

**ASX ANNOUNCEMENT**

**06 December 2021**

## **Nifty Copper Project Update**

### **HIGHLIGHTS**

- **First Government Approval document lodged**
- **SX/EW and related infrastructure refurbishment has commenced**
- **Drilling continues to provide ore intercepts to expand the resource**
- **Design optimisation and scheduling continues to proceed**
- **Metallurgical column test work continues to optimise processing parameters**
- **Senior management appointments made**

Managing Director Barry Cahill commented:

*“The Cyprium team continues to kick goals on its way to producing copper metal plate at Nifty. Drilling success continues, design process is proceeding, and we have commenced refurbishment of the project. Despite our best efforts and the exceptional progress that we have made in 8 months, there are pressures being felt throughout the mining industry. These additional pressures are primarily due to labour shortages, increasing costs, COVID related impacts and long timelines that have impacted on our original projections.*

*These same factors are also impacting on processing times for regulatory approvals. Consequently, we have been forced to reschedule our forecast project timelines, with the commencement of new construction activities now expected in September 2022, following regulatory approvals. Copper metal production at Nifty will now commence by the second half of 2023. As usual for our team, we will aim to commence copper production at the earliest opportunity.”*

Cyprium Metals Limited (“**CYM**”, “**Cyprium**” or “**the Company**”) is pleased to announce progress at its Nifty Copper Project. Since taking control of the site on the 30<sup>th</sup> March 2021, the Company has made significant progress towards establishing itself as an Australian copper producer.

### **Project Progress**

*Drilling programmes continue to upgrade mineral resource confidence, close the gaps in resource and to target extensional areas of the mineralised formation. Currently the Phase 2 reverse circulation (“RC”) drilling programme is being completed in the South East of the Nifty open pit. There are now approaching 4,000 samples from this programme that have not had assays returned. Further to this, there remain over 8,000 samples for which assays have not been returned from the +16,000 metre South West drilling programme that was completed in November. The RC drilling continues to intersect ore grade intervals and following receipt of assays, will be included in the mineral resource model for the design and scheduling of the planned Nifty open pit. Once all of the assays have been received, a follow up Phase 2 drilling programme will be planned in the South West of the Nifty open pit and a follow up Phase 3 drilling programme in the South East of the Nifty open pit will be planned. This is very positive for the Nifty Copper*

Project as there are further copper tonnes to be added to the project copper inventory but also potentially delays final mine designs and schedule progress.



Image 1 / RC Drill Rig on South Eastern end of the Nifty Open Pit

*Design* and scheduling of the open pit continues based on the recently released Nifty Mineral Resource. The current pit envelope does not include any increase in resources from the results of our drilling programmes as mentioned above. These designs will be sufficient to be included in the Restart Study and for the Finance process but will not be final until the resource is re-estimated during the first quarter of 2022 at the earliest.

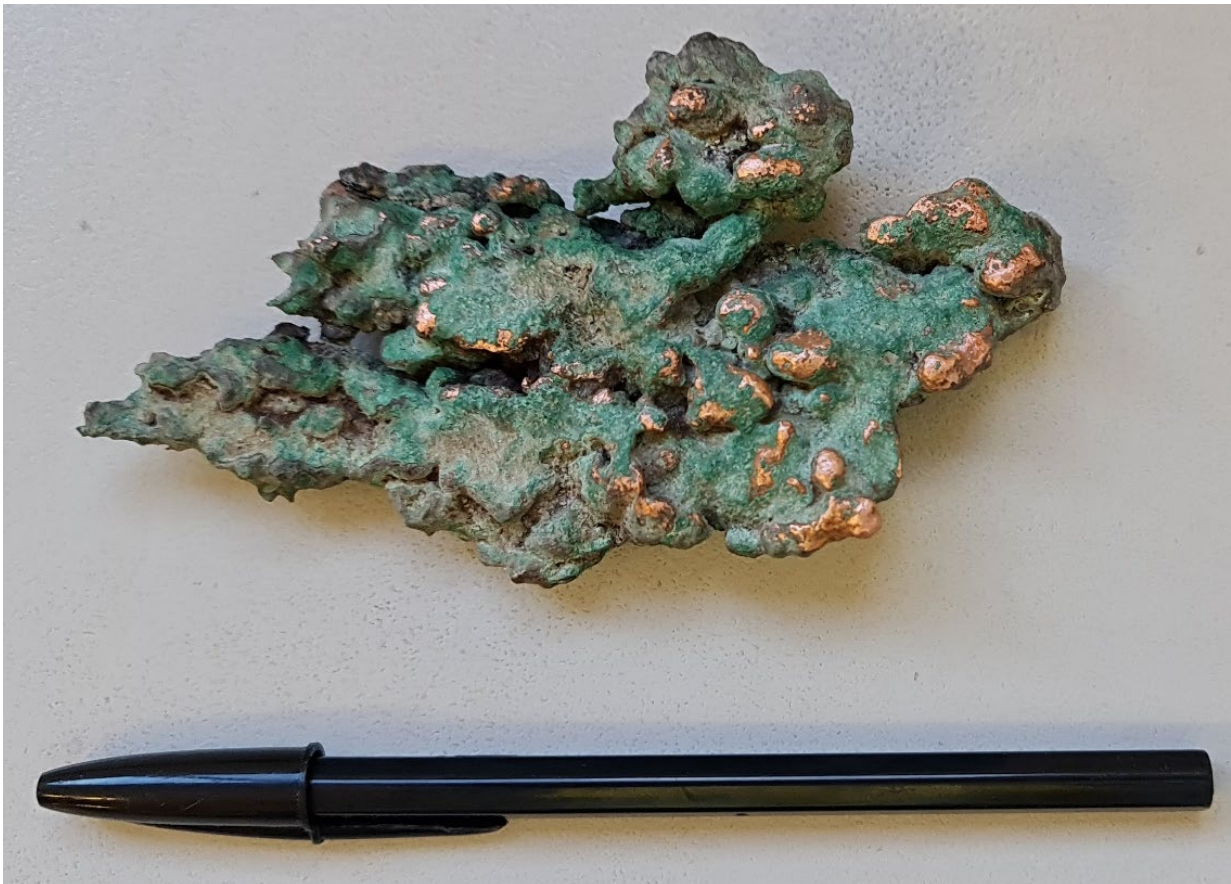


Image 2 / Native Copper sample taken from Heap 3

*Engineering design* of the SX-EW plant and heap leach pads is nearing completion. The new heap leach pads construction and design detail is required for the Works Approval submission so that construction

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activities can commence. Concurrent with the design process, tenders are being issued for the purchase and supply of long lead items.

*Metallurgy* check column test work continues. Four columns have been undertaken, including the fourth column which is a 6-metre column to match operating conditions. Results have been as expected and optimisation of reagent consumptions continues. When this round of work has been completed, a number of follow up tests will be conducted to further optimise the operating parameters. Reporting to the market on these results will be done once the test work has been completed on the residues and the reports compiled. There will also be follow up tests undertaken on core and sonic drill samples. In addition, there are 550 sonic samples yet to be assayed that have been obtained from around the site to test for the location of stockpiled oxide material.

A consultant has been engaged to firstly, build a complete mass balance and copper recovery cathode software model for the project based on the metallurgical parameters and then secondly, to design and build a metallurgical accounting system for the project so that it is ready upon the commencement of plating copper metal at Nifty. This work is well advanced.



Image 3 / Nifty Metallurgical Column Test Work

*Finance* process will commence once the Restart Study is finalised. Outstanding items are schedules, with allowance for an extended approval timeline, and final costs on a number of items including civil construction elements of the heap leach pads and associated crushing infrastructure.

*Government Approvals* are required in the new areas of the project. As a State Agreement tenement there is a Ministerial approval required to amend the project size and life. There is a requirement for clearing permits for the new clearing required for the new heap leach pads and an amendment to a current approval for the extension to the waste dump. There is an amended Mining Proposal required for the restart of the pit, pads and SX-EW which includes submission of a Project Management Plan and a Mine Closure Plan. There is an amended Works Approval required for the restart of the SX-EW and the new



heap leach pads and an amendment to the Water Licence for the change in water extraction method from underground. There are also a number of smaller permits required around the restart of the mining operation, that require reactivation or renewal.

The process of obtaining these approvals is well advanced, having conducted initial meetings and workshops, document compilation is nearing completion. The first submission of the required proposals for the clearing of native vegetation for the waste dump and the new heap leach pads has already been lodged. This is the first stage in the approval process, with management and consultants preparing submissions for the subsequent approvals. Progress is being hampered by shortage of personnel and availability of external specialists to complete the various reports that are required to lodge approval documentation. The expectation is that all documents will be lodged by the first quarter 2022.

Government staff have been very helpful in assisting CYM in making sure that the required proposals contain all that is necessary for an efficient approval process but the various departments, like the whole WA resource industry are suffering from understaffing, and it is expected that the timelines to approval will be longer than originally anticipated. Site visits have been undertaken and the learnings from these visits have been helpful in ensuring that the proposal documentation is complete.

During CYM's tenure, staff have rectified a number of legacy issues at the site that have been paid little attention for some years and site crews have managed to rectify a number of areas that have previously been raised by the regulators. Further, the site crew have been cleaning and collecting years of rubbish and waste to centralised locations and are now going through a process of scrap, recycle or disposal for these waste streams. These waste streams also include chemicals and reagents that are expired and have been on site for many years. The sale of unwanted or scrap equipment has been commenced with sold items already been removed from site. This process will continue for some time due to the volume of equipment, materials, scrap and rubbish that has built up while Nifty was operational.



Image 3 / Refurbishment of the Solvent Extraction ("SX") Plant commenced

*Refurbishment* of the oxide crushing circuit and SX-EW plant has begun. Currently the plant is being stripped down and assessed for refurbishment on an item-by-item basis. The items to be refurbished are then despatched to the required refurbishment location for the work to be undertaken whether on site, in Perth or Kalgoorlie or another specialist location. As an example, the EW electric rectifier has already



been delivered to the workshop in NSW for its refurbishment. The items are also matched with any parts or spares in stock in the warehouse.

The accumulation process as described in the site clean-up section has also delivered a significant number of new and “useable” items back into the store, which had previously been located in sub or “squirrel” stores around the site. Stores staff are still in the process of cataloguing all these items for which they lack sufficient centralised storage areas for. As items are declared not required and sold it creates space to bring in items from those other areas.

*Accommodation Camp* refurbishment has begun with the eastern side of the camp undergoing a refurbishment process first. The refurbishment will bring the accommodation standard to be aligned with Cyprium’s attraction and retention requirements for site personnel. Once the eastern refurbishment is complete the western refurbishment will commence. The dry mess is undergoing a refurbishment process concurrently with the eastern side of the camp.

### **Management Appointments**

CYM is pleased to announce it has strengthened its management team as it progresses towards becoming a copper producer. The appointments made are to ready the team for the transition from Restart Study to construction and ultimately to production at the Nifty Copper Project. The company is fortunate to be able to make such quality appointments during a very tight labour market and this reinforces the quality of Cyprium’s portfolio of Copper projects and the appeal of the Nifty Restart to experienced industry veterans.

John Banning has been promoted as the Chief Operating Officer for Cyprium. John’s previous role for Cyprium was General Manager – Nifty and he is a mining engineer with over 20 years’ experience in the mining and construction industries covering multiple commodities. His professional expertise extends from project development, construction, operations, technical, business improvement and management. John has previously been an independent consultant, Managing Director and Regional General Manager. He has worked with multiple large and mid-size resource companies in Australia and overseas.

Gavin Hammer has been promoted as the General Manager – Project Development and Operational Readiness. Gavin’s previous role for Cyprium was Manager Engineering. Gavin is a maintenance professional with over 30 years’ experience in asset maintenance and management, which includes surface and underground operations within fixed and mobile plant applications. His areas of expertise include the construction, commissioning, optimisation and asset management of process plants and mobile fleet operations in local and remote regions. Prior to joining Cyprium Metals, Gavin spent 5 years in Indonesia at the Wetar Copper Project follow by 2 years in Western Africa in operational and project construction roles.

Clint Moxham has been appointed as General Manager – Nifty. Clint is a mining engineer with over 20 years’ of experience, with a track record of delivering greenfield and restart operations. He has a reputation of safe operations with a career long record of team management and mining operations successes. He is a mining engineer, geologist and mineral economist, with multi commodity expertise ranging from mining strategy, risk management, data analysis, infrastructure development, geological understanding, option analysis and mining due diligence.

Amanda Croft has been appointed Technical Services Manager – Nifty. Amanda is a geologist with over 20 years’ experience in the mining industry covering multiple commodities. Her professional expertise extends from development and operational open pit and underground mines as well as greenfield and brownfield exploration in Australia and Africa. She has previously held management roles with a number of resource companies.

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## Project Timeline

The current progress on the project has been extremely good however CYM is currently foreseeing significant delays to progress due to the effects of numerous impacts on the industry which are have caused and will continue to cause further delays to the project progress. These include:

### *Labour Issues*

- Consultants workloads are extending timelines for deliverables including required site visits, data and reports that are essential to completing government approval submissions and other key study inputs
- Appropriate personnel levels in critical areas has been difficult, restricting CYM's progress
- Delays on the delivery of data for project studies (e.g. assays etc)

### *Government Approvals*

- Delays in approvals timelines due to government understaffing
- Reviewing and rectifying poor historical environmental management practices and stewardship
- Workshop and education sessions with stakeholders regarding the way forward for the project

The COVID imposed lockdowns, travel restrictions and vaccination mandates are also exacerbating of all of the impacts outlined above.

These issues combined have required CYM to reforecast its schedule timeline as a matter of prudence.

It is now anticipated that construction of the major elements of the Nifty Restart will not commence prior to September 2022 which means that copper production will not occur until the second half of 2023. The current focus is twofold which is to:

- Complete the Restart Study and Finance the Nifty Copper Project
- Complete and lodge documents for the required Government Approvals

To all other intents and purposes the rest of the project work is on the start line ready to commence once finance is obtained and the Government Approvals have been received. CYM now anticipates the submission of the remaining approvals documents to occur in the first quarter of 2022 to enable all of the necessary approvals to be received by the end of September 2022.

A positive outcome of these delays is that it enables CYM to further optimise both the mining of the resource and the metallurgy for the project to further bolster the robust economics of the Nifty Copper Project. The time delay allows the completion of outstanding work in these areas.

It also allows the Company to complete outstanding work around our other projects where there are also over 6,000 outstanding assays and subsequent resource calculations to be completed at Nanadie Well and Maroochydoore.

The Nanadie Well and Maroochydoore core remain available at the lab for metallurgy testing which will be commenced once the Nifty optimisation has been completed.

This ASX announcement was approved and authorised by the Board.

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### About Cyprium Metals Limited

Cyprium Metals Limited (ASX: CYM) is an ASX listed company with copper projects in Australia. The Company has a highly credentialed management team that is experienced in successfully developing sulphide heap leach copper projects in challenging locations. The Company's strategy is to acquire, develop and operate mineral resource projects in Australia which are optimised by innovative processing solutions to produce copper metal on-site to maximise value.

The Company has projects in the Murchison and Paterson regions of Western Australia, that is host to a number of base metals deposits with copper and gold mineralisation.

#### Paterson Copper Projects

This portfolio of copper projects comprises the Nifty Copper Mine, Maroochydore Copper Project and Paterson Exploration Project.

The Nifty Copper Mine ("Nifty") is located on the western edge of the Great Sandy Desert in the north-eastern Pilbara region of Western Australia, approximately 350km southeast of Port Hedland. Nifty contains a 2012 JORC Mineral Resources of 732,000 tonnes of contained copper. Cyprium is focussed on a heap leach SX-EW operation to retreat the current heap leach pads as well as open pit oxide and transitional material. Studies will investigate the potential restart of the copper concentrator to treat open pit sulphide material.

The Maroochydore deposit is located ~85km southeast of Nifty and includes a shallow 2012 JORC Mineral Resources of 486,000 tonnes of contained copper.

An exploration earn-in joint venture has been entered into with IGO on ~2,400km<sup>2</sup> of the Paterson Exploration Project. Under the agreement, IGO is to sole fund A\$32 million of exploration activities over 6.5 years to earn a 70% interest in the Paterson Exploration Project, including a minimum expenditure of A\$11 million over the first 3.5 years. Upon earning a 70% interest, the Joint Venture will form and IGO will free-carry Paterson Copper to the completion of a Pre-feasibility Study (PFS) on a new mineral discovery.

#### Murchison Copper-Gold Projects

Cyprium has an 80% attributable interest in a joint venture with Musgrave Minerals Limited (ASX: MGV) at the Cue Copper-Gold Project, which is located ~20km to the east of Cue in Western Australia. Cyprium will free-carry the Cue Copper Project to the completion of a definitive feasibility Study (DFS). The Cue Copper-Gold Project includes the Hollandaire Copper-Gold 2012 JORC compliant Mineral Resources of 51,500 tonnes contained copper, which is open at depth. Metallurgical test-work has been undertaken to determine the optimal copper extraction methodology, which resulted in rapid leaching times (refer to 9 March 2020 CYM announcement, "*Copper Metal Plated*", <https://cypriummetals.com/copper-metal-plated/>).

The Nanadie Well Project is located ~650km north east of Perth and ~75km south east of Meekatharra in the Murchison District of Western Australia, within mining lease M51/887.

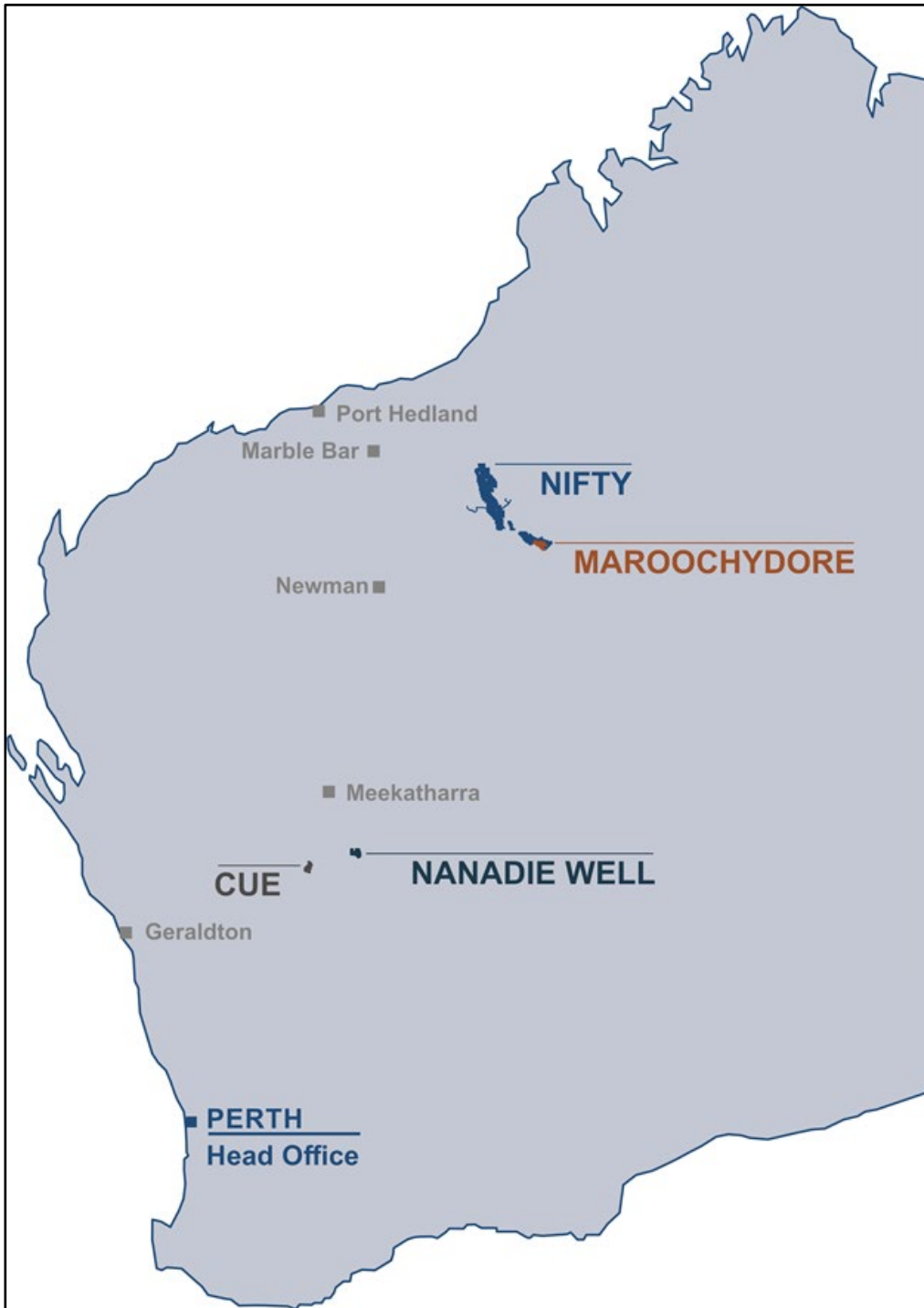
The Cue and Nanadie Well Copper-Gold projects are included in an ongoing scoping study, to determine the parameters required to develop a copper project in the region, which provides direction for resource expansion work.

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# CYPRIMUM



*Cyprium Metals project locations*

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