reviewing and approving any material that is to be placed in the Landfill to ensure suitability for disposal, including checking inspection sheets completed by the equipment cleaning contractor to ensure that all equipment with hazardous materials (fuels, lubricants, batteries, etc.) have been emptied of those materials prior to impoundment in the landfill;
- Conducting and documenting regular inspections for operational compliance;
- Coordinating with other managers and supervisors to ensure safe and appropriate allocation of resources on site;
- Maintaining the reclamation schedule, and where schedule changes occur, advising the Project Manager in a timely manner;
- Carrying our surface water quality monitoring, or assigning designate to do so;
- Assigning and overseeing specific roles and responsibilities regarding material handling;
- Maintaining a log of waste deposited daily, mitigation measures applied, analyses conducted, preventative maintenance undertaken; and
- Maintaining photo documentation of works.

2.4 SITE ENGINEER

In addition to the responsibilities listed above, the Site Engineer, whose role may overlap with or be filled by the Reclamation Manager, is responsible for the following specific tasks:

- Sequencing material placement in the Landfill to ensure adequate room for disposal and cover of large waste;
- Conducting quality assurance/quality control (QA/QC) during construction and waste consolidation;
- Monitoring waste volumes to ensure capacity is not reached before all wastes have been impounded in the facility;
- Advising on corrective actions in the event of unauthorized dumping;
- Directing sump excavation, operation and monitoring, as needed during Landfill operations; and
- Monitoring the performance of the Landfill cover.

3.0 HEALTH & SAFETY

Site-wide health and safety measures occurring in accordance with Blue Star procedures as well as the *Mine Health and Safety Act* (1994) and *Regulations* apply to all aspects of Landfill construction and operations. Landfill-specific measures include:

- Identifying the Landfill as a Restricted Access Area (Area);
- Restricting access to the area to those designated and involved in waste placement, monitoring and inspection;
- Consideration of building of a perimeter fence in the event wildlife are seen to be within the footprint area;
- Limiting manual handling and placement of waste, using heavy equipment wherever possible;
- Prior to any handling associated with segregation and staging, marking sharp wastes (glass, rough metal edges) with non-toxic marking paint, or in an otherwise visible manner;
- Minimizing manual handling of sharp waste;
- Where workers need to enter the Area on foot, all related heavy equipment remaining either outside the Area, or, if necessary to remain within the Area, shutting down until workers on foot have left the Area.

4.0 OPERATIONS

4.1 WASTE IDENTIFICATION, SEGREGATION AND STAGING

As detailed in Appendix A, the Landfill design and capacity is based on an understanding of existing legacy waste on site. Prior to landfilling, verification of the waste inventory is undertaken and waste volumes confirmed. Wastes are segregated into the waste streams listed below in Table 2, with wastes identified as suitable for disposal being verified as suitable by the Reclamation Manager. Waste designated as unsuitable for Landfill disposal is segregated, bulked and backhauled for offsite disposal at a suitable facility. Wastes identified for disposal are staged in such a manner as to allow sequencing and suitable placement within the Landfill. Where approved, clean combustible wastes such as lumber may be open burned.

Only non-putrescible non-hazardous waste is accepted at the Landfill. Table 2 provides a list of common items that can be managed in the Landfill, while Table 3 provides a list of waste streams prohibited from the Landfill.

To ensure that all equipment planned for disposal in the landfill is free of hydrocarbons, hydraulic fluids, lubricants and antifreeze, a third party specializing in equipment flushing is retained as needed to flush all equipment, suitably dispose of any related waste off site, and provide documentation verifying results of flushing procedures.

Table 2 Acceptable waste for disposal in the Ulu Landfill

Material	Examples
Scrap Metal	Steel, decommissioned tanks, metal containers, rebar, tin
Rubble	Concrete, bricks
Wood products	Timbers, plywood, concrete forms, lumber
Rubber products	Conveyor belts, non-reusable tires
Construction debris	Siding, tarps, insulation
Glass	Cleaned bottles and jars, plate glass, windows, mirrors
Piping	Steel and plastic piping, heat tracing
Fabric and liners	Synthetic liners (cut into strips), woven geotextiles
Electrical	Cables, cable support trays, panels, switchgear, transformers
Non-recyclable or reusable equipment	Electric motors, boilers, fans, heaters, pumps, screens, appliances, vehicle parts, lighting, tools.

Table 3 Waste unacceptable for disposal in the Ulu Landfill

Material	Example
Corrosives	Batteries, unusable chemicals such as acids or lime
Hazardous Wastes	Used oils, hydraulic fluids, gasoline or any hydrocarbons, hydrocarbon contaminated matting, wood or rags, asbestos, lead paint and lead painted items, lighting fixtures containing mercury, any electrical goods containing PCBs
Liquids	Kitchen wastes, portable latrines and related septage, paint
Contaminated soils	All soils collected as a result of a spill
Animal carcasses	Natural mortality or roadkill
Spoiled edible or otherwise putrescible products	All solid or liquid forms of food and/or kitchen waste

4.2 PLACEMENT METHOD AND COMPACTION

Waste placement is carefully sequenced to ensure the Landfill footprint is minimized and design criteria are met. Large waste, such as heavy equipment, sea cans or scrap fuel tanks[1], is placed in the deepest areas, with smaller materials including suitable granular placed within and among larger waste to fill void spaces and minimize settlement. Placement of materials within and among large waste may be done manually and/or utilizing an excavator or backhoe to assist placement and compaction. Once waste compaction is complete, areas where voids are still present are filled with esker sand and where approved, soils containing low levels of petroleum hydrocarbons (PHCs), and packed in order to fill the voids and mitigate waste settling, cover subsidence and related pooling of water on the surface.

Smaller waste placement is done by means of the Depression Method, which entails end-dumping, compacting and covering waste, as illustrated in Figure 3. In this instance, waste is placed in 1 m lifts and then compacted by “track packing” or mechanically using an excavator bucket.

Lifts are constructed in a manner that promotes positive water drainage away from the Landfill area to mitigate the need for water management and minimize recontouring should interim cover placement be required if operations extend beyond 1 year.

[1] Removed from service, cleaned and cut up by previous site owner.

Waste is placed directly on the native ground surface, which is considered to be a suitable foundation given it is largely exposed bedrock. Localized leveling of any soil present maybe undertaken under the direction of the Project Engineer.

As outlined in the following section, soil containing traces of PHCs may be placed in the Landfill to create workable waste placement surfaces where required or used as subsurface backfill.

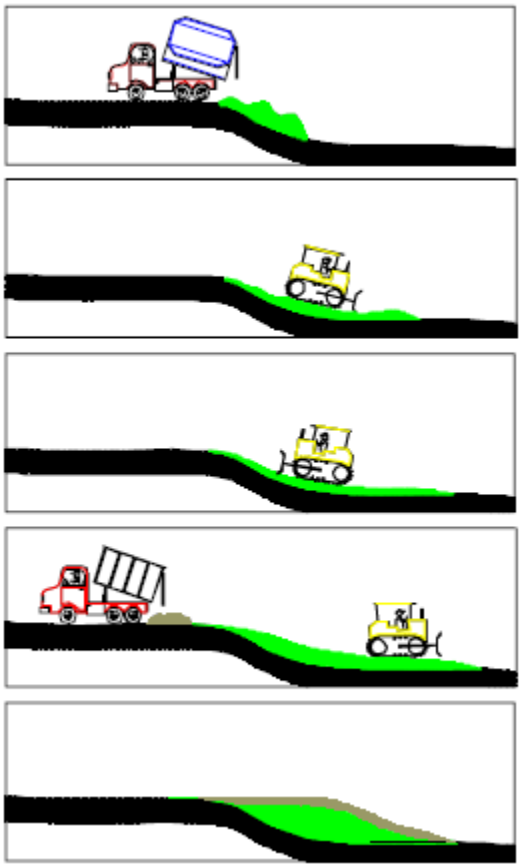

Figure 3 Illustration of the Depression Method of landfill construction (FSC 2003).

4.3 CONSTRUCTION MATERIAL

Material is required to cover the waste in the Landfill and fill void spaces, and collectively is referred to here as 'Construction Material'. This material includes course grained esker sand, hard rock borrow material, and where approved, material containing low levels of PHCs.

Esker material considered suitable for Landfill construction is locally available both in a stockpile proximal to the Landfill as well as an existing borrow location approximately 6 km away.

Hard rock borrow may include existing waste rock, as was historically used on site for construction by previous operators, or new quarry rock. Geochemical testing must be done on all potential hard rock borrow planned for use prior to construction to ensure it is not potentially acid generating (PAG); no PAG material may be used in the construction of the Landfill, as per Part E item 6 of 2BM-ULU2030.

As outlined in the design memorandum in Appendix A, the interim covers are constructed from the available esker sand. Investigations into the durability of the esker sand will confirm if it is suitable for the final cover.

All material is confirmed suitable by the Site Engineer prior to use for construction.

In the unlikely event that suitable cover materials or Landfill space are limiting, interim cover placed overwinter may be removed and stockpiled nearby for future use as final cover or final cover repair.

Upon completion of material placement, a stockpile of esker sand may be established adjacent to the Landfill to support maintenance and possible future re-activation and additional waste disposal. Stockpile establishment should be undertaken in advance of final closure while heavy equipment is still available to transport materials to the Landfill area.

4.3.1 USE OF HYDROCARBON-CONTAMINATED SOIL

Further to Part I item 11 of 2BM-ULU2030, the beneficial use of soils containing hydrocarbons in the Landfill as backfill and cover is acceptable following approval from the Government of Nunavut (GN) and the Inspector; direction from the GN and the Inspector can be found in Appendix B.

The GN's *Environmental Guideline for Contaminated Site Remediation* (GN 2009) indicates that Tier 1 criteria may be applied to use of remediated soil including both surface (0-1.5 m depth below ground surface[2]) as cover and subsurface (>1.5 m depth below ground surface[3]) as backfill; these criteria are provided below in Table 4 and discussed further in the *Soil Treatment Facility Management Plan*.

The soil criteria are derived from the pathway-specific Tier-1 guidelines established by the Canadian Council for Ministers of the Environment (CCME) in the *Canadian Environmental Quality Guidelines* (CCME 2018) and the *Canada-Wide Standards for Petroleum Hydrocarbons in Soil* (CCME 2008), and as adopted by the GN in the *Environmental Guideline for Contaminated Site Remediation* (GN 2009). (CCME 2010).

[2] Ground surface is considered to be the final crest of the landfill
[3] Subsurface soil >1.5 m depth = subsoil

Table 4 Criteria for use beneficial reuse of hydrocarbon contaminated soil, Ulu Landfill[1]

Parameter	Surface Soil (mg/kg)	Subsurface Soil (mg/kg)
Benzene	11[2,3]	62[2]
Toluene	75[4]	150[4]
Ethylbenzene	55[4]	110[4]
Xylenes	65[2,3]	130[2,3]
PHC Fraction 1 (F1)	210[5]	700[6,7]
PHC Fraction 2 (F2)	150[5]	1,000[6,7]
PHC Fraction 3 (F3)	300[5]	2,500[6,7]
PHC Fraction 4 (F4)	2,800[5]	10,000[6,7]
PAH Naphthalene	0.6[8]	0.6[8]
PAH Phenanthrene	0.1[8]	0.1[8]

[1] Coarse grained, unless otherwise noted.
[2] Agricultural/Residential/Parkland use, soil quality guideline for environmental health (CCME 2004a,d).
[3] Fine grained fraction, as it is a more conservative objective.
[4] Agricultural land use, soil quality guideline for environmental health (CCME 2004b,c).
[5] Agricultural/Wildland land use, Ecosoil Contact exposure pathway (GN 2009).
[6] Agricultural/Wildland land use, Management Limit exposure pathway (GN 2009).
[7] Environmental Guideline for Contaminated Site Remediation (GN 2009).
[8] Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, Polycyclic Aromatic Hydrocarbons (CCME 2010).

4.4 DUST CONTROL

It is possible that dusting may arise during and after esker material placement as backfill and cover. Should dusting occur during operations, water is applied using a pump and spray nozzle to mitigate dust generation. Water application in combination with compaction of the surface may further assist in creating a more compacted top layer, much less vulnerable to the generation of dust.

Given the historic use of the esker quarries, observations indicate that the land surrounding the quarries does not appear to be impacted by dusting; dust generation from esker use for cover is not expected.

4.5 WATER MANAGEMENT

While it is not necessary to eliminate all moisture migration into and out of a non-hazardous waste landfill, it is good practice to minimize water ingress and monitor water seeping/flowing out of the facility to ensure stability and confirm potential environmental effects are suitably mitigated. Accordingly, as per the design (Appendix A), the areas surrounding the facility are graded to promote drainage around and away from the Landfill, preventing surface water ingress.

Should runoff observed during construction and operation be of sufficient volume that it may be captured, the Site Engineer shall oversee the construction of a sump in a suitable location. Following collection and characterization of the seepage accumulated, and subsequent related consultation with and approval from Inspectors, it may be discharged to tundra, treated on-site through a hydrocarbon filter such as a Rain Drain™ or pumped out and backhauled to a suitable waste receiver for treatment and disposal. Related inspections and monitoring are discussed further in subsequent sections of this Plan.

4.6 UNAUTHORIZED DUMPING

Unauthorized dumping of materials to the Landfill can result in contamination and leachate generation, and pose a safety risk to unauthorized personnel entering a restricted area. Should any unauthorized dumping occur at the facility, the activity must be reported to the Reclamation Manager or Site Engineer, with corrective actions, including removal and handling of the materials in accordance with the *Waste Management Plan* implemented as soon as practical.

4.7 SIGNAGE

In addition to Restricted Access Area delineation, the entrance to the facility is clearly marked with multi-lingual signage identifying types of acceptable waste and limited access (see Figure 4 for example signage).

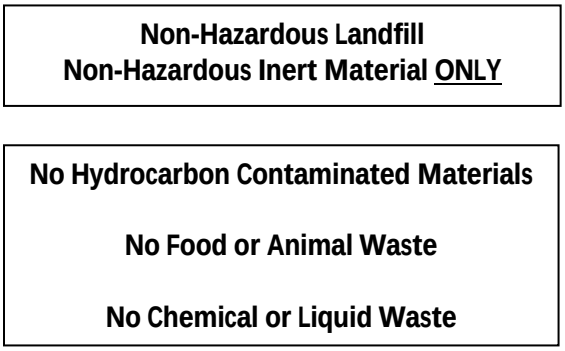

Figure 4 Examples of Landfill signage.

Further, signage is erected in accordance with Part B Item 12 of 2BM-ULU2030, identifying the Landfill location, in Inuktitut, Inuinnaqtun, and English.

5.0 CLOSURE

The closure objectives outlined in the *Interim Closure and Reclamation Plan* are to return the Ulu site to a condition of similar environmental productivity and land use that existed prior to the development of mine facilities. Closure is also intended to minimize requirements for long-term monitoring and maintenance. The specific objectives of Landfill closure are to:

- Consolidate all site waste materials in one designed waste storage facility;
- Isolate Landfill material from the environment; and
- Provide long term performance specifically focused on the prevention of erosion resulting in exposed waste.

Should landfilling extend beyond one year, the closure of the Landfill incorporates an interim closure during winter shut down period, and the final facility closure follows once all identified waste is placed within the facility, as described in Appendix A. Depending on the nature and volume of any additional waste accumulated for disposal following interim closure, interim cover may be removed and replaced following waste placement.

Refer to Appendix A for specifications regarding the intermediate and final cover design.

Should capacity in the Landfill remain at closure and future use beyond that contemplated herein be considered, subsequent design and approval amendments will be undertaken.

6.0 SURVEILLANCE AND MAINTENANCE

The *Interim Closure and Reclamation Plan* and water licence 2BM-ULU2030, outline construction, closure and annual monitoring requirements associated with engineered and waste facilities. In accordance with Part D Item 14 of 2BM-ULU2030, a geotechnical engineer is required to inspect the earthworks and geological regime annually.

Specific surveillance (monitoring) measures are outlined below.

6.1 SURFACE WATER MONITORING

Throughout construction and subsequent operation, the Landfill is monitored for the presence of runoff or seepage through the facility. At the location(s) where runoff from the Landfill is observed, monitoring station ULU-15 will be established in accordance with Schedule J of 2BM-ULU2030. Should there be multiple locations where runoff can be sampled, additional monitoring locations are identified as ULU-15a, ULU-15b, etc.. All runoff and seepage waters are analyzed for parameters as specified in Schedule J of 2BM-ULU2030.

During the annual geotechnical inspection, surface water runoff patterns are monitored to determine if drainage control structures are functioning as designed. Maintenance is conducted as necessary.

6.2 COVER PERFORMANCE MONITORING

QA/QC during construction and waste consolidation minimizes cover subsidence over time, thus reducing the need for long term monitoring and potential future maintenance work to the facility, and is achieved through implementation of this Plan.

Periodic visual inspections are undertaken, including, but not limited, identifying the following:

- Depressions or voids on the surface;
- Erosion gullies;
- Water flowing from the facility.

Visual inspection are carried out:

- Within 24 hours following a rain event, when the site is occupied;
- Annually as part of the geotechnical inspection required under the water licence.

After the placement of the final cover, inspection of the Landfill during the annual geotechnical inspections is considered sufficient to monitor the site's long-term performance. The performance of the cover must be compared to the cover design as outlined in Appendix A. Any subsidence or other changes in cover stability are addressed under the direction of the Site Engineer with follow-up by the Licensee reported pursuant 2BM-ULU-2030 Part D Item 14. A stockpile of cover materials may be established adjacent to the facility to aid in cover repairs.

7.0 ENGINEERING CONTROLS

Engineering controls are presented in Section 4 of the Landfill design documents found in Appendix A.

8.0 TRAINING

All attendees to site involved in Landfill operations will participate in a site orientation which outlines environmental and Landfill operations procedures. Specific roles and responsibilities regarding material handling will be assigned by the Site Engineer or Reclamation Manager.

9.0 REPORTING AND DOCUMENTATION

9.1 REPORTING

Reporting will occur in accordance with the water licence and land use licence requirements and the *Engagement Plan*. Specifically, in accordance with Part E item 3 of 2BM-ULU2030, Issued For Construction drawings are provided in Appendix A, and a construction report is submitted to the Nunavut Water Board within 90 days of facility completion. An annual geotechnical inspection report is submitted to the Nunavut Water Board annually (as per 2BM-ULU2030 Part D Item 14).

9.2 DOCUMENTATION

All construction records associated with the Landfill are maintained on site, in Blue Star's office and on Blue Star's server, and are available to the Nunavut Water Board or an Inspector.

Examples of Inspection Checklists that may be employed are provided in Appendix F.

The Reclamation Manager maintains a logbook of:

- Quantity and type of waste deposited each day (in cubic meters);
- Quantity of fill material deposited each day to fill the gaps between the impounded materials;
- Confirmation that the fill material placed that day has been compacted as per the facility design;
- Measures taken to avoid or mitigate any adverse impacts from the deposition of waste;
- Records of any test results, waste analysis, equipment flushing, hazardous materials removal (i.e. batteries) or other determinations;
- Equipment preventative maintenance;
- Facility-related wildlife issues encountered;
- Seepage observed and an indication of likely cause;
- Required follow-up actions.

The logbook is transported to the site at the start of each field season and stored off-site during the off season for safe keeping. An electronic copy is made at the end of each field day and retained by Blue Star.

Photographs to document activities are taken throughout the field season. Where possible aerial photography is used to track waste placement and the corresponding available Landfill volume. These are stored electronically by the Site Engineer, and included in the annual geotechnical report as needed.

10.0 REFERENCES

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Government of Nunavut (GN). 2009. Environmental Guideline for Contaminated Site Remediation. Department of Environment, Environmental Protection Division. Originally approved in 1999, revised in 2009.

Appendix A: Landfill Design Memorandum

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Memo

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From:	Darryl Godley	**Project No:**	1CB041.000
Cc:	Arlene Stearman, Michel Noel	**Date:**	March 12, 2020
Subject:	Ulu Gold Project Non-Hazardous Waste Landfill		

1 Introduction

The Ulu Gold project (the Project) is located on Inuit-owned land in the Kitikmeot Region, Nunavut, within the Hood River watershed. It is located 126 km north of the Lupin mine.

The mineral claims holding the Ulu deposit were initially staked in 1988. Portal excavation at the Ulu site commenced in 1996 to confirm resource calculations and mining design for mill feed to the Lupin Mine. Equipment to construct the camp and develop the mine was mobilized to site via a winter road from the Lupin mine in 1996. Camp 3 was built at the esker sand quarry to facilitate construction of the airstrip, road and underground exploration site. It included tent accommodations, a garage and a fuel tank farm. Camp 3 was reclaimed in 2018/2019. Underground development of the ramp ceased in August 1997 at the 155m level. The existing facilities at the Ulu underground exploration site consist of a 20-person camp with sleeping and dining quarters, a 22 m by 37 m vehicle repair shop, fuel containment areas (tanks removed in 2018) for bulk diesel and day tank storage, core storage area, core shack, and fuel staging area. The previous operator demolished unused facilities and stockpile piled them in preparation for disposal in the underground workings and in a landfill at the portal entrance. Blue Star intends to utilize a surface landfill that does not compromise the underground workings.

In support for renewal and amendment of the site water licence application submitted by Blue Star Gold Corporation (Blue Star), SRK Consulting (Canada) Inc. (SRK) was given the mandate to design a non-hazardous waste landfill facility (landfill). The landfill is intended to contain non-hazardous wastes generated during ongoing remediation activities.

This memo provides details of the landfill design and should be read in conjunction with the attached engineering drawings (Appendix A).

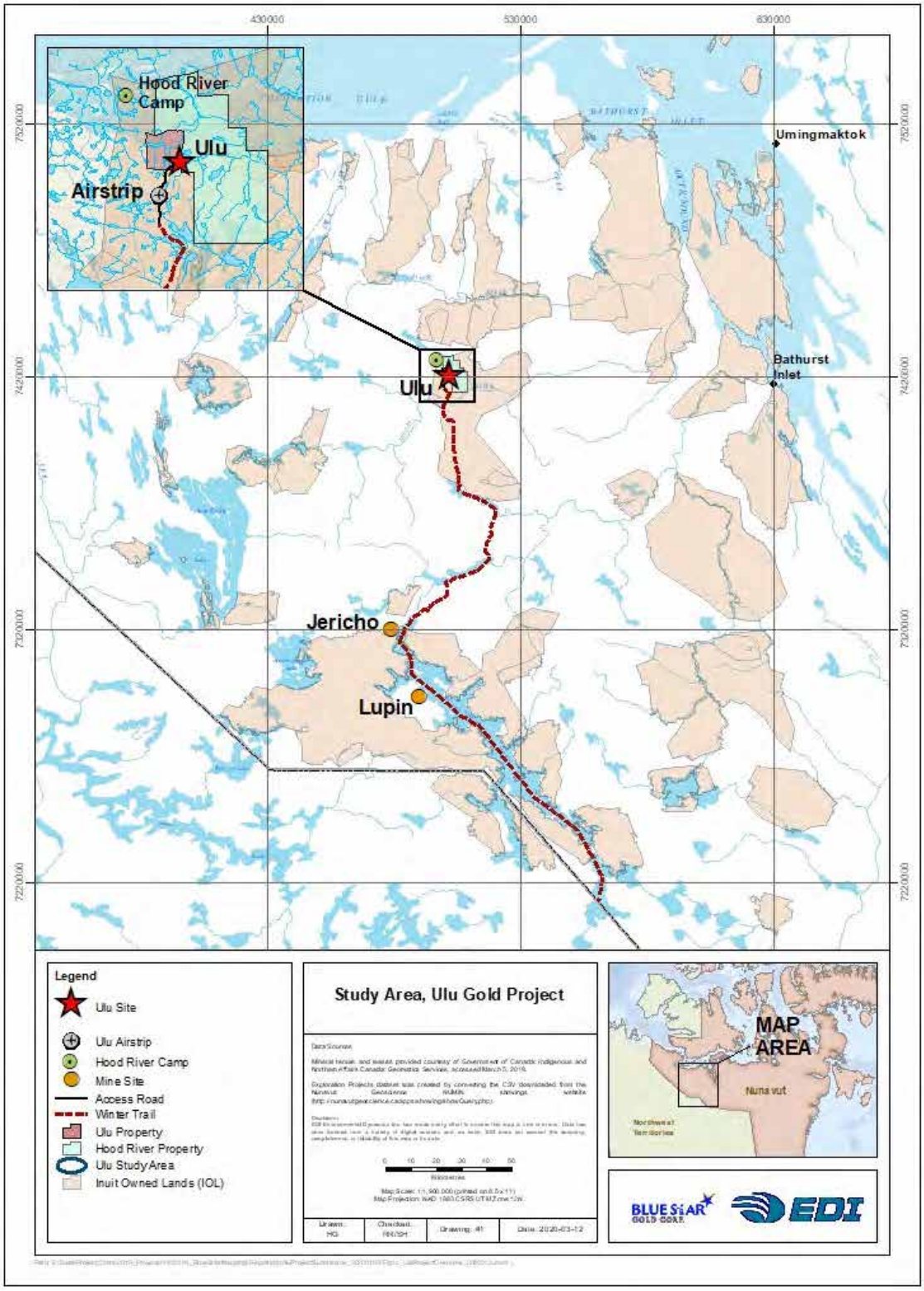

Figure 1 Ulu mine project location

2 Existing Conditions

2.1 Non-Hazardous Waste

The previous operators compiled an inventory list of the waste requiring management on the project in September 2018, see Appendix C. During initial remediation activities the waste was consolidated into three primary areas identified in Figure 3. SRK conducted further investigations in 2019, the topographic drone survey was used to verify the waste volumes provided, these volumes can also be found in Appendix C. Due to the uncertainty in the waste volumes a 30% contingency was added to the minimum storage capacity of the landfill. Total consolidated waste, including contingency, is approximately 10500 m³.

2.2 Climate

The proposed landfill, for the former Ulu Mine exploration camp, is located within the Southern Arctic Ecozone and the Takijuq Lake Upland Ecoregion. Much of this region is composed of unvegetated rock outcrops. Vegetative cover is characterized by shrub tundra, consisting of dwarf birch, willow, northern Labrador tea, avens species and blueberry species. Organic Cryosols are the dominant soils in the lowlands and permafrost is deep and continuous (ECCC 2019).

Regional annual normals from Lupin A station between 1980 and 2010 (ECCC, 2020a) indicate a mean annual rainfall of 160 mm, mostly occurring during July and August. The mean annual snowfall is equivalent to 138 mm of water, most of which falls during autumn and spring. The mean annual air temperature is -10.9 degrees Celsius. Monthly precipitation and temperature normals are presented in Figure 2, and Table 1.

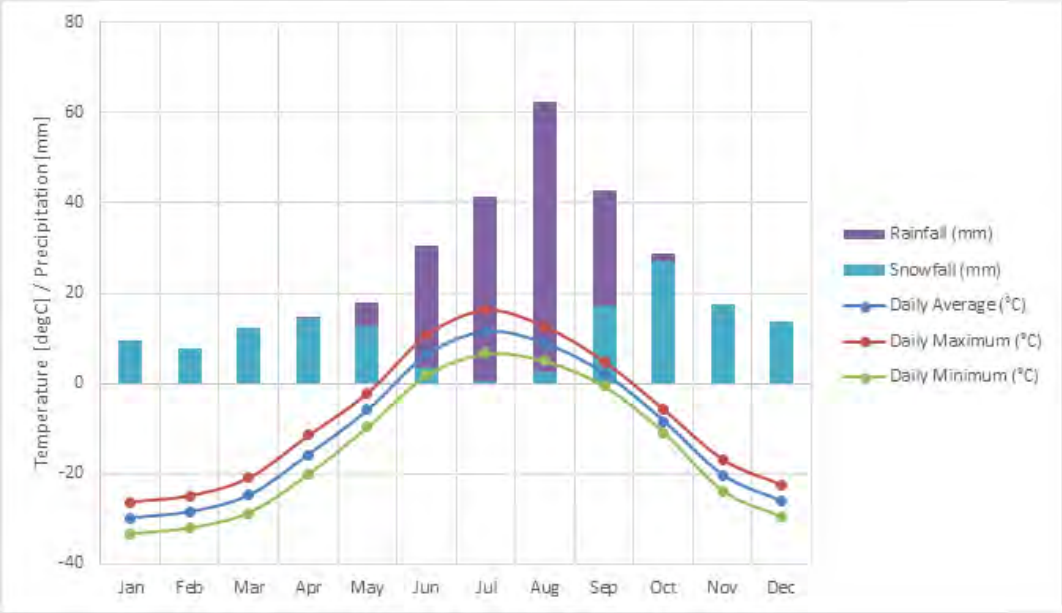

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Figure 2 Temperature and Precipitation Normals

Table 1 Precipitation and Temperature normals based on Lupin A records

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Rainfall (mm)	0	0	0	0.4	5.3	26.8	41.1	59.8	25.5	1.6	0	0	160.5
Snowfall (mm)	9.4	7.8	12.2	14.3	12.5	3.6	0.4	2.6	17.1	27.1	17.4	13.7	138
Precipitation (mm)	9.4	7.8	12.2	14.6	17.8	30.4	41.5	62.5	42.6	28.7	17.4	13.7	298.5
Daily Average Temperature (°C)	-29.9	-28.5	-24.8	-15.8	-5.9	6.4	11.5	8.8	2.1	-8.4	-20.4	-26.2	-10.9
Daily Maximum Temperature (°C)	-26.3	-24.9	-20.9	-11.5	-2.1	10.8	16.3	12.6	4.8	-5.8	-16.9	-22.6	-7.2
Daily Minimum Temperature (°C)	-33.4	-32.1	-28.7	-20.1	-9.6	1.9	6.7	5	-0.6	-10.9	-23.9	-29.7	-14.6

Source: Compiled into text from ECCC 2020a
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3 Location Alternatives

During the July 2019 site investigation, SRK reviewed potential locations for the landfill. The preferred locations were chosen due to their proximity to waste and cover material, use of the surrounding topography for optimal storage space and minimised facility footprint. Figure 3 shows the proposed landfill locations, the proximity to access roads, water courses, and remediation works.

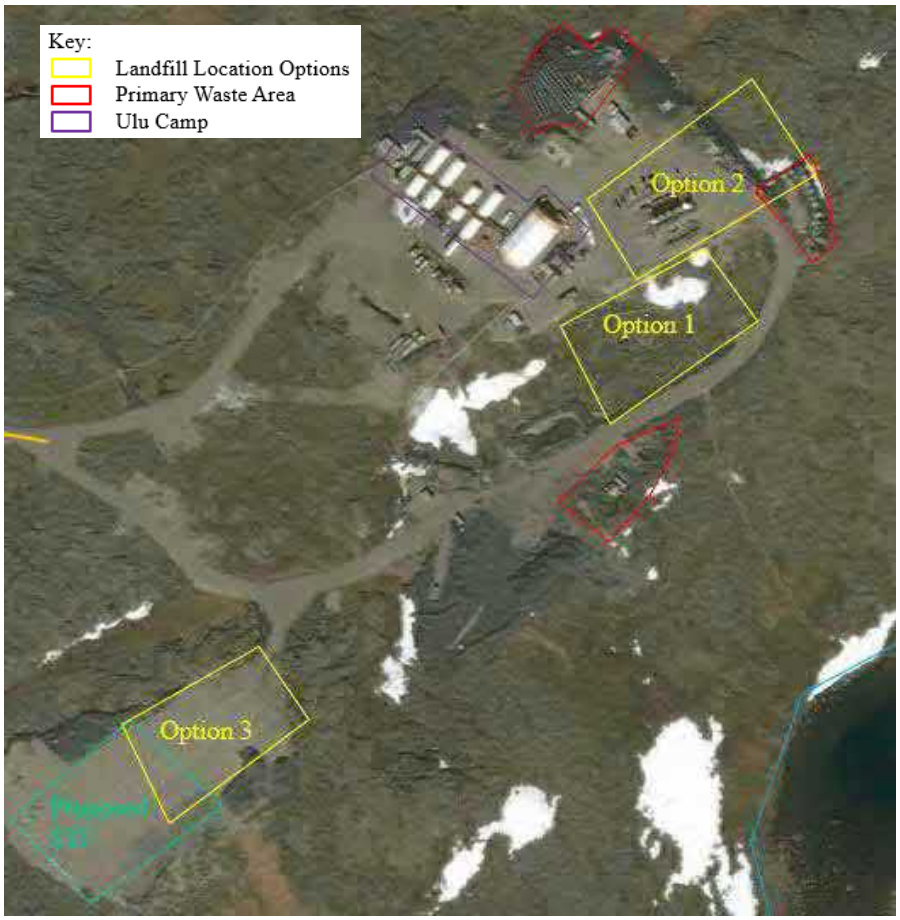

Figure 3 Landfill Location Overview

The following design locations were considered for the landfill:

#1 Adjacent to the Ulu Camp tank farm. An area situated between what was the Ulu Camp tank farm and portal access road. The orientation and topography of this area allows for construction using the depression method for constructability. It is also situated in proximity to all consolidated waste stockpiles. *This location was selected due the proximity to consolidated waste, independent of other reclamation activities and minimized side slopes exposed to potential erosion.*

#2 Ulu camp tank farm void. This location is situated on the former exploration camp tank farm footprint, where contaminated material will be removed prior to the construction of the landfill. The selected location contains petroleum hydrocarbon (PHC) contaminated material intended for the soil treatment facility. An approximately 2.5 m deep void to bedrock will remain once excavated. The intention is to utilize this void to minimized additional ground surface disturbance as well as minimise the required landfill embankment slopes to assist with erosion control. *This option was not selected due to the dependence of the STF PHC contaminated material excavations which pose a risk of delaying the reclamation activities as well as possible interaction with potentially acid generating rock within the vicinity.*

#3 Waste rock pad. A level pad was constructed for the Run-of-Mine stockpile, this location is situated in the South West of the Ulu camp. The area was leveled using waste rock form underground workings and covered with esker sand. *This option was not selected because of the high volumes of cover material required increasing the facility cost as well as this location being the preferred option for the Soil Treatment Facility being constructed in conjunction with landfill.*

The selected locations are situated outside of the primary land-use zone for airstrips as outline by Transport Canada. Primary Hazard Zones generally enclose airspace in which aircraft are at or below altitudes of 1500 feet above ground level (Government of Canada 2013/14). Dry waste landfills are classified to have a “potentially low” level of risk, however, they must not be situated within the primary land-use acceptability zone. See Figure 2 of Appendix A for the site plan showing the zone and landfill locations.

A topographic drone survey was conducted during the 2019 site investigation to capture the detailed topographic surface which implicitly includes the elevation of slope transitions and the general site profile. A 3D model of the Ulu Camp area was utilized for the design of the landfill.

4 Design and Construction

4.1 General

The landfill will contain generally dry, non-leachate generating materials originating from the demolition of site infrastructure, progressive reclamation and closure activities. The non-hazardous waste material includes:

- Non-hazardous building demolition waste,
- Non-hazardous equipment and tyres,
- Untreated wood waste,
- Decontaminated, non-hazardous steel from demolition of tanks, trailers and sea cans, and
- Decontaminated fabrics: Geomembrane liners, weather-haven camp fabric.

Details of the waste volume breakdown can be found in Appendix C.

4.2 Design criteria

The design criteria for the Non-Hazardous Waste Landfill is based on the Guidelines for the Planning, Design, Operations, and Maintenance of Modified Solid Waste Sites in the Northwest Territories (Ferguson et. al. 2003). The design criteria for the landfill is as follows:

- Maximum sidewall slopes of 4H:1V;
- Petroleum hydrocarbon concentrations of material placed within the landfill shall not exceed the Canada-Wide Standard for Petroleum Hydrocarbons in Soil (CCME 2008) for subsoil;
- Geochemical properties of construction material shall be non-metal leaching/acid rock drainage (ML/ARD);
- Minimize surface run-off through the landfill area during operations and post-closure;
- The general drainage gradient of the landfill outer surfaces post-closure shall not be less than 1%;
- Beyond 1:200-year return period flood elevation;
- 30 m beyond high water mark (a distance from water sources to ensures the protection of drinking water); and
- Outside the airstrip primary land-use acceptability zone (Transport Canada)

As the materials are non-hazardous, the design is not dependent on permafrost aggradation into the landfill.

4.3 Construction Specification

Minimal ground preparation will be required due to the sloping nature of the landfill location. Petroleum hydrocarbon contaminated (PHC) material acceptable for burial can be used to create working platforms at the base of the landfill (refer to Landfill Management Plan for specifications on accepted PHC content).

The landfill facility has a maximum capacity of 20,000 m^3 of non-hazardous waste material. The non-hazardous waste will be consolidated by stacking and compacting 1 m thick layers. The maximum vertical length of the facility varies from 5m to 10m across the footprints of the landfill locations.

There will be cut or filled with non-hazardous waste prior to placement within the landfill where shipping containers or tanks are placed. Where applicable, hazardous waste material must be removed from storage tanks or containers prior to placement within the landfill.

Each lift will be compacted with the mobile heavy equipment available on site, namely excavator or bulldozer. The technique to achieve an effective compaction during the initial waste placement will be determined by the construction supervision team and the on-site engineer. Voids within the waste material will be filled with available dry soil material in order to reduce settlement and final cover subsidence. Material with allowable petroleum hydrocarbon concentrations may be used to fill voids within the landfill (refer to Landfill Management Plan for specifications on accepted PHC content).

Snow and ice in excess of 100 mm must be removed from areas where waste is being placed. It is not required to prevent or capture all the seepage that may originate from the waste given the non-hazardous nature of the waste material.

Refer to section 3 for details regarding interim and final closure cover specifications.

4.4 Schedule

It is anticipated the non-hazardous waste will be collected and placed in the proposed landfill for one summer work season. The design and schedule are based on the following equipment:

- 1 x excavator (CAT 311)
- 1 x front end loader (CAT 966D)
- 1 x dump truck (CAT 769C)
- 1 x bulldozer (CAT D8N)
- 1 x grader (CAT 14G)

It is understood that the above includes all the mobile equipment available on site.

4.5 Construction QA/QC

The construction quality assurance and quality control (QA/QC) will consist of the following:

- **Waste Consolidation:** During waste placement, the contractor will consolidate the wastes; voids will be filled using available dry soil (esker) to avoid excessive voids that could lead to post-closure subsidence.

- **Elevation Control:** During construction, the construction team will maintain elevation control of the landfill construction to ensure sufficient void space remains for placement of the final containment cover over the consolidated wastes.

- **Lift Compaction:** The onsite construction supervisor will compact the landfill cover in maximum of 1 m lifts. Compaction will be performed with the available equipment, either by “track packing” using tracked equipment or by tamping with the excavator bucket for small surfaces. The compaction technique will be determined by the construction supervision and the site engineer.

4.6 As-built Report

An as-built survey will be performed after construction of the landfill to confirm and document its size and location. An as-built report of the landfill construction will be prepared and will contain:

- Description of the construction activities;
- Results of the QA/QC program;
- Changes to the design;
- Photos;
- As-built drawings from the site survey; and
- Waste relocation map (area not necessarily accurate survey).

5 Operations and Maintenance

The Landfill Management Plan will accompany the design memo. The plan will provide the types of waste accepted, methods of placement, operating method, engineering controls, closure details and monitoring procedures to be followed during the operation of the facility. It will also include guidance on the placement of materials which are required to be buried at depth.

6 Closure

6.1 General

As with all reclamation activities, the objective is to return the site to a condition of similar environmental productivity and land use that existed prior to the development of mine facilities. It is also intended to eliminate or minimize the requirements for long-term monitoring and maintenance. The specific objectives of the landfill closure plan for the Project are to provide:

- Isolating landfill material from the environment, and
- long term performance specifically focused on the prevention of erosion that may expose the buried waste.

The closure of the landfill will incorporate an interim closure during mine site operation, winter shut down periods, and the final closure once all the identified waste is placed in the landfill facility. The mine will be able to initiate the final closure at any point prior to the final mine site closure. The interim closure will require a higher level of monitoring and maintenance.

6.2 Interim Closure

Interim closure ensures isolation of the waste material prior to final closure.

6.2.1 Design Criteria

The closure design criteria for the non-hazardous landfill is as follows:

- All surface depressions to be to be filled with dry soil cover material;
- Petroleum hydrocarbon concentrations in the surface cover shall not exceed the Canada-Wide Standard for Petroleum Hydrocarbons in Soil (CCME 2008) for surface soil;
- Minimum of 200 mm interim dry soil cover above waste material (temporary wildlife barrier);
- All surfaces graded to prevent ponding of water; and
- Slope angles may not exceed 4H:1V.

6.2.2 Design and Specifications

The objective of the dry soil cover is to isolate the waste from wildlife contact during site inactivity periods (i.e. winter season or prolonged site shut-down). A minimum of 200 mm thick dry soil cover material will be placed over the consolidated non-hazardous waste. The maximum slopes shall not exceed a grade of 4H:1V. Placement to be done in such a way as to minimise water accumulation on the facility.

The dry soil cover material will consist of gravel and sand material sourced locally; esker sand. It is anticipated that the dry soil cover will be constructed by pushing the material over the landfill with a bulldozer and/or placement by an excavator. The surface must be shaped/graded to prevent ponding water. Compaction will be achieved by vibrating roller or multiple passes by the track-mounted bulldozer and/or the excavator.

6.3 Final Closure

6.3.1 Design Criteria

The final closure design criteria for the non-hazardous landfill is as follows:

- All surface depressions to be to be filled with dry soil cover material;
- Petroleum hydrocarbon concentrations in the surface cover shall not exceed the Canada-Wide Standard for Petroleum Hydrocarbons in Soil (CCME 2008) for surface soil;
- Minimum 300 mm intermediate cover (which includes any interim cover placed) and a 300 mm final cover;
- All surfaces graded to prevent ponding of water; and
- Slope angles may not exceed 4H:1V.

6.3.2 Design and Specifications

At final closure, the landfill will be covered in two lifts: a minimum 300 mm intermediate dry soil cover; and then the final cover of 300 mm rock fill or dry soil cover for a total cover thickness of 600mm.

The intermediate cover will include any interim cover previously placed. For; example, if 200mm interim cover is present, only the remaining 100mm of dry soil cover is needed to complete the 300 mm intermediate cover.

Investigations are currently underway to locate suitable rock fill construction material required for the landfill final cover. An investigation will also assess the durability of the available dry soil cover during the construction period. If considered acceptable as final cover material by the site engineer, the client will have the option of using either dry soil or rockfill as final cover material.

All depressions and voids must be filled and closed prior to placement of the final cover. The final side slope surfaces of the landfill will be graded to a maximum slope of 1V:4H and the edges graded to blend into the adjacent surface slope features. Vegetation is naturally sparse in this area and it is expected that natural recolonization will occur over time in areas capable of supporting vegetation. The final landscaping of the facility will be configured to prevent ponding of water, shed surface water away from the landfill facility and merge as much as possible with the surrounding topography.

The 600 mm thick cover composed of two 300 mm layers complies with the Nunavut landfill guidelines (FSC 2003).

7 Monitoring

Minimal monitoring will likely be required for the landfill due to the non-hazardous nature of the waste. The construction and operation of the landfill will include a QA/QC program to ensure compliance with the design and to control waste consolidation for minimizing possible cover subsidence over time. Intermittent maintenance may be required during the interim period of the closure work. Annual visual inspections will be required to determine the need for repair work.

Visual inspections should include, but not limited, to the following:

- Depressions or voids on the surface;
- Frost boils or bulges from frost heave;
- Erosion gullies;
- Damages from human and animal activities;
- Evidence of contamination;
- Abnormal water seeps.

After the placement of the final cover (final closure), inspection of the landfill during the annual mine closure geotechnical inspections should be sufficient to monitor the site's long-term performance.

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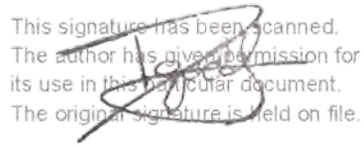

Darryl Godley, EIT (BC)
Consultant

Michel Noel, PEng (BC, NWT/NU)
Principal Consultant

8 References

Canadian Council of Ministers of the Environment (CCME) 2008. Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil – Technical Supplement. January 2008.

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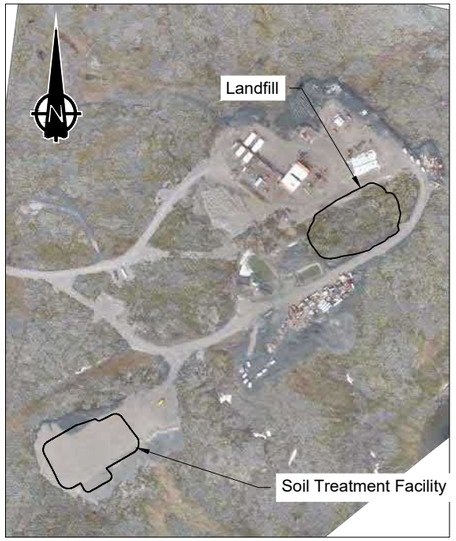
Koerner 2016. Designing with Geosynthetics, 6th edition Volume 1. August 2016. Robert M. Koerner.

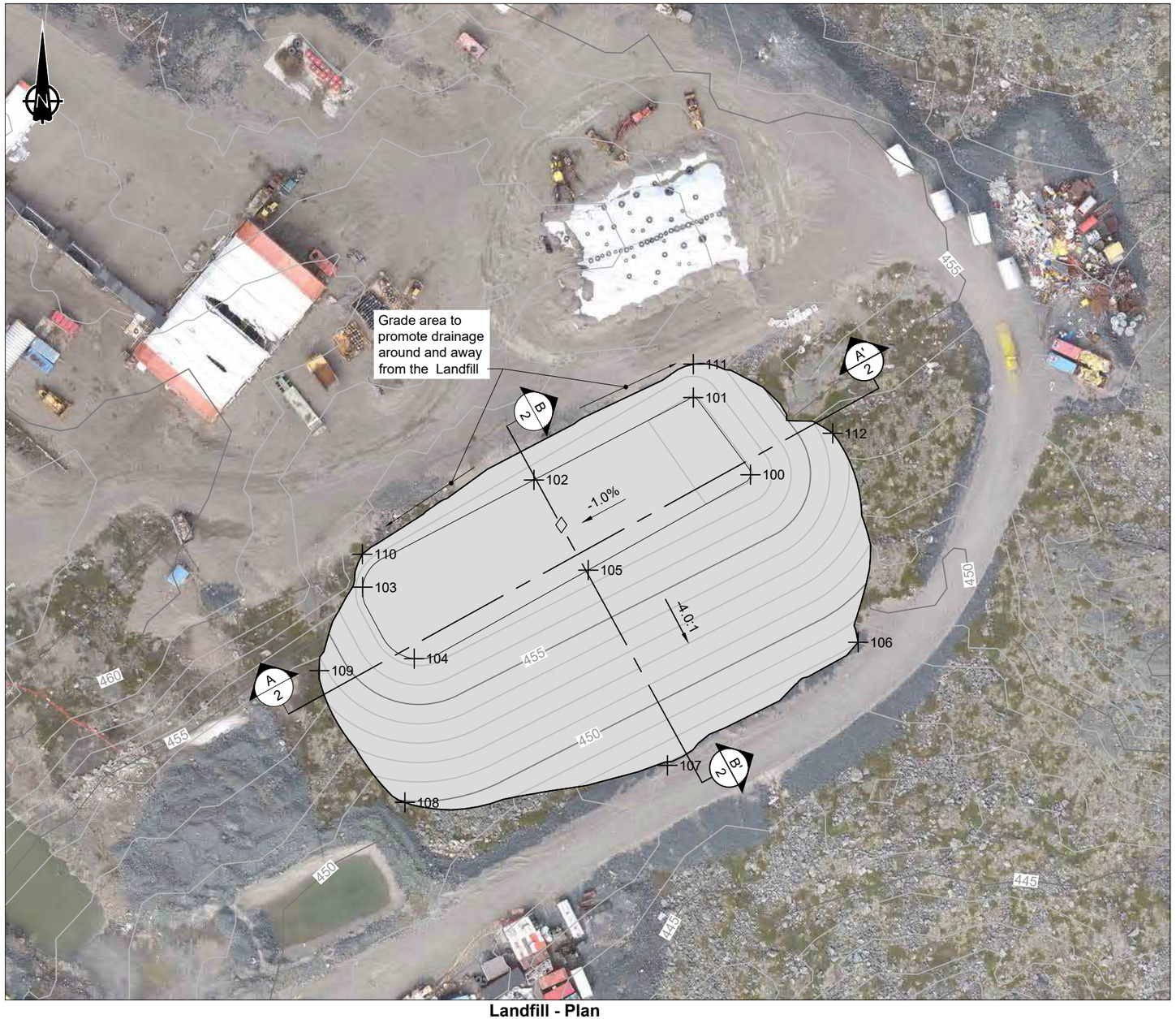
Koerner 2016. Designing with Geosynthetics, 6th edition Volume 2. August 2016. Robert M. Koerner.

Appendix B: Design Drawings



Key Plan

0m 50 100 150 200 250 300



Landfill - Plan

0m 10 20 30 40

LEGEND

Design Infrastructure

NOTES

1. Contours shown at 1.0m intervals.
2. All dimensions are in meters unless otherwise noted.
3. Limits of existing roadway surfaces are approximate.
4. Landfill boundary limit to be delineated in field by means of markers or a small berm and confirmed by On-Site Engineer.
5. Final Cover volume estimate based on 350mm cover to accommodate possible oversize material.
6. All construction material to be approved by the Design Engineer.
7. Establish control points outside of construction area for reference, location to be determined on site with survey.
8. All survey layout to be checked by contractor prior to construction.
9. All construction to be completed in accordance with the technical specifications in the design memorandum (Ulu Gold Project Non-Hazardos Waste Landfill Design. March 2020. Project No. 1CB041.000).

REFERENCE

1. Coordinate System is WGS84 UTM Zone 12N.
2. Background Image and drone survey completed 07/17/2019 by Blue Star Gold Corp.

STAKEOUT POINTS

Point #	Northing	Easting	Elevation (m)	ID
100	7421137.03	501518.39	458.10	PileTop
101	7421152.96	501506.58	458.10	PileTop
102	7421135.95	501473.66	457.72	PileTop
103	7421113.83	501438.29	457.35	PileTop
104	7421099.06	501448.94	457.35	PileTop
105	7421117.34	501484.89	457.71	PileTop
106	7421102.44	501540.64	448.00	PileToe
107	7421077.04	501501.24	446.92	PileToe
108	7421069.39	501447.03	449.91	PileToe
109	7421096.59	501429.33	453.65	PileToe
110	7421120.61	501438.23	453.65	PileToe
111	7421159.85	501506.58	453.65	PileToe
112	7421145.57	501535.38	453.41	PileToe

Landfill Volumes

Material	Volume m^3
General Waste	20,100
Interim Cover	2485
Final Cover	3130

(See Note 5)

srk consulting

SRK JOB NO.: 1CB041.000

FILE NAME: 1CB041.000 Non-Hazardous Waste Landfill.dwg

BLUE STAR GOLD CORP.

Blue Star Gold Corp.

Ulu Gold Project

Landfill
Plan

DATE: June 2020 | APPROVED: MN | FIGURE: 1

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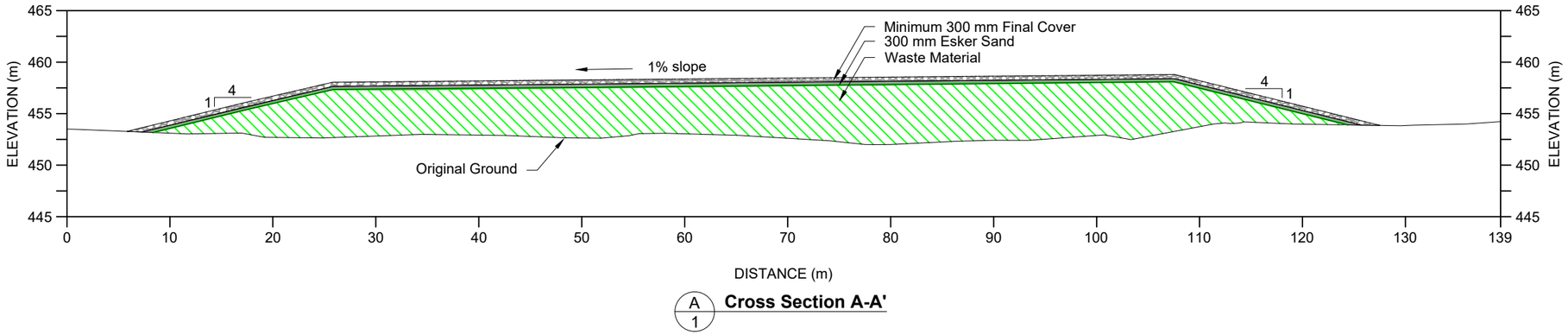
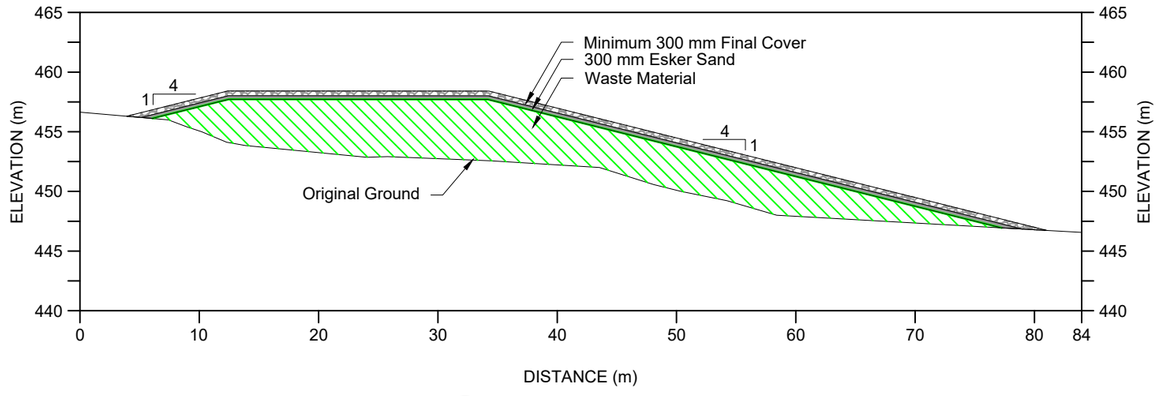


A/1 **Cross Section A-A'**



B/1 **Cross Section B-B'**

LEGEND

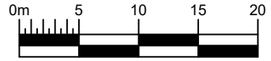
- Waste Material
- Esker Sand
- Final Cover

NOTES

1. All dimensions are in meters unless otherwise noted.
2. Suitability of the cover material to be approved by the on site engineer.
3. Cover material should be restricted to a maximum size of 150 mm (Approximately 50% of thickness).
4. Compaction of the cover material should meet the requirements established by the On-Site Engineer at time of construction.
5. Final elevation and landform may vary based on the final quantity of waste.
6. All construction to be completed in accordance with the technical specifications in the design memorandum (Ulu Gold Project Non-Hazardous Waste Landfill Design. March 2020. Project No. 1CB041.000).

REFERENCE

1. Coordinate System is WGS84 UTM Zone 12N.



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BLUE STAR GOLD CORP.

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Ulu Gold Project

Landfill
Sections

DATE:	APPROVED:	FIGURE:
June 2020	MN	2

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Appendix C: Landfill Design Figures

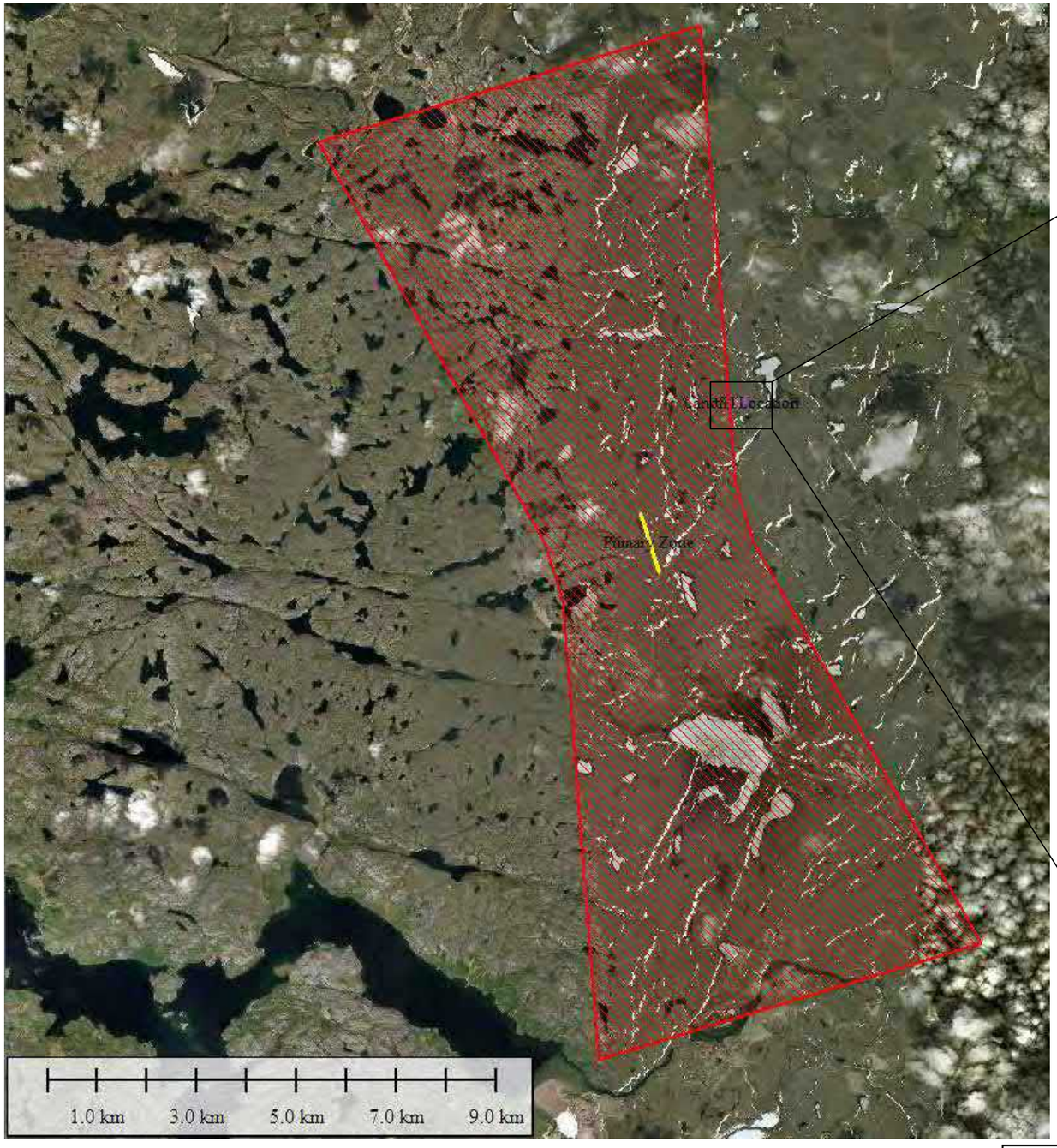

Image source: Global Mapper World Imagery 2009

srk consulting	BLUE STAR GOLD CORP.	Landfill Design	
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		Date: March 2020	Approved: DG	Figure: **1**

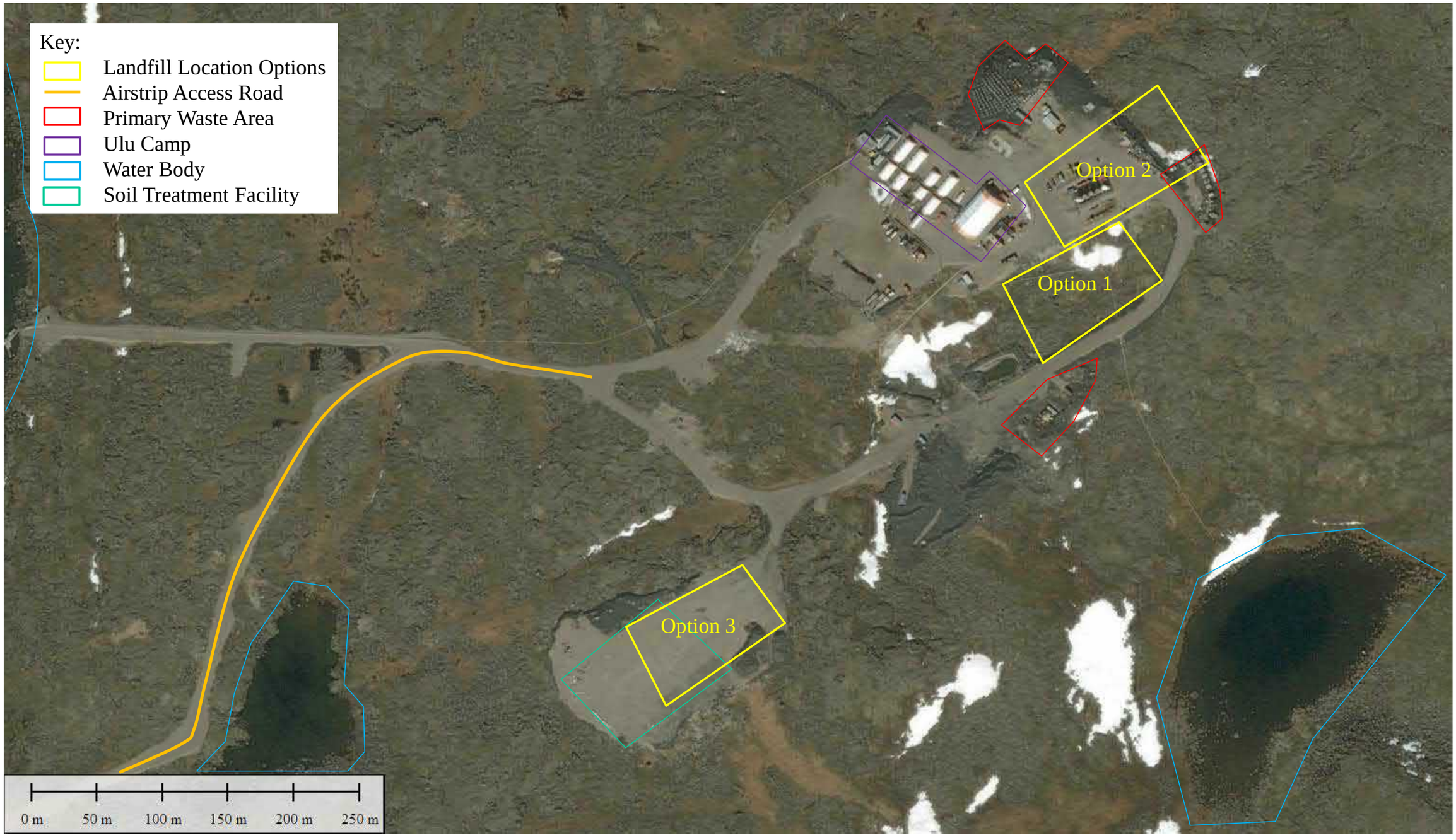

Image source: Global Mapper World Imagery 2009

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		Landfill Location Overview
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Appendix D: Ulu Inventory 2018 September Estimate

Waste Overview

Type of Waste		Composition	Original Treatment Method	September 2018 Revised Volume Estimates (m3)	Notes and Blue Star Treatment Method	July 2019 SRK Volume Estimates (Lidar)
Non-Hazardous	Solid Waste	Non-combustible, non-hazardous building demolition waste.	Remove controlled/hazardous materials as per Solid & Hazardous Waste Management Plan. Cut into manageable pieces and haul to mine portal.	2040	This is volume in sea cans and trailers, does not include volume of materials in camp areas yet to be dismantled. Landfill disposal.	2183
	Bulky Items/Scrap Metal	Salvageable and non-salvageable non-hazardous equipment and tanks. Building support steel.	Option for salvage or recycling if feasible. If not, cut into manageable pieces and haul to mine portal or landfill.	3057	This is volume of sea cans, trailers and shop weatherhaven, does not include camp areas yet to be dismantled. Landfill disposal.	3907
	Solid Waste (Burn)	Paper, paperboard packing, untreated wood waste and natural fiber textiles.	Burned in a controlled manner in a permitted burn pit	0	All available burnable waste was burned. Does not include buildings and equipment not yet dismantled.	0
Hazardous	Hazardous	Batteries, light bulbs.	Prepare for shipment offsite, as detailed in Solid & Hazardous Waste Management Plan.	1	All hazardous material was hauled off site. Estimate of the volume that remains in areas in use, to be removed from site.	1
	Waste Oil	Waste oil from Project and drained from equipment	Prepare for shipment offsite, as detailed in Solid & Hazardous Waste Management Plan.	114	This is a revised estimate of the remaining waste oil barrel volumes (assumed full) at site and does not include waste oil/fuel that is expected to be drained from future decommissioned equipment.	144
Varied	Waste Ore	Ore remaining on Ore Pad	Transport to mine portal	1738	Ore remaining on site.	Unconfirmed
	Hydrocarbon Contaminated Soil	Hydrocarbon Contaminated Soil	Excavate and haul to mine portal	3042	Material found to be suitable for subsoil disposal. **Landfill disposal; non-hazardous**.	2000
					Transport to Soil Treatment Facility.	4000
			Total Hazardous Waste	115	Total Hazardous Waste	145
			Total Non-Hazardous	6835	Total Non-Hazardous	8090
			Total Waste	6950	Total Waste	8235
					Total Non-Hazardous Waste + 30% Contingency	10517

Appendix E: Site Images

srk consulting	BLUE STAR GOLD CORP.	Landfill Design
		Site Images 1/2
Job No: 1CB041.00 Filename: LandfillDesign_Figures.pptx	Ulu Gold Project	Date: Date / Approved: DG / Figure: **1**

srk consulting	BLUE STAR GOLD CORP.	Landfill Design
		Site Images 2/2
Job No: 1CB041.00 Filename: LandfillDesign_Figures.pptx	Ulu Gold Project	Date: Date / Approved: DG / Figure: **2**

Appendix F: Inspection Checklists

Inspection Checklist
Ulu Landfill

Date (MM/DD/YY):		Time:	
Inspector:		Weather:	
Current activities on site:		Seepage to sump?	

Site Conditions		OK (x or N/A)	Needs Attention (x)	Entered into Maintenance Log (Y/N, Initial)	Comment
Access	Access barriers in working order				
	Signage visible				
Spill Kit	On site				
	Lid secured				
	Contents checked				
Wildlife	Observed on site				
	Damage to facility				
Facility Grounds	Evidence of spills				
	Rutting				
	Ice				
	Other				
Landfill	Interim cover stability				
	Waste stability				
	Seepage				
	Ramp stability				
Sump	Contents checked				
	Stability				

**placing an X in a shaded box requires entry into Maintenance Log and follow-up.*

Sampling

Site	Sample ID	Matrix	Field/lab?	CofC #	Field results

Comments/Notes

Office Back-up: Date (DD/MM/YY) Initial _____

Inspection Checklist
Ulu Landfill

Waste Deposited							
Waste Type	Volume (m^3)	Placement (**Man**ually/ **Mech**nically)	Fluids drained	Dust Supress'n	Amending	Sampling	Comment
Sketch of daily work area							

Office Back-up: Date (DD/MM/YY) Initial _____