



# FIRST MINING GOLD

## SPRINGPOLE PROJECT COMMUNITY UPDATE BULLETIN

### SPRINGPOLE CO-DISPOSAL FACILITY OPTIMIZATIONS

JULY 2023



The storage of mine rock and tailings and long-term closure strategy are important to the Project planning. There are a number of different means to manage and store tailings; however, through a comprehensive alternatives assessment, it was determined that the best means to manage mine rock and tailings for the Springpole Project (Project) would be in a single Co-disposal Facility (CDF).

Since releasing the draft Environmental Impact Statement / Environmental Assessment (EIS/EA) for the Project in May 2022, First Mining Gold (FMG) has received feedback and advice from government agencies and technical specialists which has led to FMG has advancing the engineering design for the co-disposal facility proposed at the Springpole Project. Two key optimizations to the concept as presented in the draft EIS/EA have been identified which are summarized below. Technical memorandums that provide further details are also attached.

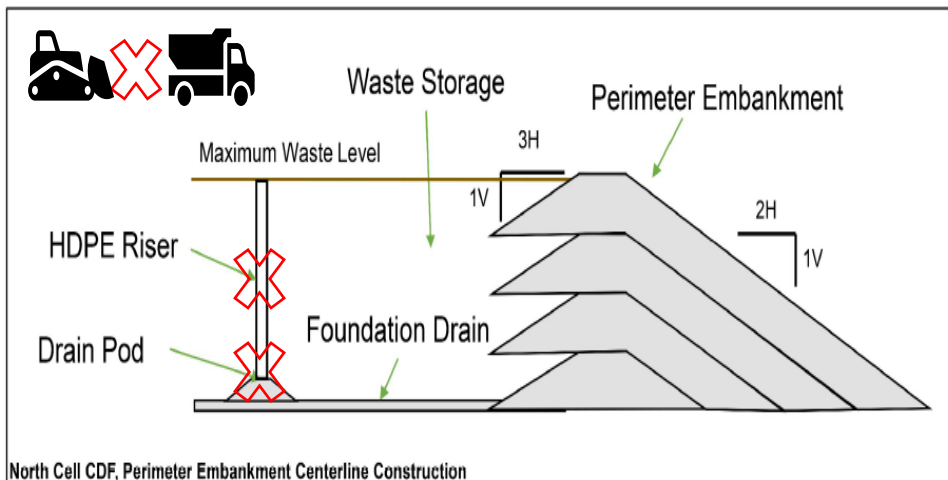
**Tailings Disposal Method.** In the north cell of the CDF, non-acid generating tailings have been optimized from a filtered product to a thickened (pumpable) tailings. This will involve:

- Thickening of the NAG tailings at plant site.
- Hydraulically transporting NAG tailings through a pipeline and co-dispose with mine rock.
- Removes drain pods and foundation drains from the design.
- Removes permanent pumpstations from the design.
- Maintain north cell at higher elevation to direct runoff towards south cell by gravity.
- Unlined internal dike between north and south cell to promote gravity drainage.
- Removes requirement for trucking tailings from plant site to CDF.\

### **Benefits of Optimization**

The evaluation finds that the optimized CDF hydraulic tailings deposition strategy results in several environmental benefits including:

- ✓ A more robust operation.
- ✓ Reduce energy consumption.
- ✓ Simplified water management.
- ✓ Reduced vehicle emissions and greenhouse gas (GHG).
- ✓ Reduced dust emissions.



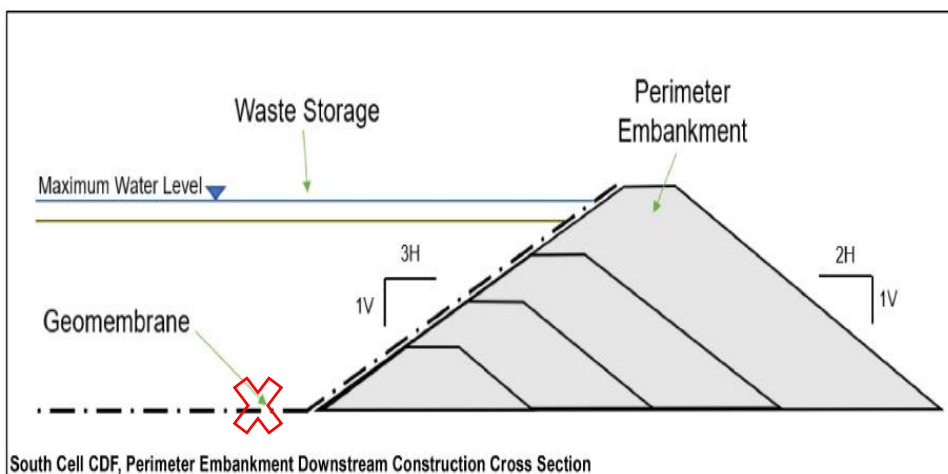
**Foundation Conditions and Liner Requirements.** The conceptual design proposed lining the base of the south cell of the CDF and its perimeter embankments with a low permeability material.

- Recent field investigations have demonstrated that the foundation conditions at the CDF are as good or better than assumed in the draft EIS /EA.
- No clear advantage to lining the base of the CDF south cell with respect to seepage capture efficiency.
- CDF design criteria be optimized by eliminating the base liner from the south cell.
- Embankment liner will be maintained with exception of internal dike.
- Current water management strategy will be maintained.

### **Benefits of Optimization**

The specific environmental benefits by eliminating the liner are associated with:

- ✓ Reduced equipment operation and emissions (including greenhouse gasses (GHG's), nitrogen oxides (NOx) and dust).
- ✓ Reduced aggregate and or low permeable soil extraction (smaller footprint, reduced GHG's, NOx, dust).
- ✓ Reduced on land storage area for stripped material (smaller footprint, reduced GHG's, NOx, dust).





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# **Attachment 1: Technical Decision Memorandum- Co-Disposal Facility (CDF) Tailings Disposal Method**



## MEMO

**To:** Jeff Reinson (First Mining Gold)  
**From:** Ganan Nadarajah, Mark Ruthven (WSP)  
**Reviewed by:** Mickey Davachi, David Bleiker (WSP)  
**cc:** Derrick Moggy (WSP)  
**Subject:** **Technical Decision Memorandum - Co-Disposal Facility (CDF) Tailings Disposal Method**  
**Document No.:** **SP-EM-MEM-0008-A**  
**Project No.:** OMGM2215.200  
**Date:** July 10, 2023

### 1 INTRODUCTION

WSP E&I Canada Limited (WSP) has been providing engineering and environmental assessment support to First Mining Gold (FMG) to advance the Springpole Gold Project (the 'Project'). As part of ongoing support, and in response to comments on the draft Environmental Impact Statement / Environmental Assessment (EIS/EA), WSP evaluated the prefeasibility study (PFS) tailings management strategy (First Mining Gold Corp 2021) to consider technical optimizations to improve the operational success of co-mingling tailings and mine rock. To this end, WSP considered optimization of the non-acid generating (NAG) tailings from a filtered product, trucked to the co-disposal facility (CDF), to a product that could be hydraulically transported and placed in a manner that improves operational and environmental performance of the CDF. The evaluation concluded that there are environmental benefits in modifying the north cell NAG tailings product to a thickened, hydraulically transported and placed tailings from a mechanically (trucked) filtered tailings.

This Technical Decision Memorandum summarizes relevant background information and describes proposed design optimizations to the tailings production and placement in the north cell of the CDF, together with a summary of the resulting environmental and operational benefits.

### 2 PROJECT BACKGROUND

The Project is located in northwestern Ontario, 110 kilometres (km) northeast of the Municipality of Red Lake and 150 km northwest of the Municipality of Sioux Lookout (Figure 1).

Ore will be extracted from the open pit generating approximately 101 million tonnes (Mt) of tailings requiring permanent storage over the life of mine. Two tailings streams will be produced: non-acid generating (NAG) tailings (~80% by mass) and potentially acid generating (PAG) tailings (~20% by mass).

The Project will also produce approximately 292 Mt of mine rock (consisting of both NAG and PAG rock) that will either be used in construction or require permanent storage. The mine rock requiring permanent storage will be actively co-mingled with the NAG tailings in the north cell of the CDF.



### **3 CO-DISPOSAL FACILITY - DRAFT ENVIRONMENTAL IMPACT STATEMENT / ENVIRONMENTAL ASSESSMENT**

The layout of the CDF, as presented in the draft EIS/EA (Wood 2022) is shown in Figure 2. The CDF was proposed as a two-cell facility consisting of a north cell and a south cell. The north cell was proposed to receive filtered NAG tailings co-disposed and co-managed with mine rock. The NAG tailings were to be filtered at the processing plant, and conveyed by trucks to the CDF where they would be co-mingled with the mine rock. The PAG tailings were proposed to be hydraulically deposited subaqueously in the south cell to mitigate acid rock drainage (ARD) potential.

The CDF design includes perimeter embankments constructed primarily from the NAG mine rock. The north cell embankments will be raised by centreline construction while the south cell embankments are raised by the downstream construction method. The base of the south cell and its perimeter embankments were proposed to be lined with a low permeability material (such as local soils or a geosynthetic/membrane materials) for minimizing seepage losses and to maintain saturation of the PAG tailings. Since the preparation of the draft EIS/EA, a separate technical evaluation has determined that although the embankment liners will be retained, a foundation liner in the south cell is not required. This determination was based on additional data and engineering assessments since the draft EIS/EA, and the optimal existing foundation conditions at the CDF location and predicted seepage collection system efficiencies.

### **4 TAILINGS DEPOSITION EVALUATION**

An evaluation to review the concept presented in the PFS and draft EIS/EA as completed to assess the benefits of optimizing the PFS tailings management strategy. The evaluation considered ways of improving co-mingling within the north cell via a thickened and hydraulically delivered tailings. The following optimizations were assessed in the evaluation based on the draft EIS/EA design:

- Rather than hauling filtered NAG tailings from the filter plant to the CDF by mine fleet, thickened NAG tailings are to be hydraulically transported and deposited from the perimeter of the north cell of the CDF. NAG tailings and mine rock will be actively co-mingled within the CDF north cell.
- The tailings level in the north cell will be maintained at a higher elevation than the south cell such that water flows via gravity to the south cell thus ensuring a water cover is maintained over the PAG tails throughout the Life of Mine (LOM).

The separator berm between the north and south cells will be permeable allowing water from the north cell to drain to the south cell. Water will not be stored in the north cell. With the proposed optimization to the tailings management scheme, the overall volume of the NAG tailings increases by approximately 12 million cubic metres (Mm<sup>3</sup>) with no difference in the volume of PAG tailings (Table 1). The volume differential represents a small crest elevation increase of less than 10% in both the NAG and PAG cells compared to a filtered product.

**Table 1: Filtered vs. Hydraulic Tailings Volume over Life of Mine**

NAG Hydraulic (Thickened) Tailings		NAG Filtered Tailings (previously proposed method)		PAG Slurry Tailings	
Tonnage (Mt)	Volume (Mm <sup>3</sup> )	Tonnage (Mt)	Volume (Mm <sup>3</sup> )	Tonnage (Mt)	Volume (Mm <sup>3</sup> )
80.9	62.3	80.9	50.6	20.2	15.6

Note:

1. WSP's estimation based on production tonnage and assumed dry densities from the current mine plan (Ver.20).

#### 4.1 SURFACE WATER MANAGEMENT

The filtered NAG tailings presented in the draft EIS/EA relied on multiple pumpstations to remove surface runoff. These pumpstations would require maintenance access, electricity and pipelines. These services would need to be raised to accommodate the rising tailings surface. Thickened tailings relies on gravity drainage to the south cell resulting in a simpler, more robust system with less air emission from machinery. The south cell PAG water cover will act as a final clarification pond to settle solids prior to the reclaiming water from the south cell. In the draft EIS/EA, the PAG tailings in the south cell had a water cover and are subaqueously deposited. The volume of this water cover would be unchanged for the hydraulic tailings option in the south cell. While the average volume of water being pumped from the CDF would increase, the water treatment plant capacity need remains the same and the pump requirements to manage the extreme weather events would not be affected.

As the tailings would also be saturated, seepage would still be captured by the perimeter collection system given the foundation conditions (see Attachment 1). In the longer term (post operation) the method of deposition will not affect the degree of saturation or seepage rate.

#### 4.2 CO-DISPOSAL, CO-PLACEMENT AND CO-MINGLING

Mine rock will be actively co-placed with the NAG tailings in the north cell. Filtered tailings deposition would require access roads for the pumpstations and to transport the tailings especially during wet or winter conditions. In addition, filtered tailings requires mechanically co-mingling with the mine rock using heavy equipment which would lead to varying degrees of efficiency and mixing. This style of mixing could be operationally challenging, as noted by the review comments on the draft EIS/EA. By using hydraulically delivered thickened tailings and actively mixing the tailings in and around the placed mine rock, the ultimate co-mingled product will be more homogeneous and result in an overall improved operational efficiency at the CDF.

### 5 ENVIRONMENTAL AND ECONOMIC BENEFITS

The WSP evaluation finds that the optimized CDF hydraulic tailings deposition strategy results in several environmental benefits including:

- A more robust operation;
- Reduce energy consumption;
- Simplified water management;
- Reduced vehicle emissions and greenhouse gas (GHG); and
- Reduced dust emissions.



Filtered tailings have a much greater energy consumption than thickened tailings and require vehicle and equipment emissions for transport and placement. As a result, GHG and other air emission reductions would be realized from:

- Reducing energy consumption associated with power generation;
- Eliminating the need for trucking filtered tailings to the north cell;
- Not requiring machinery to mechanically co-mingle the tailings with the mine rock;
- Reducing emission associated with construction of the filter plant for items like the production of cement and transport of steel; and
- Reducing the use of consumables for the filter plant such as filter fabric.

Eliminating the need to haul the filtered tailings will greatly reduce other air emissions such as nitrogen oxides (NO<sub>x</sub>) and dust. The reductions in GHG's and other emissions with the proposed hydraulic tailings optimization are provided in Table 2. The reductions in GHG's, dust and NO<sub>x</sub> would be effective from the construction phase to the end of the life of the mine, resulting in considerable environmental benefit over the filtered tailings option.

**Table 2: Filtered and Hydraulic Tailings Air Emission Comparison**

Tailings Method	Estimated Tailings Tonnage (t)	Annual Energy Consumption (kWh)	Tailings Haul Trips over LOM	GHG Emission (t CO <sub>2</sub> e) Indirect Energy Scope 1	GHG Emission (t CO <sub>2</sub> e) Direct Scope 1 Mobile – Haulage	GHG Emission (t CO <sub>2</sub> e) Scopes 1 and 2	Dust Emissions (tonnes) – Tailings Haulage	NO <sub>x</sub> Emissions (tonnes) – Tailings Haulage
Filtered	80,900,000	21,412,000	336,667	6,424	48,267	54,690	806.8	251.5
Thickened	80,900,000	13,170,400	-	3,951	-	3,951	-	-

Notes:

1. Energy consumption rate includes tailings pump energy consumption (source: Carneiro, A & Fourie, AB 2018, 'A conceptual cost comparison of alternative tailings disposal strategies in Western Australia', in RJ Jewell & AB Fourie (eds), Paste 2018: Proceedings of the 21st International Seminar on Paste and Thickened Tailings, Australian Centre for Geomechanics, Perth, pp. 439-454, [https://doi.org/10.36487/ACG\\_rep/1805\\_36\\_Carneiro](https://doi.org/10.36487/ACG_rep/1805_36_Carneiro)).
2. Tailings haul trips from Wood 2022, Air Quality Assessment Springpole Gold Project First Mining Gold Corp.
3. GHG emission rates from Wood 2022, GHG Assessment Springpole Gold Project First Mining Gold Corp.

## 6 SUMMARY AND RECOMMENDATIONS

This memorandum presents a comparison of a filtered NAG tailings versus a thickened hydraulic tailings deposition option for the north cell of the CDF. Although the thickened hydraulically placed tailings option results in a minor increase in dam heights (less than 10%), there are clear environmental and long-term benefits to be derived by the optimization.

Table 3 presents a relative comparison of filtered versus hydraulic NAG tailings for common items of consideration.

**Table 3: Comparison of Hydraulic vs Filtered NAG Tailings**

Item	NAG Filtered Tailings (previously proposed method)	NAG Hydraulic (Thickened) Tailings
Air Quality and Greenhouse Gas Emissions	Larger Higher energy consumption and increases need for mine fleet and machinery	Lower Reduced energy, reduced mine fleet and reduce or eliminate co-mingle equipment
Dust and NOx emissions	Larger Increased truck volumes on haul roads, and fugitive dust from mechanical co-mingling	Lower Reduced mine fleet on haul roads and reduce or eliminate mechanical co-mingling
Embankments	Smaller	Minor increase of <10%
Operational Robustness	Lower Filter plants have down times and placement in poor weather conditions can be challenging. Requires pumpstations and access within the north cell	Higher Hydraulic tailings is widely used in the industry with consistent operation under all weather conditions. Gravity surface water drainage from the north cell simplifies water management
Dam Safety	Same design criteria.	Same design criteria
Impounded Water (south cell)	No change No water impoundment in north cell Minimum water storage determined by PAG tailings subaqueous deposition requirements	No change No water impoundment in north cell Minimum water storage determined by PAG tailings subaqueous deposition requirements

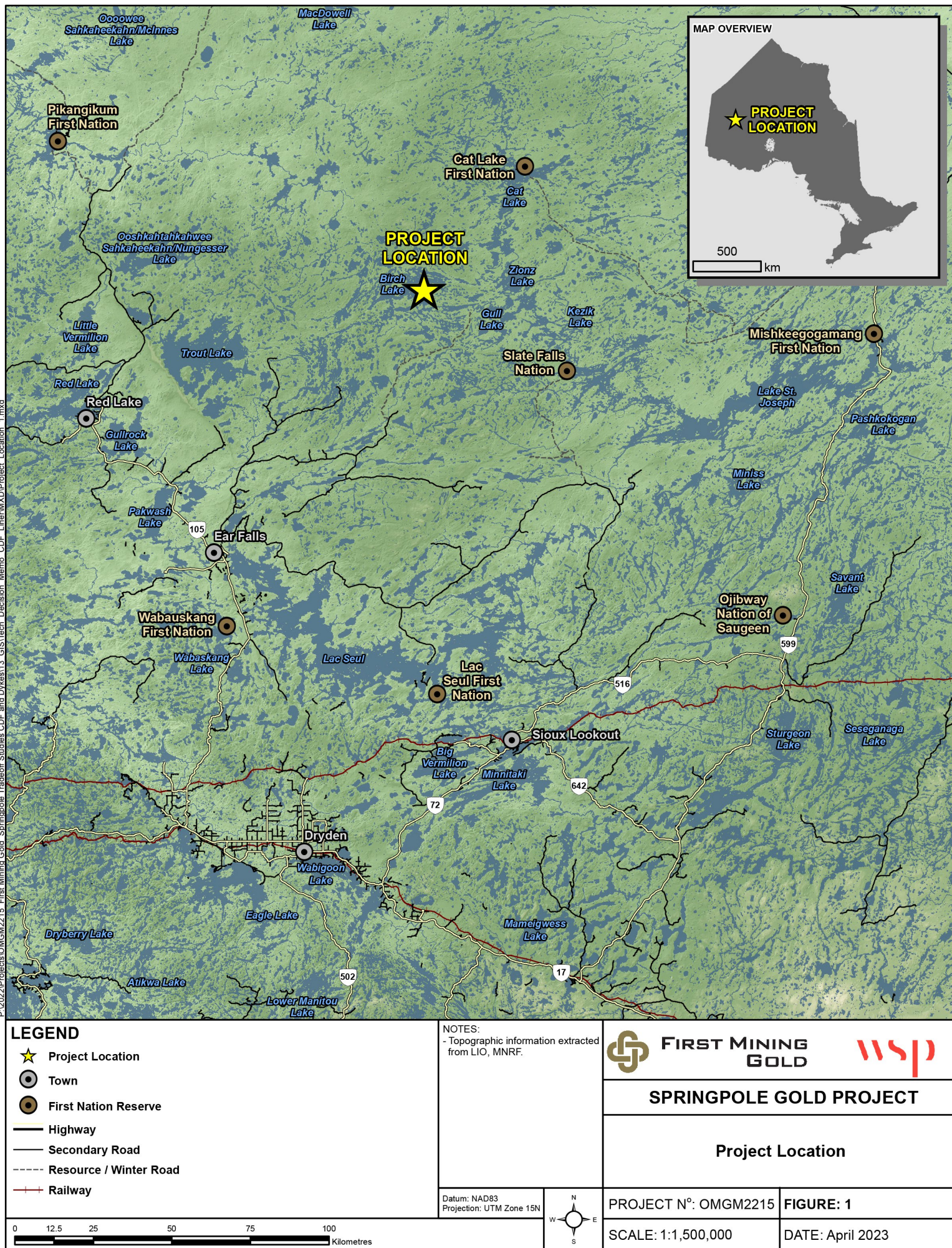
Given the clear environmental benefits, consistent dam safety conditions, with only a minor increase in ultimate dam heights, WSP recommends the CDF north cell NAG tailings deposition method be optimized to include a thickened hydraulically placed NAG tailings.

## 7 REFERENCES

- Carneiro, A & Fourie, AB 2018, 'A conceptual cost comparison of alternative tailings disposal strategies in Western Australia', in RJ Jewell & AB Fourie (eds), Paste 2018: Proceedings of the 21st International Seminar on Paste and Thickened Tailings, Australian Centre for Geomechanics, Perth, pp. 439-454, [https://doi.org/10.36487/ACG\\_rep/1805\\_36\\_Carneiro](https://doi.org/10.36487/ACG_rep/1805_36_Carneiro)
- First Mining Gold Corp, 2021. NI 43-101 Technical Report and Pre-Feasibility Study on the Springpole Gold Project, Ontario, Canada, January 20, 2021.
- Wood, 2022. Springpole Gold Project: Environmental Impact Statement / Environmental Assessment Report- DRAFT.



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## Attachment 2: Technical Decision Memorandum - Co-Disposal Facility (CDF) Tailings Liner Requirement



## MEMO

**TO:** Jeff Reinson (First Mining Gold)  
**FROM:** Ganan Nadarajah, Mark Ruthven (WSP)  
**REVIEWED BY:** Mickey Davachi, David Bleiker (WSP)  
**CC:** Derrick Moggy (WSP)  
**SUBJECT:** **Technical Decision Memorandum - Co-Disposal Facility (CDF) Liner Requirement**  
**DOCUMENT NO.:** **SP-EM-TDM-007-A**  
**PROJECT NO.:** OMGM2215.200  
**DATE:** July 12, 2023

### 1 INTRODUCTION

WSP E&I Canada Limited (WSP) has been providing engineering and environmental assessment support to First Mining Gold (FMG) to advance the Springpole Gold Project (the 'Project'). As part of ongoing support, WSP evaluated seepage barrier requirements for the south cell of the Co-Disposal Facility (CDF) where Potentially Acid Generating (PAG) tailings will be stored. This Technical Decision Memorandum summarizes relevant background information and describes a proposed design optimization to the CDF south cell liner requirements together with a summary of the resulting environmental benefits. The findings of the evaluation determined that eliminating the south cell base liner results in negligible differences in the seepage collection system efficiency while providing meaningful environmental benefits through reduced equipment and material demands.

### 2 PROJECT BACKGROUND

The Project is located in northwestern Ontario, 110 kilometres (km) northeast of the Municipality of Red Lake and 150 km northwest of the Municipality of Sioux Lookout (Figure 1).

Ore will be extracted from the open pit generating approximately 101 million tonnes (Mt) of tailings requiring permanent storage over the life of mine. Two tailings streams will be produced: non-acid generating (NAG) tailings (80% by mass) and potentially acid generating (PAG) tailings (20% by mass).

The Project will also produce approximately 292 Mt of mine rock (consisting of both NAG and PAG rock) that will either be used in construction or require permanent storage. The mine rock requiring permanent storage will be co-mingled with the NAG tailings in the north cell of the CDF.

### 3 CO-DISPOSAL FACILITY - DRAFT ENVIRONMENTAL IMPACT STATEMENT / ENVIRONMENTAL ASSESSMENT

The layout of the CDF, as presented in the draft Environmental Impact Statement / Environmental Assessment (EIS/EA) (Wood 2022), is shown in Figure 2. The CDF is proposed as a two-cell facility consisting of north cell and south cell. The conceptual design in the draft EIS/EA included filtered NAG tailings co-disposed and co-managed with mine rock in the north cell. A separate evaluation has resulted



in optimizing the NAG tailings management to include hydraulically placing thickened tailings in the north cell in place of the filtered tailings (WSP 2023). Consistent with the draft EIS/EA, the PAG tailings are proposed to be hydraulically deposited subaqueously in the south cell to mitigate acid rock drainage (ARD) potential.

The draft EIS/EA CDF design included perimeter embankments constructed primarily from NAG mine rock sourced from onsite quarries and the open pit. The north cell embankments are centreline construction while the south cell embankments are raised by the downstream construction method. The conceptual design in the draft EIS/EA proposed lining the base of the south cell and its perimeter embankments with a low permeability material (such as local soils or a geosynthetic material) in order to minimize seepage losses to the receivers and to maintain saturation of the PAG tailings.

#### **4 SEEPAGE BARRIER EVALUATION**

An evaluation was performed by WSP to assess the relative performance of different seepage barrier options on the CDF base and CDF embankments with respect to seepage collection efficiencies and environmental benefits. The evaluation involved performing a 2 dimensional (2D) seepage analyses (utilizing the software Seep/W) of a representative critical section of the CDF and considered various seepage barrier options (Table 1). In all cases it was assumed the perimeter embankments would be lined while the base of the cell would be either lined with a seepage barrier or unlined. The material properties for the seepage analyses were adopted based on the findings of the site investigations by Knight Piesold (2022), WSP (2023), and WSP's experience with similar material types, as well as literature references.

The seepage analyses were performed assuming a lower bedrock hydraulic conductivity of  $10^{-9}$  m/s, and a range of upper bedrock hydraulic conductivities of  $10^{-8}$  and  $10^{-7}$  m/sec. The results in Table 1 reflect an upper bedrock hydraulic conductivity of  $1 \times 10^{-8}$  m/s and a lower bedrock hydraulic conductivity of  $10^{-9}$  m/s. A tailings permeability of  $1 \times 10^{-7}$  m/s and anisotropy (ratio of horizontal to vertical hydraulic conductivities  $K_h/K_v$ ) of 10 were used. All other materials were considered isotropic, (i.e.,  $K_h = K_v$ ). Hydraulic conductivities of seepage barriers (geomembrane, geosynthetic clay liner (GCL)) were derived from manufacturers' material specifications.

The results of the 2D seepage analyses for the south cell are summarized in Table 1 below. The analysis shows that a low permeability seepage barrier (GCL or geomembrane) over the base of south cell results in negligible differences in seepage collection efficiencies compared to an unlined base alternative such that a majority of the seepage from south cell will be captured in the perimeter seepage collection system with or without a base liner. This is due to the low permeability of the bedrock within the CDF footprint. Limited areas of bedrock zones/areas with higher hydraulic conductivity (greater than  $1 \times 10^{-7}$  m/s) may require engineering controls (such as bedrock grouting, seepage interception wells, etc.) which will be developed during the detailed design phase.

In addition to the evaluation using the 2D Seep/W software, the optimized case of no seepage barrier on the base of the south cell was also modeled using a preliminary 3D Feflow Model to confirm the seepage collection efficiency determined in the 2D evaluation. The results of the 3D model shown in Table 2 closely agree with and corroborate the findings of the 2D evaluation of collection efficiencies.

**Table 1: Seepage Analyses Evaluation of the South Cell**

<b>2D Seep/W Model (South Cell) – Evaluation of Base Liner Alternatives</b> <b>Upper Bedrock Ksat = <math>10^{-8}</math> m/s, Lower Bedrock Ksat = <math>10^{-9}</math> m/s</b>		
<b>Alternatives Assessed</b>		<b>Ditch Efficiency %</b>
<b>CDF Embankment Seepage Barrier</b>	<b>CDF Base Seepage Barrier</b>	
Geosynthetic Clay Liner	None	95
Geomembrane	None	94
Geosynthetic Clay Liner	Geosynthetic Clay Liner	91
Geomembrane	Geomembrane	93

**Table 2: Seepage Analyses - Preliminary Groundwater Modeling of the South Cell**

<b>Preliminary Groundwater (3D Feflow) Model (South Cell)</b>					
<b>CDF Embankment Seepage Barrier</b>	<b>CDF Base Seepage Barrier</b>	<b>Seepage from Facility (<math>m^3/d/m</math>)</b>	<b>Seepage Collected by the Perimeter Ditch (<math>m^3/d/m</math>)</b>	<b>Seepage Passing the Perimeter Ditch (<math>m^3/d/m</math>)</b>	<b>Ditch Efficiency %</b>
Impermeable	None	0.13	0.12	0.012	92

## 5 ENVIRONMENTAL BENEFITS

There are environmental benefits from not lining the base of the CDF south cell. By eliminating the placement of a liner, the following construction activities and or material needs will be avoided:

- Stripping of tree trunks and roots that may puncture the liner.
- Dressing steep slopes and outcrops to be suitable for a base liner.
- Manufacture, transport and placement of a liner to cover approximately 220,000  $m^2$  of base area.
- Extraction, transport and placement of a granular cushion under the liner. The cushion would likely be sand or sand and gravel material.

If a soil liner were used instead of a geosynthetic liner, the granular cushion would not be required. The soil liner would require the following:

- Stripping of tree trunks and roots that may puncture the liner.
- Dressing steep slopes and outcrops to be suitable for a base soil liner.
- Extraction, transportation and placement of a 1.0 to 1.5 m thick low permeability clayey soil (likely 220,000 to 330,000  $m^3$  at  $\geq 40\%$  fines (smaller than 80 micron) content) with a water content 2 to 4% of optimum moisture content.
- Significant and strict scheduling requirements such as meteorologic controls for construction and means of covering the soil liner immediately to prevent desiccation.

The specific environmental benefits by eliminating the liner are associated with:

- Reduced equipment operation and emissions (including greenhouse gasses (GHG's), nitrogen oxides (NOx) and dust).



- Reduced aggregate and or low permeable soil extraction (smaller footprint, reduced GHG's, NOx, dust).
- Reduced on land storage area for stripped material (smaller footprint, reduced GHG's, NOx, dust).

## **6 CONCLUSION AND RECOMMENDATION**

Based on information and discussions provided above, there is no clear advantage to lining the base of the CDF south cell with respect to seepage capture efficiency; while elimination the equipment and material demands to install a liner does provide meaningful environmental benefits. The recent field investigations have demonstrated that the foundation conditions at the CDF are as good or better than assumed in the Draft EIS /EA. As such, it is recommended to the CDF design criteria be optimized by eliminating the base liner from the south cell.

## **7 REFERENCES**

Knight Piesold, 2022. Springpole Project 2022 WMF Factual Site Investigation Report Rev A.

WSP, 2023. Technical Decision Memorandum - Co-Disposal Facility (CDF) Tailings Disposal Method

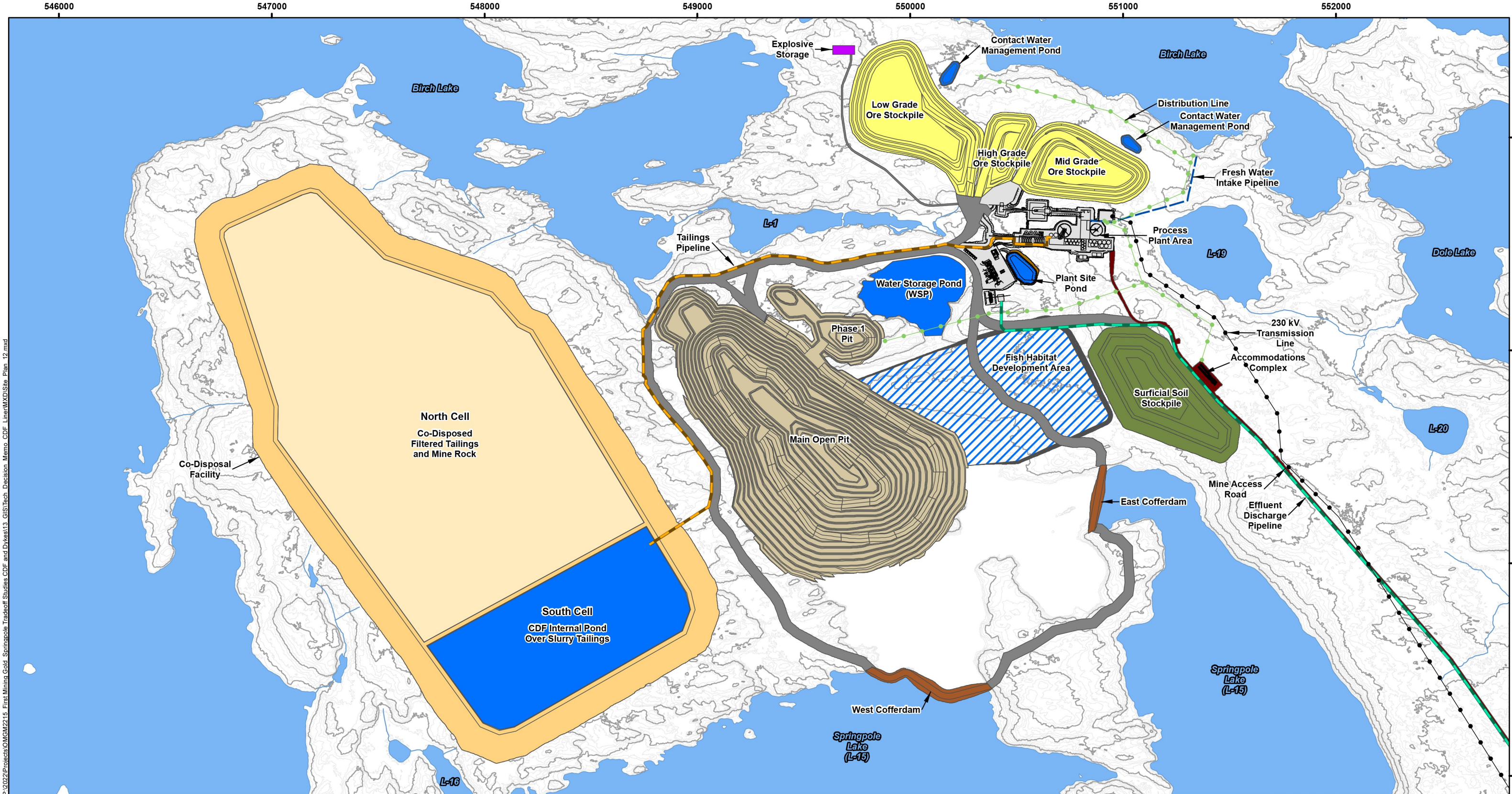
WSP, 2023. 2022 Supplemental Geotechnical Investigation Report (Draft).

Wood, 2022a. Springpole Gold Project: Environmental Impact Statement / Environmental Assessment Report- DRAFT.









**LEGEND**

Watercourse

Waterbody

Major Contours (5 m interval)

Minor Contours (1 m interval)

**Proposed Mine Features**

Open Pit

Ore Stockpile

Surficial Soil Stockpile

Co-Disposal Facility

Co-Disposed Filtered Tailings and Mine Rock

Process Plant Area

Cofferdam

Pond

Mine Access Road

Haul Road

Explosives Storage

230 kV Transmission Line

Distribution Line

Fresh Water Intake Pipeline

Effluent Discharge Pipeline

Tailings Pipeline

Fish Habitat Development Area

**NOTES:**

- Contours extracted from 2020 LiDAR survey.
- Proposed site plan provided by Ausenco, drawing number 105877-0000-G-001, Rev C. 29 July 2021.
- Co-Disposal Facility provided by Knight Piésold Ltd., 27 September 2021.

Datum: NAD83  
Projection: UTM Zone 15N

N

E

S

W

FIRST MINING GOLD

**SPRINGPOLE GOLD PROJECT**

**Site Plan**

PROJECT N<sup>o</sup>: OMGM2215

FIGURE: 2

SCALE: 1:17,000

DATE: April 2023

0

0.5

1

2

3

4

5

Kilometres