



## Minera IRL Announces Positive Preliminary Economic Assessment Results for the Ollachea Gold Project

*After-Tax NPV of \$189 million and 38% IRR at a base case gold price of \$1,600/oz*

LIMA, PERU – (July 19, 2021) – Minera IRL Limited (“Minera” or the “Company”) (BVL:MIRL) (CSE:MIRL) is pleased to announce that Mining Plus (“Mining Plus”) is currently completing a Preliminary Economic Assessment (“PEA”) detailing the Company’s revised plans for its flagship Ollachea Gold Project (“Ollachea” or the “Project”) located in the Department of Puno, Southern Peru.

### Overview

Minera has explored the Ollachea deposit since October 2008. In December of 2012, AMEC Peru and Coffey Mining Pty Ltd. produced a Feasibility Study on the viability of mining the Ollachea deposit from underground and processing mineralized material in a 1.1 million t/a facility. Minera has modified the original project design in an effort to reduce upfront CAPEX and improve project economics, and therefore the 2012 Feasibility Study is no longer current. For this reason, Minera retained Mining Plus to consider the viability of a low-CAPEX start-up for Ollachea with an underground mine, gravity concentration and carbon in leach (“CIL”) plant designed to treat 1,500 tonnes per day (“tpd”) over the first three years (targeting a defined and remodelled high-grade area), ramping up to 3,000 tpd during the fourth year.

All currencies are reported in U.S. dollars, unless otherwise specified.

### Project Highlights

- **Strong Project Economics with low CAPEX.**
  - At a base case gold price of \$1,600/oz: Pre-Tax Net Present Value discounted at 7% (“NPV<sub>7%</sub>”) of \$327 million and 54% Internal Rate of Return (“IRR”), and after-tax NPV<sub>7%</sub> of \$189 million and 38% IRR.
  - At a gold price of \$1,800/oz: Pre-Tax NPV<sub>7%</sub> of \$430 million and 68% IRR, and after-tax NPV<sub>7%</sub> of \$253 million and 47% IRR.
  - Start-up CAPEX estimated at \$89 million (**including 25% contingency**), with an after-tax payback period of 2.5 years.
  
- **Updated Mineral Resource Estimate.**
  - Indicated Mineral Resource Estimate of 10.7 million tonnes at 3.28 grams per tonne (“g/t”) containing 1.13 million ounces of gold.
  - Inferred Mineral Resource Estimate of 7.3 million tonnes at 2.7 g/t containing 0.6 million ounces of gold.
  - Total Mineral Resource Estimate includes results from the Minapampa Far East drilling program completed in 2016, which demonstrates that the mineralization remains open to the east and at depth.

- **11-year life of mine (“LOM”) projecting 876,200 recovered ounces.**
  - Average annual production over a four-year ramp-up period of approximately 66,000 ounces of gold at 1,500 tpd, with an estimated peak of 111,000 ounces in year five following an expansion to 3,000 tpd.
  - Average recovery of 90.3% during the first three years, with average recovery of 86.2% over the remaining LOM.
  - Simplified process flowsheet demonstrating improved gold extraction through gravity concentration and carbon rejection, and high gold recoveries from leaching of gravity concentrate through a CIL plant.
  - Efficient use of available space with the inclusion of co-disposal of tailings and waste rock.
  
- **Critical path milestones accomplished in advance of development.**
  - 30-year surface rights agreement from 2012 creates strong local ties and grants a five percent (5%) interest in Minera’s operating subsidiary to the community of Ollachea upon commencement of commercial production.
  - Long-lead and key construction permits and mining approvals already in hand, including an Environmental and Social Impact Assessment.
  - Mine tunnel extending 1.2 kilometers and project site access roads completed in 2013 that compress development timeframe.

Diego Benavides, CEO of Minera IRL Limited, said: “These results reinforce our confidence in the viability of a simplified and optimized mine project with reduced capital costs, a short payback period, an underexplored gold resource open to expansion to the east and at depth, and increased potential for long-term value creation for our Company, our shareholders and the local community. We look forward to building an exciting future for Ollachea, supported by a robust base case developed by a remarkable team of consultants that offers sustained production over an 11-year life of mine with an after-tax NPV of \$189 million and IRR of 38%.”

The PEA for the Ollachea Gold Project is being prepared in accordance with National Instrument 43-101 (“**NI 43-101**”) Standards of Disclosure for Mineral Projects. The Company intends to file the final PEA on its profile on SEDAR ([www.sedar.com](http://www.sedar.com)) within 45 days of this news release.

The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

## PEA Assumptions and Economic Results

The main parameters and economics of the PEA are summarized in the tables below:

### Main Parameters of the PEA

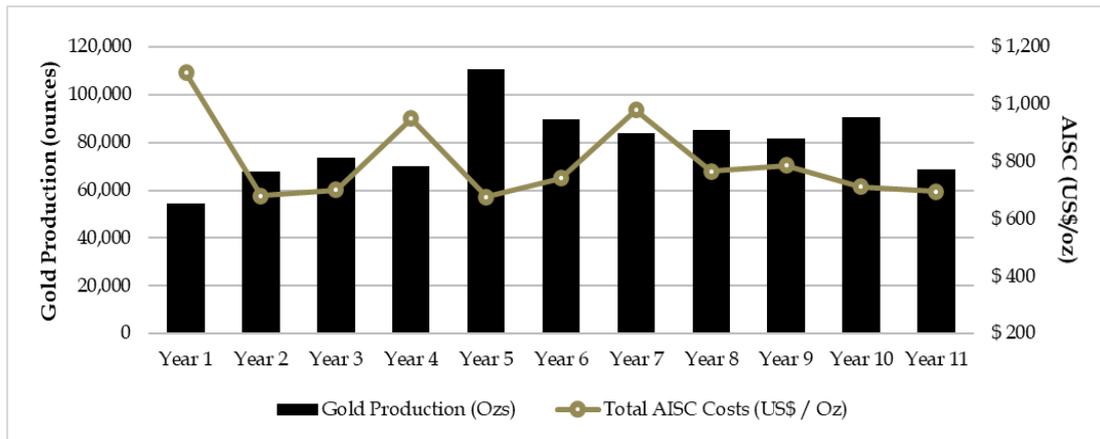
<b>Key Assumptions</b>		
Base Case Gold Price	<i>per ounce</i>	\$1,600
<b>Mining and Processing</b>		
LOM	<i>years</i>	11
Total Mineralised Material Mined	<i>million tonnes</i>	9.6
LOM Gold Production	<i>ounces</i>	876,200
Average Annual Gold Production, Years 1 to 4	<i>ounces</i>	66,000
Peak Gold Production in year 5	<i>ounces</i>	111,000
Head Grade, Years 1 to 4	<i>g/t Au</i>	4.0
Head Grade, over remaining LOM	<i>g/t Au</i>	3.0
Gold Recovery, Years 1 to 3	<i>%</i>	90.3
Gold Recovery, over remaining LOM	<i>%</i>	86.2
<b>Operating Costs</b>		
LOM Average Operating Cost <sup>(1)</sup>	<i>per ounce</i>	\$688
LOM Average Cash Cost <sup>(2)</sup>	<i>per ounce</i>	\$792
LOM All-in Sustaining Cost ("AISC") <sup>(3)</sup>	<i>per ounce</i>	\$794
<b>Capital Costs</b>		
Start-up CAPEX <sup>(4)</sup>	<i>\$ millions</i>	\$89
Expansion CAPEX <sup>(5)</sup>	<i>\$ millions</i>	\$37

- (1) Consist of mining and processing costs, tailings and waste rock disposal and on-site G&A.  
(2) Consist of operating costs plus treatment and refining charges, government and NSR royalties and community interest (5%).  
(3) Consist of cash costs plus sustaining capital (mining and processing).  
(4) Includes mine development and plant construction with a design capacity of 1,500 tpd.  
(5) Includes Tailings Storage Facility construction and process plant ramp-up to 3,000 tpd.

### Project Economics Summary

<b>@ \$1,600/oz Gold Price</b>	<b>Pre-Tax</b>	<b>After-Tax</b>
NPV <sub>7%</sub>	\$327 million	\$189 million
IRR	54%	38%
Payback	2 years	2.5 years
LOM Cash Flow	\$580 million	\$353 million

### Production and Cost Profile by Year



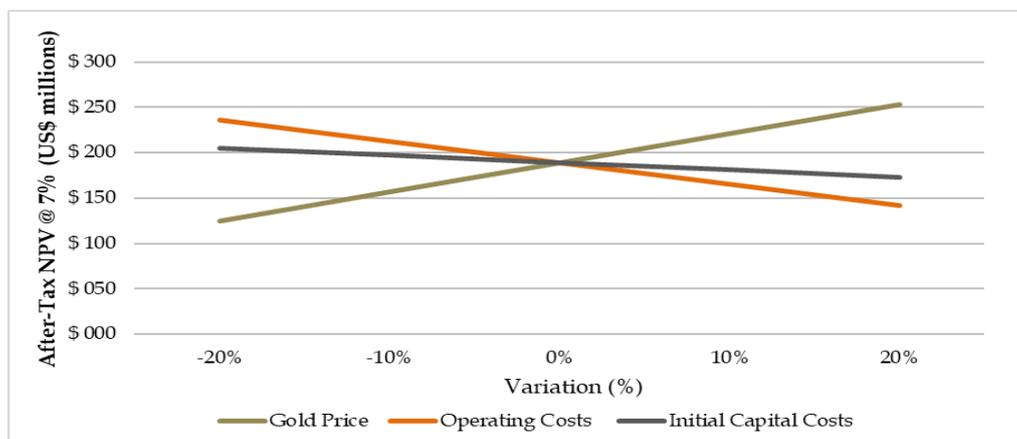
A financial model was completed based on the mine plan, which assumes the commencement of production in 2023, in addition to other inputs such as mining inventory and rates, processing throughputs and metallurgical recoveries, capital and operating costs, the outstanding debts with COFIDE and Rio Tinto, net smelter return (“NSR”) royalties, government royalty and taxation parameters.

Sensitivities of pre-tax and post-tax NPV and IRR to gold prices per ounce are as follows:

### Economic Sensitivity to Gold Price

Gold Price (\$/oz)	\$1400	\$1600	\$1800
Pre-Tax NPV <sub>7%</sub>	\$223 million	<b>\$327 million</b>	\$430 million
Pre-Tax IRR	40%	<b>54%</b>	68%
Pre-Tax Payback	2.5 years	<b>2 years</b>	1.7 years
After-Tax NPV <sub>7%</sub>	\$125 million	<b>\$189 million</b>	\$253 million
After-Tax IRR	28%	<b>38%</b>	47%
After-Tax Payback	3 years	<b>2.5 years</b>	2.2 years

### After-Tax Economic Sensitivity to Gold Price, Operating and Capital Costs



## Mineral Resource Estimates

Mineral Resources at Ollachea are considered as potentially mineable by a sub-level stoping underground method and are estimated based on drilling conducted prior to the fourth quarter of 2016. The Mineral Resource includes an updated Resource for the Minapampa Zone and a maiden Resource for the Minapampa Far East (“MFE”) Zone (pictured below). The Mineral Resource is reported inside optimized underground stope shapes, which are based on a cut-off grade of 1.4 g/t gold and a gold price of \$1,700.

The Mineral Resource is summarized as of June 30, 2021, and has been estimated in alignment with the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (CIM, 2019) and reported in accordance with NI 43-101.

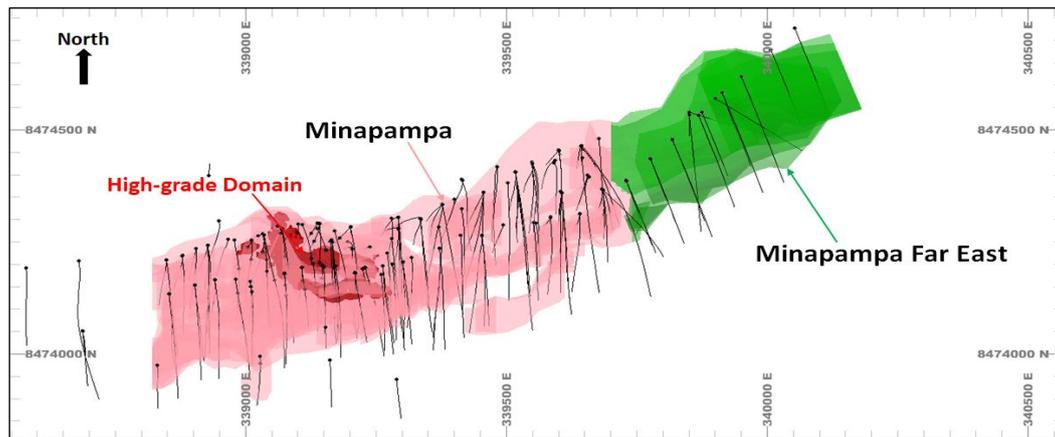
Mining Plus has estimated an Indicated Mineral Resource of 1.13 million ounces of gold contained in 10.7 million tonnes at 3.28 g/t Au. The Inferred Mineral Resource comprises 0.6 million ounces of gold contained in 7.3 million tonnes at 2.7 g/t Au within the Ollachea property limits. The details of the Mineral Resource Estimate are shown in the table below:

### Mineral Resource Estimate for the Minapampa and MFE zones within the Ollachea Project - June 2021

Zone	Indicated			Inferred		
	Tonnes (Mt)	Au g/t	Au Ounces (Moz)	Tonnes (Mt)	Au g/t	Au Ounces (Moz)
Minapampa	10.7	3.28	1.13	1.8	3.0	0.2
Minapampa Far East	-	-	-	5.5	2.6	0.5
<b>Total</b>	<b>10.7</b>	<b>3.28</b>	<b>1.13</b>	<b>7.3</b>	<b>2.7</b>	<b>0.6</b>

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
2. All figures have been rounded to reflect the relative accuracy of the estimates. Totals may not sum due to rounding.
3. The Mineral Resource was estimated by Ms. Maria Muñoz and reviewed by Dr. A. Fowler, MAusIMM, CP(Geo), Independent Qualified Person under NI 43-101, of Mining Plus Consultants who takes responsibility for it.
4. Composites were capped, where appropriate.
5. Mineral Resources have been diluted and reported within optimized underground stope shapes.
6. The optimization was based on a cut-off grade of 1.4 g/t Au, considering metal prices of \$1,700 per ounce of gold, assuming metal recovery of 87% for gold, and total operating costs of \$61.18/t.
7. Tonnages reported are metric tonnes and ounces of contained gold are troy ounces.
8. Mining Plus is not aware of any environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues that could materially affect the potential development of the Mineral Resource Estimate.

## Plan view of mineralized lodges of Minapampa and MFE and the high-grade domain



The Minapampa Zone Mineral Resource has been estimated with a conventional estimation methodology consisting of 3D wireframing of mineralization domains and ordinary kriging of the grade within each domain. The updated interpretation has now incorporated a high-grade domain in order to facilitate optimization and scheduling of high-grade material earlier in the proposed mine life when compared to the Mineral Resource Estimate that supported the 2012 Feasibility Study.

The high-grade domain has been modelled by conventional wireframing methods at a nominal grade threshold of  $\geq 4$  g/t Au. The  $\geq 4$  g/t Au High-Grade domain has been modelled by Mining Plus in the central Minapampa Zone. Mining Plus considers that this area has sufficient continuity between drill hole sections at  $\geq 4$  g/t Au and is the only portion of the deposit that could potentially support an elevated mining cut-off grade for a reasonable period of time (3 - 4 years) at the proposed initial mining rate of 1,500 tpd.

Additionally, Mining Plus notes that the newer MFE Zone mineralization interpretation overlaps part of the Mineral Resource Estimate that supported the 2012 Feasibility Study. As the MFE Zone has been interpreted from closer-spaced drilling and improved geological understanding, it has replaced the Minapampa Zone interpretation where the two overlapped. That overlapping part of the Minapampa Zone, comprising approximately 20,000 ounces of gold, has been effectively subtracted from the Minapampa Zone and now forms part of the MFE Zone, with no change in the Mineral Resource classification.

Mining Plus has reported the Mineral Resource inside optimized stope shapes in order to satisfy the “reasonable prospects for eventual economic extraction” requirement in accordance with NI 43-101 and the Mineral Resource and Mineral Reserves Best Practices Guidelines (CIM, 2019). These optimized shapes may include material  $< 1.4$  g/t Au; however, the average grade of the complete stope is  $\geq 1.4$  g/t Au cut-off grade. Similarly, outside of the optimized shapes, there are blocks with grades  $\geq 1.4$  g/t; however, by applying reasonable mining parameters, they have become diluted to the point that they do meet the reasonable prospects for eventual economic extraction criterion.

The MFE drilling program was completed in the fourth quarter of 2016 and was designed to test the extensions to the Minapampa Mineral Reserve. The program successfully demonstrated that the mineralization continues for >500m to the east of the existing mineral resource estimate and that the mineralization is still open to the east and at depth.

The drilling results have been used to estimate an Inferred Mineral Resource for the MFE Zone of 0.5 million ounces of gold contained in 5.5 million tonnes at 2.6 g/t Au. As noted above, the Mineral Resource has been reported inside optimized stope shapes based on a cut-off grade of 1.4 g/t Au.

### **Exploration**

The Minapampa and MFE Zones remain open along-strike (to the east and west) and down-dip with potential to increase the resource base. The Company plans to conduct additional exploration activities in order to add to the existing Mineral Resource, though no exploration program is planned for the balance of this year.

### **Mining and Processing**

Mining Plus identified high-grade areas within the deposit that can be mined preferentially in an efficient manner at 1,500 tpd, without compromising the remaining mineralized material. This higher-grade section can be mined at an elevated cut-off grade without breaking it up into isolated stopes, making it an ideal area to target early in the mine life and deliver the highest possible grade to the processing plant during the first three years.

The plant design includes a crushing and grinding circuit, followed by gravity concentration. The gravity concentrate is processed in a CIL circuit and gold is recovered from the loaded carbon in a conventional elution - electrowinning plant with smelting of the gold to a Dore bullion. The process also includes effluent treatment, tailings filtration and preparation of cemented paste backfill required during mining operations.

Overall gold recoveries are shown below and are based on metallurgical test work completed between 2017 and 2021 by Sepro Laboratories (Met-Solve). Additional metallurgical testing aimed to confirm recovery assumptions is planned for summer 2021. The Company will provide further details on the test results as they become available.

#### **Overall Recoveries**

<b>Head Grade</b>	<b>Recovery Rate</b>
3.3 g/t	86.2%
4.3 g/t	90.3%

## Operating Costs

The PEA contemplates an underground mine from which mineralized material will be trucked to a gravity concentration and CIL plant located close to the main portal.

LOM operating costs are summarized in the table below:

### Operating Cost Estimate

Operating Costs	LOM (\$ millions)	\$/tonne leached	\$/oz Au
Mining <sup>(1)</sup>	\$406	\$42.10	\$464
Processing	\$127	\$13.11	\$144
Tailings and Waste Rock Disposal	\$35	\$3.66	\$40
Onsite G&A <sup>(2)</sup>	\$35	\$3.65	\$40
<b>Total Operating Costs</b>	<b>\$603</b>	<b>\$62.52</b>	<b>\$688</b>
Treatment & Refining Charges	\$4	\$0.44	\$5
Government Royalty	\$35	\$3.63	\$40
Royalties <sup>(3)</sup>	\$41	\$4.21	\$46
Community Interest	\$11	\$1.14	\$13
<b>Total Cash Costs</b>	<b>\$694</b>	<b>\$71.94</b>	<b>\$792</b>
Sustaining Capital	\$1	\$0.13	\$2
<b>All-in Sustaining Costs (AISC)</b>	<b>\$695</b>	<b>\$72.08</b>	<b>\$794</b>

(1) Includes paste backfill, supervision and stope definition drilling costs.

(2) Includes mine closure bond.

(3) Includes an aggregate NSR of 2.9%.

Average unit mining costs of \$42.10/tonne were estimated based on the proposed mine plan, local cost benchmarking and experience from similar operations and local conditions. It is envisaged that the mining operations will be carried out by a contractor.

Average processing costs of \$13.11/tonne were estimated based on the design process flowsheet and considered process labour requirements and rates, as well as calculated consumption rates of reagents, consumables, electricity, and maintenance.

## Capital Costs

In the PEA, Mining Plus is estimating an initial low start-up CAPEX of \$89 million to build Ollachea with a design production capacity of 1,500 tpd. A plant expansion is anticipated during the fourth year in order to increase production capacity to 3,000 tpd. The expansion capital cost estimate is approximately \$37 million. Both estimates include a 25% contingency on direct costs.

A summary of the Ollachea capital cost estimates is shown in the table below:

## Capital Cost Estimate

Description	\$ millions
<b>Start-up <sup>(1)</sup></b>	
Mine	\$27
Process Plant <sup>(2)</sup>	\$37
Tailings and Waste Rock Disposal	\$5
Owner's Costs	\$2
<b>Start-up Capital Costs Pre-Contingency</b>	<b>\$71</b>
Contingency (25%)	\$18
<b>Total Start-up Capital</b>	<b>\$89</b>
<b>Expansion <sup>(3)</sup></b>	
Process Plant	\$16
Tailings and Waste Rock Disposal	\$13
Owner's Costs	\$1
<b>Expansion Capital Costs Pre-Contingency</b>	<b>\$30</b>
Contingency (25%)	\$7
<b>Total Expansion Capital</b>	<b>\$37</b>
<b>Total Project Capital Costs</b>	<b>\$126</b>

(1) Includes mine development and plant construction with a design capacity of 1,500 tpd.

(2) Includes EPCM costs. Also applicable to expansion.

(3) Includes Tailings Storage Facility construction and process plant ramp-up with a design capacity of 3,000 tpd.

### **Site Infrastructure**

The anticipated infrastructure for the Project includes an electrical substation, paste plant, equipment maintenance workshop, refuelling facilities, assay laboratory, office administration facilities and changing rooms, among others.

The tailings and waste rock disposal concepts were developed in full compliance with the most current standards for sustainable tailings management, including consideration of Best Available Technologies and Practices. The method considered in the PEA includes co-disposal of filtered tailings and mine waste rock, in addition to the novel implementation of Geotubes for additional risk reduction for the stacked tailings.

### **Qualified Persons**

The mine design and the respective CAPEX and operating cost estimates were completed under the supervision of Edgard Vilela, AusIMM CP(Min). Mr. Vilela is a full-time employee of Mining Plus and is an independent Qualified Person ("QP") as defined by the NI 43-101.

The Resource Estimate was under the supervision of Andrew Fowler, PhD, AusIMM CP(Geo). Dr. Fowler is a full-time employee of Mining Plus and is also a QP.

The plant design and the respective CAPEX and operating cost estimates were completed by Mr. John A. Thomas, P. Eng., Ph.D. Mr. Thomas is a full-time employee of JAT Metconsult Ltd. and is also a QP.

The tailings and waste disposal aspects and the respective CAPEX and operating cost estimates were completed under the supervision of Donald Hickson, P. Eng. Mr. Hickson is a full-time employee of Envis and is also a QP.

The QPs have reviewed and approved the technical content of this news release.

### **About Minera IRL**

Minera IRL Limited is the CSE and BVL listed holding company of Minera IRL S.A. and Compañía Minera Kuri Kullu S.A., two precious metal mining companies engaged in mining exploration and development in Peru, with a primary focus on gold. Minera is led by an agile and experienced senior management team with extensive mining industry experience, particularly in South America. Minera operates the Corihuarmi Gold Mine located 5,000 meters above sea level in Central Peru and is currently advancing the Ollachea Gold Project located in the Department of Puno, Southern Peru. For more information, please visit [www.minera-irl.com](http://www.minera-irl.com).

### **About Mining Plus**

Mining Plus is an Australian engineering and mining technical services provider, consisting of professionals specialising in geology, mining engineering (Surface & Underground), geotechnical engineering, and operational management. Part of the Mining Plus core business is Resource and Reserve Estimation, mine planning, and the respective sign for the relevant authorities. Mining Plus has a global presence and a local office in Lima, Peru.

### **On behalf of the Board of Directors of Minera IRL Limited**

Gerardo Perez  
Executive Chairman

Diego Benavides  
CEO and Director

FOR FURTHER INFORMATION, PLEASE CONTACT:

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*No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained in this news release.*

### ***Cautionary Statement on Forward-Looking Information***

*Certain information in this news release, including information about the nature, composition, cost, and development timeframes for the modified project proposed for Ollachea, CAPEX, expected or anticipated mining, production and processing rates, costs and efficiencies, gold prices, the possibilities for expansion of the Ollachea resource and the life of mine, our expectation that the final PEA will be filed on SEDAR within 45 days, constitute “forward-looking statements”. Forward looking statements are based on assumptions. While management believes these assumptions and statements are reasonable in context, forward-looking statements are inherently subject to political, legal, regulatory, business, and economic risks and competitive uncertainties and contingencies. The Company cautions readers that forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Minera IRL’s actual results and future performance to be materially different than those expected or estimated future results, performance or achievements and that forward-looking statements are not guarantees of future performance, results, or achievements.*

*Minera IRL assumes no obligation, except as may be required by law, to update or revise them to reflect new events or circumstances. Risks, uncertainties and contingencies and other factors that might cause actual performance to differ from forward-looking statements include, but are not limited to, Peru’s ability to contain the COVID-19 crisis, changes in the capital or precious metals markets, the studies to be conducted by Mining Plus, Sepro Mineral Systems Corp. and others in order to produce a PEA, and changes to legislative, political, social, health or economic developments both within Peru and in general.*