

FORM 51-102F3

MATERIAL CHANGE REPORT

1. Name and Address of Company

Turquoise Hill Resources Ltd. (“**Turquoise Hill**” or the “**Company**”)
Suite 3680 – 1 Place Ville-Marie
Montreal, Quebec, H3B 3P2
Canada

2. Date of Material Change

October 14, 2021

3. News Release

On October 14, 2021, the Company issued a press release disclosing the matters described herein, which was disseminated through the facilities of Cision. A copy of the press release was filed on SEDAR.

4. Summary of Material Change

On October 14, the Company announced its third quarter 2021 production and provided an Oyu Tolgoi mine update, which disclosed, among other things, an increase in the Company's base case estimated incremental funding requirement to US\$3.6 billion, deferral of some open-pit metal to beyond 2024, COVID-19 restrictions having impacted both open pit operations and underground development, which, through the end of Q3 2021, have resulted in a cumulative increase of US\$140 million to the estimate of underground development capital included in the Definitive Estimate, and a delayed undercut commencement pending resolution of certain non-technical undercut criteria, including the support of all Oyu Tolgoi LLC board directors to increase the underground development capital and to commence discussions with the project finance lenders, obtaining outstanding, required regulatory approvals and to agree on a pathway to meet OT's long-term power requirements.

5.1 Full Description of Material Change

On October 14, the Company announced its third quarter 2021 production and provided an Oyu Tolgoi mine update, which disclosed, among other things, an increase in the Company's base case estimated incremental funding requirement to US\$3.6 billion, deferral of some open-pit metal to beyond 2024, COVID-19 restrictions having impacted both open pit operations and underground development, which, through the end of Q3 2021, have resulted in a cumulative increase of US\$140 million to the estimate of underground development capital included in the Definitive Estimate, and a delayed undercut commencement pending resolution of certain non-technical undercut criteria, including the support of all Oyu Tolgoi LLC board directors to increase the underground development capital and to commence discussions with the project finance lenders, obtaining outstanding, required regulatory approvals and to agree on a pathway to meet OT's long-term power requirements. For a complete description of the material change, please see the press release attached as Schedule A hereto.

5.2 Disclosure for Restructuring Transactions

Not applicable.

6. Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

7. Omitted Information

Not applicable.

8. Executive Officer

Further information regarding the matters described in this Report may be obtained from Dustin Isaacs, Chief Legal Officer and Corporate Secretary, at (514) 848-1567. Mr. Isaacs is an officer through whom an executive officer who is knowledgeable about the details of the matters described herein may be contacted.

9. Date of Report

October 20, 2021

Turquoise Hill announces third quarter 2021 production and provides Oyu Tolgoi mine update

Turquoise Hill Resources Ltd. (“Turquoise Hill” or the “Company”) today announced third quarter 2021 production for Oyu Tolgoi LLC (“Oyu Tolgoi” or “OT”) and provided an update on the Oyu Tolgoi mine.

Q3 2021 production highlights

In Q3 2021, both copper and gold production from the open pit were higher vs Q3 2020 due to higher copper and gold head grade ore from Phase 4B:

- Copper production of 41,935 tonnes, an increase of 16% vs Q3 2020 and an increase of 14% vs Q2 2021
- Gold production of 130,799 ounces, an increase of 256% vs Q3 2020 and an increase of 16% vs Q2 2021
- Copper and gold production guidance for 2021 remains within the ranges of 150,000 to 180,000 tonnes and 400,000 to 480,000 ounces respectively

Mill throughput of 9.34 million tonnes in Q3 2021 was in line with Q2 2021 and 7% lower than Q3 2020. Processing of harder ore as well as lower SAG mill availability, due to maintenance, impacted Q3 2021 mill throughput.

Oyu Tolgoi has advised that the full impacts of the previously disclosed open-pit geotechnical events as well as the on-going impacts of on-site COVID-19 restrictions have resulted in delayed waste movement, which is currently forecast to result in deferral of some open-pit metal to beyond 2024. While opportunities to reduce the impact of this forecast metal deferral are under consideration, related work is not expected to be completed until Q1 2022.

Underground Development

All technical undercut readiness activities have been completed or are on-track for completion, and Oyu Tolgoi has been ready from a technical perspective to commence the undercut since July 2021. However, undercut commencement remains delayed and is pending resolution of certain non-technical undercut criteria, including the support of all OT Board directors to increase the underground development capital and to commence discussions with the project finance

lenders, obtaining outstanding, required regulatory approvals and to agree on a pathway to meet OT's long-term power requirements.

During Q3 2021, underground development progress continued to be significantly impacted by the COVID-19 constraints on-site and in Mongolia, including restrictions on movement of both domestic and international expertise. Despite these on-going constraints, breakthrough of the conveyor decline was achieved in August 2021, and breakthrough of the service decline is forecast by the end of October 2021. Material Handling System 1 ("MHS1") is almost complete; its construction is currently scheduled for completion by the end of October 2021, and its commissioning is scheduled for completion by the end of January 2022. Construction of the first on-footprint truck chute is well advanced and currently forecast to be completed by February 2022. Completion of both MHS1 and the first on-footprint truck chute is broadly in-line with the Definitive Estimate, which is an excellent result given the challenging circumstances. Nevertheless, given the cumulative and on-going impacts of COVID-19, continued delayed commitments resulting from the Definitive Estimate not yet having received the support of all directors of the Oyu Tolgoi Board, as well as the outstanding unresolved non-technical undercut issues, the Company now expects sustainable production for Panel 0 to be delayed until at least January 2023.

Progress on Shafts 3 and 4 has been impacted by quarantine requirements and international travel restrictions related to COVID-19, and no significant development progress on these shafts was made during Q3 2021. Consequently, Oyu Tolgoi has advised that a 9-month delay on Shafts 3 and 4 is currently forecast which, in combination with the reduced underground development progress, will result in delays to the start of Panel 2. Sinking of Shaft 4 recommenced in mid-October, and preparatory work for Shaft 3 sinking is continuing.

Study work continues on Panels 1 and 2 with future mine design refinements expected to reflect the learnings from Panel 0.

COVID-19

Mongolia continued to experience a significant number of cases of COVID-19 during Q3 2021, which continued to limit the ability of Oyu Tolgoi to maintain normal roster changes for its workers. While Oyu Tolgoi did experience an improvement to on-site personnel numbers vs Q2 2021, average workforce numbers remained below 50% of planned requirements during Q3 2021.

COVID-19 restrictions have adversely impacted both open pit operations and underground development, which, through the end of Q3 2021, have resulted in a cumulative increase of US\$140 million to the estimate of underground development capital included in the Definitive Estimate. This increase includes the currently known, incremental, time-related costs of COVID-19 restrictions; however, it does not include any impacts arising from associated schedule delays or delayed commitments caused by the Definitive Estimate not yet having received the support of all the directors of the OT Board, as these are still under assessment. The Company will continue to monitor these costs and will update the market as appropriate.

All workers at Oyu Tolgoi site have had two doses of vaccine, and a third dose program is well advanced. Improvements in quarantine protocols both on-site and off-site have resulted in improvements in restrictions, which resulted in higher workforce numbers in September 2021 while still minimising the spread of COVID-19. A return to normal workforce levels is expected by the end of 2021, and Oyu Tolgoi will continue to cooperate with the Mongolian authorities to implement and maintain control measures to protect the health and well-being of its workers as well as the local community.

Funding

Oyu Tolgoi has provided the Company with preliminary information that the underground delays and open-pit metal deferrals discussed above have caused an increase in the Company's base case estimated incremental funding requirement to US\$3.6 billion. The Company continues to review this preliminary information received from Oyu Tolgoi. While OT has indicated further open-pit mine plan optimization opportunities are under consideration, which could have a favourable impact on the Company's estimated incremental funding requirement, related work is not expected to be completed until Q1 2022.

Negotiations with Government of Mongolia

In September 2021, the updated Resources and Reserves (RR19) was approved by the Minerals Council of Mongolia, and the updated Feasibility Study (OTFS20) will be able to be submitted for assessment once the RR19 registration process progresses further.

Turquoise Hill continues to engage Rio Tinto and various Mongolian governmental bodies to resolve the remaining outstanding non-technical undercut criteria, and the Company remains committed to moving the project forward and ensuring long-term and mutually beneficial solutions to the issues under discussion. Nevertheless, delayed resolution of outstanding issues, as well as the slowing of discussions as a result of the COVID-19 situation in Mongolia, will delay the Company's expected timing for initiation of the undercut. Some contractual commitments for future works on items such as Material Handling System 2 and the Concentrator upgrade have experienced delays, as entering into these commitments is currently pending approval of the Definitive Estimate and related budget uplift by the Oyu Tolgoi Board. Any significant further delay to the initiation of the undercut would result in further, unfavorable impacts to the underground project schedule, including the timing of sustainable production for Panel 0, the timing to commence Panel 2 and the timing and quantum of underground capital expenditure, all of which would materially, adversely impact the timing of expected cash flows from the Oyu Tolgoi underground project thereby further increasing the quantum of Turquoise Hill's estimated incremental funding requirement and would also likely in turn adversely affect the ability of the Company and Oyu Tolgoi to obtain additional funding or re-profile existing debt as contemplated by and/or within the timeframe set out in the Heads of Agreement entered into between the Company and Rio Tinto in April 2021.

Turquoise Hill remains committed to seeking resolution of outstanding issues and remains mobilized in Mongolia to continue discussions with the Government to progress timely resolution

for the benefit of all stakeholders. The Company will continue to monitor the situation, assess any impact of any related delays and update the market as appropriate.

Force Majeure

Oyu Tolgoi concentrate shipment volumes to customers improved during Q3 2021; however, above target inventory levels remained at the end of Q3 2021 as a result of the COVID-19 related Mongolia / Chinese border restrictions that resulted in force majeure being declared from March 30, 2021. Shipments to Chinese customers recommenced on April 15, 2021, and Oyu Tolgoi continues to work closely with Mongolian and Chinese authorities to manage any supply chain disruptions. The force majeure will remain in place until there are sufficiently sustained volumes of convoys crossing the border to ensure Oyu Tolgoi's ability to meet its on-going commitments to customers and to return on-site concentrate inventory to target levels.

Oyu Tolgoi Production Data

All data represents full production and sales on a 100% basis

	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	9 months 2021	9 months 2020	Full Year 2020
Open pit material mined ('000 tonnes)	23,979	23,663	22,588	15,829	22,588	61,005	74,032	97,694
Ore treated ('000 tonnes)	10,072	9,594	9,813	9,401	9,336	28,550	30,606	40,200
Average mill head grades:								
Copper (%)	0.45	0.50	0.56	0.47	0.53	0.52	0.45	0.46
Gold (g/t)	0.21	0.41	0.68	0.50	0.63	0.60	0.18	0.24
Silver (g/t)	1.22	1.16	1.29	1.19	1.29	1.26	1.19	1.18
Concentrates produced ('000 tonnes)	168.5	190.2	201.9	173.2	191.9	567.0	502.9	693.1
Average concentrate grade (% Cu)	21.5	21.9	22.5	21.2	21.9	21.9	21.5	21.6
Production of metals in concentrates:								
Copper ('000 tonnes)	36.3	41.6	45.4	36.7	41.9	124.1	108.0	149.6
Gold ('000 ounces)	37	88	146	113	131	390	94	182
Silver ('000 ounces)	219	231	255	235	249	739	645	876
Concentrate sold ('000 tonnes)	167.9	181.5	186.3	92.6	224.4	503.3	488.1	669.6
Sales of metals in concentrates:								
Copper ('000 tonnes)	34.4	37.9	39.0	19.6	46.4	105.0	99.9	137.8
Gold ('000 ounces)	34	66	111	73	149	333	84	150
Silver ('000 ounces)	201	194	207	106	278	591	566	760
Metal recovery (%)								
Copper	78.9	85.9	86.3	79.7	83.9	83.6	77.4	79.6
Gold	53.7	68.8	72.2	69.3	68.7	70.3	51.0	58.6
Silver	54.6	64.3	65.3	62.5	64.1	64.0	54.0	56.4

Contact

Investors and Media

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Forward-looking statements and forward-looking information

Certain statements made herein, including statements relating to matters that are not historical facts and statements of the Company's beliefs, intentions and expectations about developments, results and events which will or may occur in the future, constitute "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" within the meaning of the "safe harbor" provisions of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements and information relate to future events or future performance, reflect current expectations or beliefs regarding future events and are typically identified by words such as "anticipate", "could", "should", "expect", "seek", "may", "intend", "likely", "plan", "estimate", "will", "believe" and similar expressions suggesting future outcomes or statements regarding an outlook. These include, but are not limited to, statements and information regarding: discussions with, and the nature of the Company's relationship and interaction with, the Government of Mongolia on the continued operation and development of Oyu Tolgoi, including with respect to the Definitive Estimate and the potential termination, amendment or replacement of the Investment Agreement ("IA") or the Oyu Tolgoi Mine Development and Financing Plan ("UDP") as well as the willingness of the Government of Mongolia to further engage in meaningful discussions with the Company, Rio Tinto and Oyu Tolgoi; the willingness and ability of the parties to the IA or the UDP to amend or replace the UDP; the approval or non-approval by the OT Board of funding for a full budget uplift and the likely consequences on the timing and overall economic value of the Oyu Tolgoi project, including significant delays to first sustainable production; the implementation and successful execution of the funding plan that is the subject of the Heads of Agreement between the Company and Rio Tinto entered into in April 2021 (the "HoA") and the amount of any additional future funding gap to complete the Oyu Tolgoi project and the amount and potential sources of additional funding required therefor, all as contemplated by the HoA, as well as potential delays in the ability of the Company and Oyu Tolgoi to proceed with the funding elements contemplated by the HoA as a result of delays in approving or non-approval of a full budget uplift by the OT Board; the expectations set out in the 2020 Oyu Tolgoi Technical Report ("OTTR20"); the timing and ultimate resolution of certain non-technical undercut criteria; the timing and amount of future production and potential production delays; statements in respect of the impacts of any delays on achieving first commercial production the Company's cash flows; expected copper and gold grades; the merits of the class action complaints filed against the Company in October 2020 and January 2021, respectively; the likelihood that the Company will be added as a party to the international tax arbitration brought by Oyu Tolgoi against the Government of Mongolia and the merits of its defence and counterclaim; liquidity, funding sources and funding requirements; the amount of any funding gap to complete the Oyu Tolgoi project; the amount and potential sources of additional funding; the Company's ability to re-profile its existing project debt in line with current cash flow projections; the amount by which a successful re-profiling of the Company's existing debt would reduce the Company's currently projected funding requirements; the Company's ability to raise supplemental senior debt; the timing of studies, announcements and analyses; status of underground development; the causes of the increase in costs and schedule extension of the underground development; the mine design for Panel 0 of Hugo North Lift 1 and the related cost and production schedule implications; the re-design studies for Panels 1 and 2 of Hugo North Lift 1 and the possible outcomes, content and timing thereof; expectations regarding the possible recovery of ore in the two structural pillars, to the north and south of Panel 0; the possible progression of a state-owned power plant ("SOPP") and related amendments to the Power Source Framework Agreement ("PSFA") as well as power purchase agreements and extensions to; the timing of construction and commissioning of the potential SOPP; sources of interim power; the continuing impact of COVID-19, including any restrictions imposed by health or governmental authorities relating thereto on the Company's business, operations and financial condition, as well as delays and the development cost impacts of delays caused by the COVID-19 pandemic; capital and operating cost estimates; mill and concentrator

throughput; the outcome of formal international arbitration proceedings; anticipated business activities, planned expenditures, corporate strategies, and other statements that are not historical facts.

Forward-looking statements and information are made based upon certain assumptions and other important factors that, if untrue, could cause the actual results, performance or achievements of the Company to be materially different from future results, performance or achievements expressed or implied by such statements or information. There can be no assurance that such statements or information will prove to be accurate. Such statements and information are based on numerous assumptions regarding present and future business strategies, local and global economic conditions, and the environment in which the Company will operate in the future, including the price of copper, gold and silver; projected gold, copper and silver grades; anticipated capital and operating costs; anticipated future production and cash flows; the anticipated location of certain infrastructure in Hugo North Lift 1 and sequence of mining within and across panel boundaries; the availability and timing of required governmental and other approvals for the construction of the SOPP; the ability of the Government of Mongolia to finance and procure the SOPP within the timeframes anticipated in the PSFA, as amended, subject to ongoing discussions relating to a standstill period; the willingness of third parties to extend existing power arrangements; the status and nature of the Company's relationship and interactions and discussions with the Government of Mongolia on the continued operation and development of Oyu Tolgoi (including with respect to the causes of the increase in costs and schedule extension of the underground development) and Oyu Tolgoi LLC internal governance (including the outcome of any such interactions or discussions); the willingness and ability of the parties to the IA or the UDP to amend or replace either such agreement; the nature and quantum of the current and projected economic benefits to Mongolia resulting from the continued operation of Oyu Tolgoi; the implementation and successful execution of the funding plan that is the subject of the HoA and the amount of any additional future funding gap to complete the Oyu Tolgoi project as well as the amount and potential sources of additional funding required therefor, all as contemplated by the HoA.

Certain important factors that could cause actual results, performance or achievements to differ materially from those in the forward-looking statements and information include, among others: copper, gold and silver price volatility; discrepancies between actual and estimated production; mineral reserves and resources and metallurgical recoveries; development plans for processing resources; public health crises such as COVID-19; matters relating to proposed exploration or expansion; mining operational and development risks, including geotechnical risks and ground conditions; litigation risks, including the outcome of the class action complaints filed against the Company; the outcome of the international arbitration proceedings; regulatory restrictions (including environmental regulatory restrictions and liability); Oyu Tolgoi LLC or the Government of Mongolia's ability to deliver a domestic power source for the Oyu Tolgoi project within the required contractual time frame; communications with local stakeholders and community relations; activities, actions or assessments, including tax assessments, by governmental authorities; events or circumstances (including public health crises strikes, blockades or similar events outside of the Company's control) that may affect the Company's ability to deliver its products in a timely manner; currency fluctuations; the speculative nature of mineral exploration; the global economic climate; global climate change; dilution; share price volatility; competition; loss of key employees; cyber security incidents; additional funding requirements, including in respect of the development or construction of a long-term domestic power supply for the Oyu Tolgoi project; capital and operating costs, including with respect to the development of additional deposits and processing facilities; defective title to mineral claims or property; and human rights requirements. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements and information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. All such forward-looking statements and information are based on certain assumptions and analyses made by the Company's management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believes are reasonable and appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements or information.

With respect to specific forward-looking information concerning the continued operation and development of Oyu Tolgoi, the Company has based its assumptions and analyses on certain factors which are inherently uncertain. Uncertainties and assumptions include, among others: the timing and cost of the construction and expansion of mining and processing facilities; the timing and availability of a long-term domestic power source (or the availability of financing for the Company or the Government of Mongolia to construct such a source) for Oyu Tolgoi; the implementation and

successful execution of the funding plan that is the subject of the HoA and the amount of any additional future funding gap to complete the Oyu Tolgoi project as well as the amount and potential sources of additional funding required therefor, all as contemplated by the HoA; the status and nature of the Company's relationship, interactions and discussions with the Government of Mongolia on the continued operation and development of Oyu Tolgoi (including with respect to the causes of the increase in costs and schedule extension of the underground development) and Oyu Tolgoi LLC internal governance (including the outcome of any such interactions or discussions); the willingness and ability of the parties to the IA and the UDP to amend or replace either such agreement; the nature and quantum of the current and projected economic benefits to Mongolia resulting from the continued operation of Oyu Tolgoi; the potential impact of COVID-19, including any restrictions imposed by health and governmental authorities relating thereto, as well as the development cost impacts of delays caused by the COVID-19 pandemic; the impact of changes in, changes in interpretation to or changes in enforcement of, laws, regulations and government practices in Mongolia; the availability and cost of skilled labour and transportation; the obtaining of (and the terms and timing of obtaining) necessary environmental and other government approvals, consents and permits; delays and the costs which would result from delays, including delays caused by COVID-19 restrictions and impacts and related factors, in the development of the underground mine (which could significantly exceed the costs projected in OTTR20); projected copper, gold and silver prices and their market demand; and production estimates and the anticipated yearly production of copper, gold and silver at Oyu Tolgoi.

The cost, timing and complexities of mine construction and development are increased by the remote location of a property such as Oyu Tolgoi. It is common in mining operations and in the development or expansion of existing facilities to experience unexpected problems and delays during development, construction and mine start-up. Additionally, although Oyu Tolgoi has achieved commercial production, there is no assurance that future development activities will result in profitable mining operations.

Readers are cautioned not to place undue reliance on forward-looking information or statements. By their nature, forward-looking statements involve numerous assumptions, inherent risks and uncertainties, both general and specific, which contribute to the possibility that the predicted outcomes will not occur. Events or circumstances could cause the Company's actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. Important factors that could cause actual results to differ from these forward-looking statements are included in the "Risk Factors" section in the Company's annual information form for the year ended December 31, 2020 ("AIF"), as supplemented by the "Risks and Uncertainties" section of the Company's management's discussion and analysis for the second quarter ended June 30, 2021 ("MD&A").

Readers are further cautioned that the list of factors enumerated in the "Risk Factors" section of the AIF and in the "Risks and Uncertainties" section of the MD&A that may affect future results is not exhaustive. When relying on the Company's forward-looking statements and information to make decisions with respect to the Company, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Furthermore, the forward-looking statements and information contained herein are made as of the date of this document and the Company does not undertake any obligation to update or to revise any of the included forward-looking statements or information, whether as a result of new information, future events or otherwise, except as required by applicable law. The forward-looking statements and information contained herein are expressly qualified by this cautionary statement.