# **QUARTERLY REPORT**



#### June 2022 Quarterly Report

## **Highlights**

- ✓ Definitive Feasibility Study ("DFS") remains on track for completion by revised timing of late Q3 / early Q4 for the 2022 calendar year.
- ✓ Key equipment suppliers engaged and undertaking engineering design around their respective areas
  of the TECH project.
- Memorandum of Understanding ("MOU") signed with global engineering company KBR, Inc regarding supply of technology and critical equipment associated with nitric acid processing and recycling.
- ✓ Good progress made on testwork including production of magnesia from thermal decomposition pilot activities, very high percentage iron hematite production from iron hydrolysis tests and successful residue testwork for use as engineered landfill.
- ✓ Ore supply agreement executed with Société des Mines de la Tontouta ("SMT"), securing QPM's ore supply requirements for the first phase of the TECH Project
- ✓ Advancing through due diligence and discussions with various potential customers for remaining nickel and cobalt offtake for the first phase of the TECH Project

Queensland Pacific Metals Ltd (ASX:QPM) ("QPM" or "the Company") is pleased to present a summary of activities from the June 2022 quarter.

# **Feasibility Update**

The DFS progressed well throughout the quarter and remains on track for completion late Q3 / early Q4 in the current calendar year. With lead engineers Hatch, QPM has awarded or is in the process of awarding basic engineering design work to key equipment suppliers, with the view of progressing towards supply agreements containing performance guarantees for construction. This early involvement of key suppliers is a major part of QPM's funding strategy for the TECH Project.

The following packages have been awarded:

Vendor	Package
KBR Plinke KBR Weatherly	Packages associated with nitric acid recycling and regeneration including iron hydrolysis, barren evaporation, acid regeneration plant, vent systems and chloride and fluoride removal. KBR is a global leader in nitric acid recycling and the ideal partner for QPM as this is a key function of the DNi Process <sup>TM</sup> .

Vendor	Package
Jord	Package for crystalisers in the sulfate refinery. Jord is a global leader in the provision of crystalisers for the battery chemicals sector, including delivery of a nickel sulfate crystallisation plant for BHP Nickel West and crystallisers for the Terafame battery chemicals plant in Finland.
Ekato	Package for leach tanks, reaction tanks and mixers. Ekato Group is a market leader for agitator and mixing technology for minerals and chemicals processing.
Senet	Package for solvent extraction regarding impurity removal in the sulfate refinery. Senet is a global leader in solvent extraction and its appointment includes a review by globally reknowned solvent extraction expert Graeme Miller.
Hatch	Package for fluid bed roasters for thermal decomposition part of the flowsheet.  Hatch is a global leader in the supply of fluidised bed systems for application in high temperatures and chemical environments.
Primetals	Package for hematite pellet plant.
BG & E Pty Ltd Townsville	Package for "wrap-around" engineering regarding the front end of the TECH Project.
Genco	Package for power and steam generation. Genco are undertaking a feasibility of a gas turbine system which will generate all the power and steam requirements for the TECH Project. This is a change from previous thinking where QPM was going to install steam boilers and purchase power from the grid. By being self sufficient, QPM should deliver cost savings as the incremental gas required for this sytem is modest and is likely to be more than offset by the savings from not purchasing power from the grid.

During the quarter, QPM also made good progress on further testwork which is supporting the DFS and design work of the various equipment suppliers.

#### **Thermal Decomposition**

In the previous quarter, QPM had commenced thermal decomposition pilot construction to confirm the selection of a fluid bed roaster for the thermal decomposition process. During the quarter, QPM completed the construction and in July completed the pilot program with the successful production of magnesia (MgO) from magnesium nitrate. The original DNi Process<sup>™</sup> flowsheet considered the use of kilns to undertake thermal decomposition, however the specified unit would unlikely have been commercial given its relatively small size (requiring 60 of the largest units built). Only 1 -2 fluidised bed reactors are required. This pilot work confirms QPM's equipment choice selection of fluid bed roaster for commercial scale.

Magnesia samples produced are now being analysed at laboratory to assess which markets the product could be sold into.



Image: QPM fluid bed roaster pilot plant

#### **Hematite Pelletisation**

QPM has engaged CSIRO's iron ore processing group to assist with agglomerating and pelletisation options for QPM's hematite co-product with the goal of determining suitability as a direct feed for steel making. Testwork with CSIRO has commenced and involves granulating and sintering tests where QPM hematite is substituted for other iron products typically used in a blended sinter feed. Such products include Chinese magnetite concentrates and Australian iron ore fines.



Image: Sinter pellets production from QPM iron hydrolysis hematite

High grade hematite pellets trade at a premium to DSO ore and the current premium is around US\$40/tonne. QPM is aiming to demonstrate comparability with hematite pellets to be produced from the TECH Project and those that are currently traded on the global market. This will position QPM to be able to market its hematite product and also achieve the best possible pricing.

#### **Residue as Engineered Landfill**

In the TECH Project, all valuable metals will be leached into solution and then recovered and refined into saleable products. The remnant residue is only ~25% of the dry ore feed and it is typically comprised of silicates including quartz sand. The ability to utilise this residue as an engineered fill as a replacement (for example) for mined sand would mean that 100% of the ore processed by the TECH Project reports to a commercial application, effectively positioning the TECH Project as the only zero solids waste nickel and cobalt producer. Such a feat would be an industry first in the resources sector, particularly in nickel laterite processing which typically requires large tailing dams that leave significant environmental footprint. Such tailing dams usually have to hold more than 1.2 tonnes of tailing per tonne of feed ore.

QPM is working with JCU to undertake testwork on the TECH Project residue. The testwork conducted had two main areas of focus:

- Mixing varying levels of simple binding agents with the residue and testing structural properties to determine suitability as engineered fill; and
- Undertaking leaching chemical content tests of the residue to ensure it meets regulatory guidelines.

From JCU's testwork, it has been determined that, with a simple binder, the residue from the TECH Project demonstrated the requisite structural properties and can be used as engineered fill.

The chemical leaching tests undertaken by JCU involved:

- Toxicity Characteristic Leaching Procedure ("TCLP");
- Inductively coupled plasma mass spectrometry ("ICP-MS"); and
- X-Ray powder diffraction.

This testwork demonstrated that under the Townsville City Council (TCC) guidelines, QPM comfortably met

the threshold for all elements of potential concern except nickel. QPM and JCU are confident that nickel levels will also be reduced to below the threshold with additional washing.

Metal	TCC guideline (ppm)	Result (ppm)
Antimony	5.0	< 0.1
Arsenic	5.0	< 0.1
Barium	100.0	< 0.1
Boron		< 0.1
Cadmium	0.5	< 0.1
Chromium	5.0	0.3
Cobalt	5.0	2.8
Copper	100.0	< 0.1
Lead	5.0	< 0.1
Nickel	5.0	9.37
Mercury	0.1	0.0001
Molybdenum	1.0	< 0.1
Selenium	1.0	< 0.05
Silver	5.0	< 0.1
Tin	3.0	< 0.1
Titanium		< 0.1
Vanadium	5.0	< 0.1
Zinc	500.0	0.1

# **Ore Supply**

During the quarter, QPM secured the balance of ore required for phase 1 of the TECH Project. QPM entered into a binding ore supply agreement with Société des Mines de la Tontouta ("SMT"), a significant New Caledonian mining company, for up to 600,000 wmt per annum. Key terms are set out in the table below:

Area	Terms
Term	10 year ore supply agreement, expected to commence in late 2023 (6 month notice period required by QPM ahead of first cargo)
Tonnage	Up to 600,000 wmt per annum
Specification	Limonite ore
	1.4 – 1.7% Ni (typical 1.6%)
	0.1 – 0.25% Co (typical 0.18%)
	30.0 – 47.5% Fe (typical 42%)
	1.5 – 7.0% MgO (typical 5%)
	2.0 – 6.0% Al <sub>2</sub> O <sub>3</sub> (typical 3%)
	28.0 – 40.0% moisture (typical 35%)

Pricing	Commercial in confidence, linked to underlying price of Ni (LME exchange) and Co (Metal Bulletin) on an FOB basis			
Source	Multiple mining operations			
Termination	Typical termination clauses including Force Majeure, material breach and insolvency.			
Conditions	QPM making a final investment decision to build the TECH Project.  Exports from SMT to QPM will be subject to prior authorization by the New Caledonian government.			

QPM is delighted to have entered into this agreement with SMT and it represents a significant de-risking event for QPM with respect to ore supply for the TECH Project.

## High Purity Alumina Update

QPM and its HPA partners Lava Blue, have been progressing on feasibility work with regards to an HPA refinery which will feed into the overall DFS of the TECH Project.

Further to this, Lava Blue continues the construction of its demonstration plant, which will be located at QUT's Redlands Research Facility. QPM and Lava Blue have agreed that the first runs through the demonstration plant will be using QPM feedstock. The target is for commissioning of the demonstration plant in September, with the production of 100kg of 4N HPA by the end of the year.

## **Project Approvals**

During the quarter, good progress was made on both Federal and State approvals required for the TECH Project.

#### Federal Approvals – EPBC Act

The assessment of the referral under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 ("EPBC Act") is currently progressing through the decision stage. QPM submitted the response and supporting materials to the Commonwealth Department of Agriculture, Water and the Environment's ("DAWE") request for information in early April 2022. DAWE has been reviewing and has also been in discussions with QPM regarding offsets associated with the approval. This process has taken slightly longer than expected and a final decision is expected early in Q4 2022.

#### Queensland Approvals - Material Change of Use Development Application ("MCU DA")

Review of QPM's MCU DA by Townsville City Council ("TCC") and the State Assessment Referral Agency ("SARA") remained ongoing throughout the quarter. QPM and the assessment agencies are also currently negotiating conditions associated with the approval. Receipt of Queensland State approvals remains on track for late Q3 2022.

#### **Early Works Approvals**

QPM has commenced discussions with TCC with regards to two operational work permits that will facilitate site establishment and early works at the Lansdown site. Work has begun to define the scope of work within each package so that the work necessary to support the early works applications is clearly understood. The statutory timeframe for these approvals is typically 85 working days or four months. QPM is targeting having these permits in place by the end of the year.

#### Offtake Discussions

QPM continues to facilitate discussions and due diligence with potential customers for its uncontracted nickel and cobalt supply. There has been significant interest in QPM's nickel and cobalt, particularly with respect to the TECH Project's leading ESG credentials. The nature of counterparties actively engaged with QPM includes OEMs, battery manufacturers and trading houses.

QPM is aiming to enter into an offtake agreement for the balance of its supply prior to the end of the year.

#### Cash and Corporate

Cash at the end of the quarter was \$31.4m

#### Additional ASX Information

**ASX Listing Rule 5.3.1:** Exploration and Evaluation during the quarter was \$8.5m. The majority of this was spent on the Company's TECH Project.

**ASX Listing Rule 5.3.2:** There were no substantive mining production and development activities during the quarter.

**Tenement Table: ASX Listing Rule 5.3.3:** Tenements currently held by QPM as at 30 June 2022 are detailed in the table below.

TENEMENT ID	STATUS	APPLIC DATE	GRANTED DATE	EXPIRY DATE	HOLDING	NAME	REGISTERED CO.
EPM27035	GRANTED	28 Aug 2018	12 Feb 2021	12-Feb-23	100%	Serpentinite Ridge	QPM Tech Project Pty Ltd
EL 1761	Renewal application submitted and pending approval	11 Mar 2020	18 Sep 2020	12-Mar-22	100%	Sewa Bay	Queensland Pacific Metals Ltd

#### **ASX Listing Rule 5.3.5:**

RELATED PARTY	AMOUNT	DESCRIPTION
Directors and CEO	\$306,971	Director and consulting fees paid to Directors and/or Director related entities

This announcement has been authorised for release by the Stephen Grocott.



ASX: QPM | ACN:125 368 658

For Further Info: P: +61 7 3517 5900 | E: info@qpmetals.com.au | W: www.qpmetals.com.au Contact: Dr Stephen Grocott, MD & CEO | Address: Level 17, 307 Queens St, Brisbane Q 4000

FORWARD LOOKING STATEMENT Statements & material contained in this ASX Release, particularly those regarding possible or assumed future performance, production levels or rates, commodity prices, resources or potential growth of QPM, industry growth or other trend projections are, or may be, forward looking statements. Such statements relate to future events & expectations and, as such, involve known and unknown risks & uncertainties. Although reasonable care has been taken to ensure facts stated in this Release are accurate and/or that the opinions expressed are fair & reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness. Actual results & developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this Release should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

#### Name of entity

Queensland Pacific Metals Limited		
ABN Quarter ended ("current quarter")		
61 125 368 658	30 June 2022	

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	23
1.2	Payments for		
	(a) exploration & evaluation	(8,486)	(30,148)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(1,362)	(4,491)
	(e) administration and corporate costs	(556)	(2,485)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	4	4
1.5	Interest and other costs of finance paid	-	(61)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	2,563
1.8	Other (provide details if material)	421	421
1.9	Net cash from / (used in) operating activities	(9,979)	(34,174)

2.	Са	sh flows from investing activities		
2.1	Payments to acquire or for:			
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	(10)	(265)
	(d)	exploration & evaluation	(27)	(108)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(38)	(374)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	50,173
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	615	975
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(5)	(2,470)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(35)	(1,035)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	575	47,643

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	40,748	17,745
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(9,979)	(34,173)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(38)	(371)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	575	47,643

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	77	539
4.6	Cash and cash equivalents at end of period	31,383	31,383

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	31,383	40,748
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	31,383	40,748

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(307)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includation for such payments	le a description of, and an

\$306,971

Director and consulting fees paid to Directors and/or Director related entities

6.1

Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
Loan facilities	-	-
Credit standby arrangements	-	-
Other (please specify)	-	-
Total financing facilities	-	-
Unused financing facilities available at quarter end		-
Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	Note: the term "facility" includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.  Loan facilities  Credit standby arrangements  Other (please specify)  Total financing facilities  Unused financing facilities available at qualinclude in the box below a description of each rate, maturity date and whether it is secured facilities have been entered into or are proposed.	Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.  Loan facilities  Credit standby arrangements  Other (please specify)  Total financing facilities  -  Unused financing facilities available at quarter end  Include in the box below a description of each facility above, including rate, maturity date and whether it is secured or unsecured. If any addifacilities have been entered into or are proposed to be entered into af

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(9,979)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(27)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(10,006)
8.4	Cash and cash equivalents at quarter end (item 4.6)	31,383
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	31,383
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	3.1
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A".	

Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 29 July 2022

Authorised by: The Board of Queensland Pacific Metals Limited (Name of body or officer authorising release – see note 4)

#### Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.