

# CornishMetals

## CORNISH METALS PROVIDES SOUTH CROFTY TIN PROJECT UPDATE

**Vancouver, March 5, 2023**

**Cornish Metals Inc. (TSX-V/AIM: CUSN)** (“Cornish Metals” or the “Company”) is pleased to provide an update on progress at the South Crofty Tin Project (“South Crofty” or the “Project”), located in Cornwall, SW England.

### **Background**

- Tin is a Critical Mineral as defined by the UK, USA, and Canadian governments, but there is no primary tin production in Europe or North America. Cornwall is one of the world’s major past producing tin provinces;
- The Company is targeting production in 2026, coinciding with projected deficits in tin supply;
- Responsible sourcing of critical minerals and security of supply are key factors in the energy transition and technology growth;
- South Crofty is an historic, high-grade, underground tin mine that operated since the sixteenth century until its closure in 1998, and benefits from the presence of multiple shafts that can be used for future operations;
- It is the 4<sup>th</sup> highest grade tin resource globally, with a Mineral Resource grade of 1.6% tin (equivalent to 4.4% copper at current metals prices). The other three tin projects; Bisie in DRC, San Rafael in Peru, and Renison Bell in Tasmania (similar grade to South Crofty), are all producing underground tin mines;
- The Project possesses Underground Planning Permission (mine permit) valid to 2071, full Surface Planning Permission to construct a mine water treatment plant, new processing facilities, all necessary site infrastructure, and an Environmental Permit to dewater the mine;
- The Company completed a £40.5 million funding in May 2022, the use of proceeds for which are to construct the mine water treatment plant, dewater the mine, and complete a Feasibility Study;
- South Crofty benefits from strong local community and regional and national government support. ([Photo 1](#)). The Project could generate 250 – 300 direct jobs.

This update reports on all these aspects of the South Crofty Tin Project.

**Richard Williams, CEO of Cornish Metals**, stated; “We have made very good progress over the last eight months, building an experienced and highly motivated team at South Crofty. The Company remains on track to commission the mine water treatment plant in June this year, with the objective of commencing full scale dewatering operations in July. Construction costs for the mine water treatment plant remain in line with previous guidance of £6.5m to £7.0m. In addition to the mine dewatering programme, ongoing metallurgical, feasibility study and exploration work will provide news flow for Cornish Metals through 2023.”

### **Mine Water Treatment Plant**

The mine water treatment plant (“MWTP”) is designed to treat 25,000m<sup>3</sup> of mine water per day. At this rate, mine dewatering is estimated to take 18 months, through to the end of 2024. [Figure 1](#) shows a 3D schematic view of the MWTP. Treated mine water will be discharged into the Red River via the Dolcoath Deep Adit. Since South Crofty closed in 1998, untreated mine water has directly entered the river, so dewatering the mine and treating the water will have a positive effect on the Red River water quality.

The concrete foundation pad for the MWTP was completed in November 2022, and the first reaction tanks were installed in December 2022. The plant comprises nine reaction tanks (all now installed) for increasing and decreasing the pH to precipitate the various metals in solution, and six inclined plate settlers (lamella clarifiers) to remove the precipitated solids, four of which are currently installed with completion expected in early March. ([Photo 2](#), [photo 3](#) and [photo 4](#)).

Installation of the structural steel supports and walkways, surrounding and providing access to the MWTP, is scheduled to commence this week, with completion by the end of March. The pipelines carrying water from the submersible pumps in New Cook’s Kitchen shaft to the MWTP are substantially complete and modifications have been made to the headframe to allow the installation of the suspended pumps and pipes.

The mechanical, electrical and instrumentation equipment will commence installation in April along with reagent storage, make-up and dosing equipment, which are being supplied as complete packages from specialist manufacturers. Wet commissioning is expected to commence at the end of May with completion due in June 2023.

### **Metallurgical Drill Programme**

As part of the ongoing feasibility study, the Company has retained the services of Mr. Mike Hallewell, the former Mill Superintendent and Chief Metallurgist at South Crofty and Wheal Jane, to assist in the collection of a representative metallurgical sample and advise on the following studies:

- Metallurgical flowsheet design and optimisation work being conducted by Wardell Armstrong International;
- Paste backfill studies being conducted by Paterson & Cooke; and
- XRT ore sorting testwork being undertaken by TOMRA.

Five main lodes / mineralised areas within the Mineral Resource were selected for metallurgical work, namely the North Pool Zone, No. 4 Lode, No. 8 Lode, Roskear B/D Lode, and Dolcoath North Lode ([see Figure 2](#)), which contain the majority of the mineralised material anticipated to be processed during the first six years of operation. The Company has three drill rigs operating currently, two drilling the North Pool Zone from surface, and one underground drill rig targeting Dolcoath North from the Tuckingmill Decline. ([Photo 5](#))

All mineralised sample material required from No. 4 Lode, No. 8 Lode, and Roskear B/D Lode has been collected and initial metallurgical studies have commenced. North Pool Zone drilling and sampling is expected to be completed by the end of March and all of the requisite metallurgical studies, except for Dolcoath North, are expected to be completed by the end of 2023 for inclusion in the feasibility study.

The metallurgical drill holes have encountered, highly encouraging tin mineralisation down dip of existing workings ([Photo 6](#)). Representative samples from each mineralized zone have been collected for assay, results of which will be released when received.

## **Feasibility Study**

In addition to the metallurgical work, the feasibility study continues to advance with the following activities:

- Fairport Engineering has been engaged to design the process plant and estimate capital and operating costs. The first phase is a concept study based on the design of the plant that operated up to 1998, with a second full-feasibility level phase later in the year as the metallurgical testwork program yields results;
- A geotechnical site investigation for the process plant has been completed by AGS Ground Solutions;
- MiningOne has been engaged to conduct numerical modelling and ground control studies for underground mining method and stope designs; and
- Entec has been engaged to provide a study on the refurbishment, re-equipping and operation of New Cooks Kitchen shaft, the principal shaft for future operations.

## **Exploration**

Following the recently announced discovery of high-grade tin mineralisation in the Wide Formation (see news release dated [January 10, 2023](#)), the geology team is planning a follow up drill programme to better define the geometry (i.e. strike and dip) of the Wide Formation. This programme is expected to commence in June 2023, as soon as the metallurgical drill programme is completed.

## **ABOUT CORNISH METALS**

Cornish Metals is a dual-listed company (AIM and TSX-V : CUSN) focused on advancing the South Crofty high-grade, underground tin project through to delivery of a Feasibility Study, as well as exploring its additional mineral rights, all located in Cornwall, South West England. The former producing South Crofty tin mine is located beneath the towns of Pool and Camborne, and closed in 1998 following over 400 years of continuous production. Since acquiring the project in 2016, Cornish Metals has completed and published maiden NI 43-101 Mineral Resources for South Crofty using the vast archive of historical production data and more recent drilling completed between 2007 and 2013. Additionally, Cornish Metals has undertaken extensive pilot-scale water treatment trials and successfully applied for and received the necessary environmental permits to abstract, treat and discharge mine water in order to dewater the mine. Planning permissions for the operation of the mine and re-development of the surface facilities have been secured and construction of the water treatment plant is currently well underway. The dewatering pumps, variable speed drives and new high-voltage power supply have been delivered to site and dewatering of the mine is expected to commence in June / July 2023.

An updated Mineral Resource was completed in June 2021 as summarised below:

South Crofty Summary (JORC 2012) Mineral Resource Estimate					
Area	Classification	Mass ('000 tonnes)	Grade	Contained Tin / Tin Equivalent ('000 tonnes)	Increase in contained Tin / Tin equivalent from 2016 MRE
Lower Mine	Indicated	2,084	1.59% Sn	33	10.2%
	Inferred	1,937	1.67% Sn	32	129.8%
Upper Mine	Indicated	277	1.01% SnEq	3	9.5%
	Inferred	493	0.93% SnEq	5	8.0%

The Mineral Resource Estimate for South Crofty (see news release dated [June 9, 2021](#)), is available in a report titled the "[South Crofty Tin Project Mineral Resource Update](#)", dated June 7, 2021, authored by Mr. N. Szebor, CGeol (London), EuroGeol, FGS, of AMC Consultants (UK) Ltd, can be accessed on the Company's SEDAR page.

The technical information in this news release has been compiled by Mr. Owen Mihalop who has reviewed and takes responsibility for the data and geological interpretation. Mr. Owen Mihalop (MCSM, BSc (Hons), MSc, FGS, MIMMM, CEng) is Chief Operating Officer for Cornish Metals Inc. and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined under the JORC Code (2012) and as a Qualified Person under NI 43-101. Mr. Mihalop consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

For additional information please contact:

In North America:

Irene Dorsman at (604) 200 6664 or by e-mail at [irene@cornishmetals.com](mailto:irene@cornishmetals.com)

SP Angel Corporate Finance LLP  
(Nominated Adviser & Joint  
Broker)

Tel: +44 203 470 0470

Richard Morrison  
Charlie Bouverat  
Grant Barker

Hannam & Partners  
(Joint Broker)

Tel: +44 207 907 8500

Matthew Hasson  
Andrew Chubb  
Ernest Bell

BlytheRay  
(Financial PR/IR-London)

Tel: +44 207 138 3204

Tim Blythe [tim.blythe@blytheray.com](mailto:tim.blythe@blytheray.com)  
Megan Ray [megan.ray@blytheray.com](mailto:megan.ray@blytheray.com)

## **ON BEHALF OF THE BOARD OF DIRECTORS**

*“Richard D. Williams”*

Richard D. Williams, P.Geol

### **Market Abuse Regulation (MAR) Disclosure**

*The information contained within this announcement is deemed by the Company to constitute inside information pursuant to Article 7 of EU Regulation 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 as amended.*

*Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*

### **Caution regarding forward looking statements**

*This news release contains "forward-looking statements". Forward-looking statements, while based on management's best estimates and assumptions at the time such statements are made, are subject to risks and uncertainties that may cause actual results to be materially different from those expressed or implied by such forward-looking statements, including but not limited to: risks related to receipt of regulatory approvals, risks related to general economic and market conditions; risks related to the COVID-19 global pandemic and any variants of COVID-19 which may arise; risks related to the availability of financing; the timing and content of upcoming work programmes; actual results of proposed exploration activities; possible variations in Mineral Resources or grade; outcome of the current Feasibility Study; projected dates to commence mining operations; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes, title disputes, claims and limitations on insurance coverage and other risks of the mining industry; changes in national and local government regulation of mining operations, tax rules and regulations.*

*Although Cornish Metals has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Cornish Metals undertakes no obligation or responsibility to update forward-looking statements, except as required by law.*



Photo 1: UK Minister of State at the Department for Business and Trade Nusrat Ghani visiting Cornish Metals' booth at the PDAC, March 5, 2023.

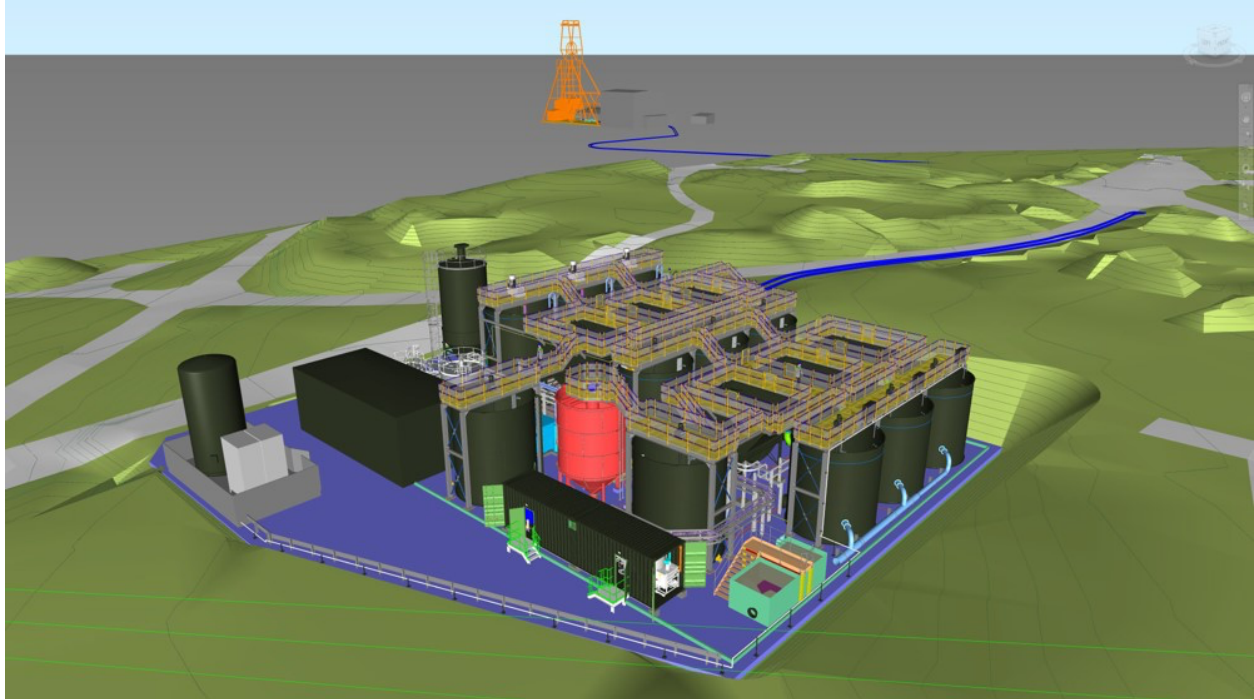


Figure 1. 3D schematic of the Mine Water Treatment Plant



Photo 2 – The Water Treatment Plant as of March 2, 2023.



Photo 3 – Ground level view of the water treatment plant.



Photo 4 – A lamella clarifier, located between the reaction tanks.



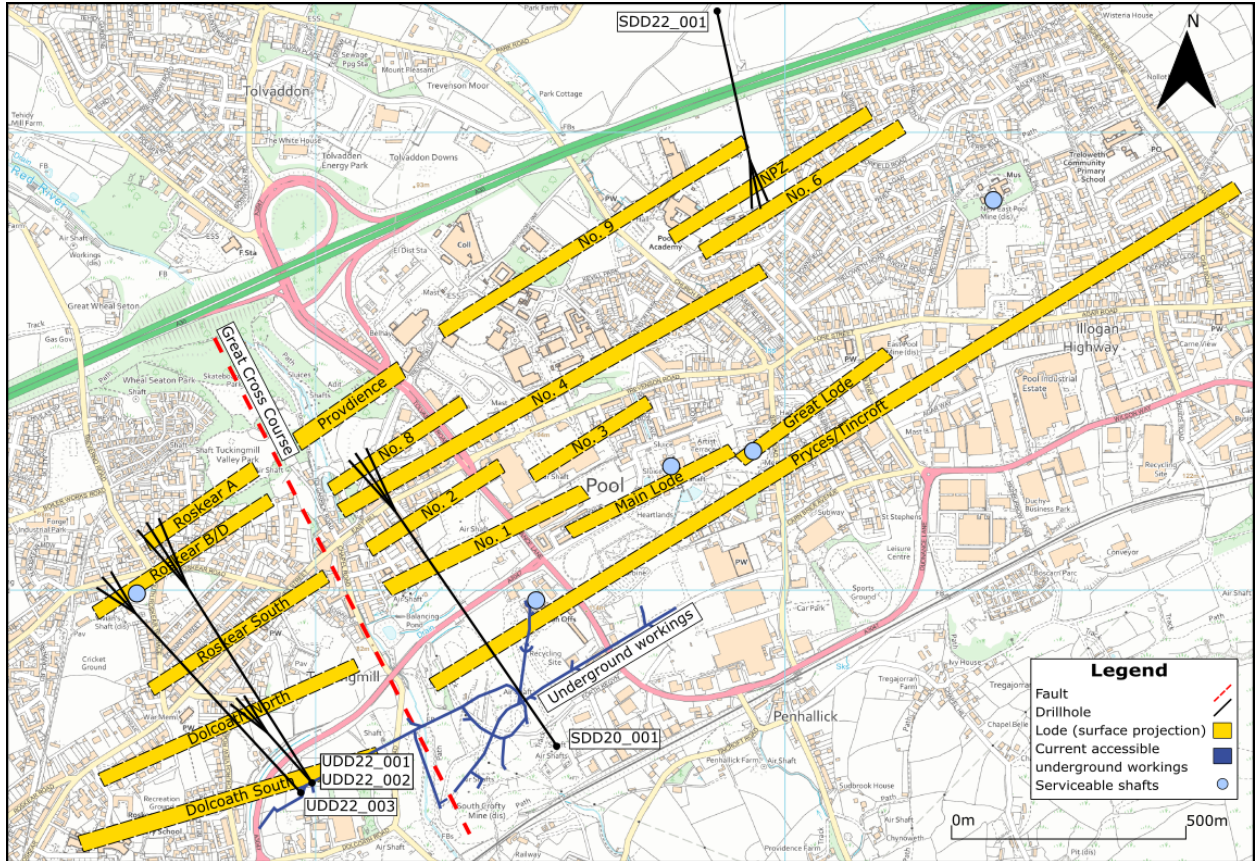


Figure 2 – Map showing the main mineralised lodes at South Crofty and the locations of North Pool Zone (NPZ), No. 4 Lode, No. 8 Lode, Rosgear B/D and Dolcoath North, where samples are being collected for metallurgical studies.



Photo 5 – drilling from the Tuckingmill decline to collect metallurgical samples from the Roskear zone.



Photo 6 – Strong tin mineralisation from the North Pool Zone