

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

In re Turquoise Hill Resources Ltd. Securities
Litigation

Civil Action No. 1:20-cv-08585-LJL

CLASS ACTION

AMENDED CONSOLIDATED
COMPLAINT FOR VIOLATIONS OF THE
FEDERAL SECURITIES LAWS

DEMAND FOR JURY TRIAL

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	2
II. JURISDICTION & VENUE.....	10
III. THE PARTIES.....	11
A. Plaintiffs.....	11
B. The Turquoise Hill Defendants.....	15
C. The Rio Tinto Defendants.....	18
D. Non-Party Oyu Tolgoi LLC.....	21
IV. DEFENDANTS MISLEAD INVESTORS CONCERNING THEIR MOST IMPORTANT AND VALUABLE ASSET.....	23
A. Defendants’ Negotiation Of Rio And TRQ’s Interests In The Oyu Tolgoi Mine	23
B. Defendants Restart Work On The Oyu Tolgoi Underground Expansion And Shaft 2	26
C. OT Managers Decry The Work On Shaft 2 As Dangerous, Abysmal, And Necessitating A Rebuild Costing Hundreds Of Millions Of Dollars And Months Of Delay.....	31
D. Numerous Former Oyu Tolgoi Managers Confirm That Defendants’ Publicly Reported Timeline And Budget Were False And Unachievable Before The Beginning Of The Class Period	37
E. Before The Start Of The Class Period, Rio Tinto Hires An Expert To Investigate The Delays And Cost Overruns And Develop A Plan To Address Them	40
F. Rio Tinto’s Longstanding Executive Consulting Firm Independently Identifies Problems With Overestimation And Unethical Conduct At OT And Reports Them To Senior Management	45
G. Rio Tinto’s Expert Informs The Executive Defendants That Oyu Tolgoi Is In Distress And That Construction Is A Year Behind Schedule And Hundreds Of Millions Over Budget.....	48

H.	Defendants Scapegoat Managers Who Told Them About The Shaft 2 Delays And Cost Overruns	51
I.	At The Beginning Of The Class Period, Defendants Falsely Reaffirm That The Oyu Tolgoi Expansion Remained “On Target,” “On Budget,” and “On Track”	55
J.	Rather Than Disclose The Truth, Rio Tinto Develops “Forecast 2” And Continues To Misrepresent That OT Is “On Time And On Budget”	56
K.	Defendants Were Highly Motivated To Conceal The Problems At OT In The Face Of A Burgeoning Scandal That Jeopardized Rio Tinto and TRQ’s Stake In The Mine.....	62
L.	Defendants Attempt To Silence A Whistleblower Who Repeatedly Urged Them To Tell Investors The Truth.....	69
M.	Rio Tinto Terminates The Whistleblower And Attempts To Cover Up Its Misconduct Through A Whitewash Investigation	73
V.	DEFENDANTS ARE FORCED TO DISCLOSE THAT THE OT PROJECT IS MONTHS BEHIND SCHEDULE AND WELL OVER A BILLION DOLLARS OVER BUDGET	76
A.	Defendants Are Forced To Issue A Public Disclosure About The Delays And Cost Overruns After Terminating The Whistleblower—But Continue to Mislead Investors.....	76
B.	News Reports Reveal PWG Review Findings, Disclose That Rio Tinto Is Conducting An Internal Investigation Of Its Oyu Tolgoi Disclosures, And Cast Doubt On Defendants’ Geotechnical Data Explanation	78
C.	Defendants Stun Investors By Disclosing That The OT Expansion’s Cost Will Increase By \$1.2 To \$1.9 Billion And The Schedule Will Be Delayed By 16-30 Months	81
VI.	POST-CLASS PERIOD DEVELOPMENTS.....	86
VII.	ADDITIONAL ALLEGATIONS OF SCIENTER.....	88
VIII.	DEFENDANTS’ MATERIALLY FALSE AND MISLEADING STATEMENTS AND OMISSIONS	101
A.	Defendants Tout The Progress Of The Oyu Tolgoi Underground Project, Concealing \$300 Million In Cost-Overruns And A Year-Long Schedule Delay	102

B.	Defendant Soirat Falsely Reassures Investors That Oyu Tolgoi Is On Budget And On Schedule Two Weeks Before The “Re-Forecast”	111
C.	Defendants Issue A False And Misleading “Reforecast” In Order To Conceal Delays And Reassure Investors That Capital Costs And Schedule Remain In Line	112
D.	Defendants Continue To Reassure Investors That The Project Is On Schedule And On Budget After The False “Re-Forecast”	116
E.	Throughout The End Of 2018 And The Beginning Of 2019, Defendants Continued To Falsely Claim The Underground Project Was On Budget And On Schedule	121
F.	Defendants Falsely Attribute Delays To Later Stage “Understanding” Of “Challenging Ground Conditions,” While Continuing To Conceal Cost Overruns And Reassuring Investors Concerning Budget And Schedule.....	123
G.	Defendants Continue To Misrepresent Delays And Fail To Disclose Cost Overruns, Claiming Delays Are “Absolutely Normal” And Based On New Geotechnical Data	128
H.	Defendants Disclose A 16-30 Month Delay In Sustainable First Production And A \$1.2-\$1.9 Billion Increase In Capital Expenditure	136
I.	Defendants Signed False And Misleading SOX Certifications	138
J.	Defendants’ Risk Factor Disclosures Were False And Misleading.....	139
IX.	LOSS CAUSATION.....	143
X.	CLASS ACTION ALLEGATIONS	146
XI.	INAPPLICABILITY OF STATUTORY SAFE HARBOR	147
XII.	PRESUMPTION OF RELIANCE	148
XIII.	CLAIMS FOR RELIEF	149
COUNT I	149
	For Violations Of Section 10(b) Of The Exchange Act And SEC Rule 10b-5 (Against Defendants Turquoise Hill, Rio Tinto, RTIH, Jacques, Soirat, Quellmann, Colton, and Lane).....	149
COUNT II	152
	For Violations Of Section 20(a) Of The Exchange Act (Against Defendants Rio Tinto, RTIH, Jacques, Soirat, Quellmann, Colton, and Lane).....	152

XIV. PRAYER FOR RELIEF	157
XV. JURY DEMAND	157

1. Plaintiffs the Pentwater Funds (defined in ¶29 below, collectively, “Lead Plaintiff” or “Plaintiffs”), by their undersigned counsel, bring this action for violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (“Exchange Act”), 15 U.S.C. §§ 78j(b) and 78t(a), and Securities and Exchange Commission (“SEC”) Rule 10b-5, 17 C.F.R. § 240.10b-5, against Defendants Turquoise Hill Resources Ltd. (“Turquoise Hill” or “TRQ”), Rio Tinto plc and Rio Tinto Limited (together, “Rio Tinto” or “Rio”), Rio Tinto International Holdings Limited (“RTIH”), Jean-Sébastien Jacques (“Jacques”), Arnaud Soirat (“Soirat”), Ulf Quellmann (“Quellmann”), Luke Colton (“Colton”), and Brendan Lane (“Lane”). Plaintiffs bring these claims on behalf of a class of investors who purchased or otherwise acquired Turquoise Hill securities from July 17, 2018 to July 31, 2019 in domestic transactions or on United States exchanges (as further defined below), inclusive (the “Class Period”), and were damaged thereby.

2. Plaintiffs allege the following upon personal knowledge as to themselves and their own acts, and upon information and belief as to all other matters. Plaintiffs’ information and belief as to allegations concerning matters other than themselves and their own acts are based upon the investigation of Plaintiffs and their counsel Bernstein Litowitz Berger & Grossmann LLP (“Lead Counsel”), including (1) review and analysis of documents filed publicly by Defendants Turquoise Hill and Rio Tinto with the SEC; (2) Turquoise Hill and Rio Tinto press releases and other public statements; (3) transcripts of Turquoise Hill and Rio Tinto investor conference calls; (4) research reports by financial analysts and news reports concerning Turquoise Hill and Rio Tinto; (5) Lead Counsel’s review and analysis of trading data for Turquoise Hill and related documents; (6) other publicly available sources as described below; (7) consultations with relevant experts and consultants; and (8) Plaintiffs’ and Lead Counsel’s communications with and review of documents from former employees of Turquoise Hill, Rio Tinto and contractors who worked at the Oyu Tolgoi

mine in Mongolia (sometimes referred to herein as “OT”), and other sources. Plaintiffs’ and Lead Counsel’s investigation into the factual allegations contained in this complaint is continuing, and many of the relevant facts are known only by Defendants or are exclusively within their custody or control. Plaintiffs believe that substantial additional evidentiary support will exist for the allegations in this complaint after a reasonable opportunity for discovery.

I. INTRODUCTION

3. This case arises from Defendants’ scheme to conceal massive cost overruns and delays concerning the most critical aspect of the sole business of Defendant Turquoise Hill—the development of the Oyu Tolgoi underground mine in Mongolia. The Oyu Tolgoi mine, which is jointly owned by Turquoise Hill and the Government of Mongolia, and operated almost exclusively by Turquoise Hill’s controlling shareholder, mining giant Rio Tinto, is expected to be one of the largest copper mines in the world.

4. Throughout the Class Period, the senior executives of Rio Tinto and Turquoise Hill repeatedly assured investors that progress on that development was at the time “on plan and on budget” and that the deadline for achieving sustainable first production—when the mine would begin generating cash flows—remained intact. In reality, from before the start of the Class Period and at the time of Defendants’ statements, the underground expansion project was many months behind schedule and hundreds of millions of dollars over budget. Ultimately, Turquoise Hill investors incurred massive losses as Turquoise Hill shares lost well over 70% of their value when the true extent of the delays and cost overruns at Oyu Tolgoi came to light—and Defendants were ultimately forced to disclose that the Oyu Tolgoi project was \$1.2 to \$1.9 billion over budget and up to 30 months behind schedule.

5. While Oyu Tolgoi has operated an open pit copper mine since 2013, by far the largest amount of copper ore at the site—and 80% of the mine’s reserve value—is located deep

underground and accessible only by underground mining. Work on drilling the underground mine began in 2010 but was suspended in 2013 due to ongoing disputes between Rio Tinto and the Government of Mongolia concerning the scale of the investment needed, the government's involvement in decision making and other issues, and insufficient project financing.

6. In 2015, Defendant Jacques, who was then head of Rio Tinto's copper division, negotiated with the Mongolian government for Rio Tinto to resume work on the underground mine. Defendant Jacques personally signed the 2015 Oyu Tolgoi mine development and financing plan on behalf of Rio to begin "Phase 2" of the underground expansion—a development that was critical to launching Jacques' surprise ascension to CEO of Rio Tinto in July 2016. The success of the mine was also a key focus for Defendant Jacques during his tenure as CEO at Rio, which touted OT as the "cornerstone" of its copper strategy. As the *Australian Financial Review* put it in a July 2019 article, "Jacques' fortunes past and present are inextricably linked to successful progress at Oyu Tolgoi," and thus both he and Defendant Soirat—Rio's head of copper during the Class Period—were intimately familiar with the actual progress at OT at all relevant times.

7. At the time Rio Tinto reinitiated the underground expansion in October 2016, Defendants publicly reported that the total capital development cost for the mine would be \$5.3 billion and that the first production ramp-up would commence in the first quarter of 2021. That milestone, which Defendants referred to as achieving "sustainable first production," occurs after the "first drawbell" blasting. The first drawbell blasting marks the beginning of large-scale subsurface production mining and necessarily occurs after completion of sufficient development mining—the excavation of shafts and underground tunnels and the related construction work to build both underground and surface infrastructure. Throughout the Class Period, Defendants repeatedly told investors that the underground development was progressing as planned, provided

detailed facts concerning that progress and the number of development kilometers completed, and consistently reaffirmed that everything was on budget and schedule to achieve this milestone.

8. In truth, as soon as work on the underground mine resumed in 2016, the project was plagued with serious delays and cost overruns as a result of deficient engineering, procurement, and construction by Rio Tinto and other Oyu Tolgoi contractors on a critical mine shaft called Shaft 2. Shaft 2 was one of five planned mine shafts at OT but by far its most important, as it was to serve as the main logistics hub for the transportation of personnel and equipment needed to build the remaining mine infrastructure, appropriate ventilation to support increased underground activity, and transportation to convey ore to the surface. But rather than ensure this critical shaft was designed and built properly, the work on Shaft 2 was so incompetent and flawed that its construction presented serious safety risks. As described by numerous former Oyu Tolgoi managers, the initial construction work on Shaft 2 was extremely deficient and dangerous. As a result, OT managers were effectively forced to rebuild much of Shaft 2 from scratch—a project that required workers to replace more than 40,000 bolts and approximately 95% of the steel in the shaft's headframe—and predictably caused costs and schedule delays to skyrocket.

9. At the same time, by no later than 2016, costs on the Oyu Tolgoi underground expansion increased, in part because of procurement practices that the industry veterans in charge of them believed were contrary to industry standards. Moreover, rather than implement a synchronized integration system to ensure coordinated activities between engineering, construction and procurement functions—an absolute necessity for a project of the size and scope of Oyu Tolgoi—there was no such coordination at OT.

10. By no later than 2017, Defendants Jacques and Soirat recognized that the

underground expansion was in severe distress. As recounted by Dr. Maurice Duffy, a former executive coach whose consulting firm, GFI Blackswan, worked as an executive leadership consultant for Rio Tinto for over a decade, problems with the Oyu Tolgoi expansion were identified by Rio Tinto's top management stationed in Mongolia by 2017.

11. In fact, the reports that Duffy's firm received about problems at Oyu Tolgoi were so concerning that he felt compelled to bring them to senior management's attention. To do so, he set up a meeting with Vera Kirikova, Rio's head of human resources who Duffy knew served as an intermediary for Defendant Jacques, on September 6, 2017. In that meeting, Duffy reported the problems he was hearing about Oyu Tolgoi to Kirikova—but was told by Kirikova this was information that Defendant Jacques would not appreciate, and that Duffy would regret reporting it to him. Troubled by this reaction and after reporting “multiple, unprofessional [and] unethical behaviors” by Rio's most senior executives since Defendant Jacques took over as CEO to Rio's Board and chairman—who “took no action” in response—Duffy cancelled his firm's contract with Rio Tinto, even though it was its most valuable contract at the time.

12. According to Duffy—whose firm had been hired by Rio to provide executive coaching services for Rio's senior leadership and who provided such coaching to Defendants Jacques and Soirat for a number of years—Defendant Jacques “knew without a doubt” about the problems at Oyu Tolgoi by 2017. As Duffy explained, Defendant Jacques was very distrustful of other Rio Tinto executives, surreptitiously tracked their work through other intermediaries at Rio Tinto (including Kirikova), and closely followed the developments in Mongolia. According to Duffy, when Defendant Jacques made a surprise visit to Oyu Tolgoi in January 2018, it was because by that time, he knew the “wheels were coming off” of the project.

13. At same time Duffy internally reported these serious ethical concerns to senior

management, in late 2017, Defendant Soirat and Craig Kinnell, the Chief Development Officer for Rio Tinto's Copper and Diamonds division, hired a veteran Oyu Tolgoi contractor, Richard Bowley, to examine the problems at OT and come up with a plan to address them. Bowley was extremely qualified to develop such a plan, as he had earlier worked at Oyu Tolgoi for years at a construction management firm in Mongolia charged with developing the underground study, value, and engineering for Phase 2, and knew many of the key managers at the project. In fact, before he was hired by Rio, Bowley wrote to Kinnell in a July 3, 2017 email that "two out of three of your senior guys on the project have told me Jacobs [Rio's principal contractor at OT] are failing badly," warning that "[w]e both know that mess will lead straight to OTs door in the shape of schedule overruns and cost." Kinnell immediately responded, agreeing that "it is all getting messy Richard and needs intervention to stop it from getting significantly worse."

14. Just as Kinnell had previewed, almost immediately after Bowley was hired by Defendant Soirat and Kinnell in late 2017, Bowley identified hundreds of millions of dollars in cost overruns and it was obvious to him the project was months behind schedule. Consistent with his assignment, Bowley detailed the problems at the mine in a presentation to Kinnell and Rosemary Fagen, who was Vice President for Human Resources for Rio Tinto's Copper & Diamond group and, according to Bowley, served as Defendant Soirat's gatekeeper, at Rio Tinto's London headquarters in February 2018. In that presentation and in subsequent discussions and emails with Defendant Soirat and other senior Rio executives, Bowley directly informed Rio's senior management about the actual cost overruns and massive delays at OT. For example, in an email sent on July 19, 2018, at the start of the Class Period, Bowley wrote to Fagen, Defendant Soirat's gatekeeper, to report that the project was a year behind schedule and hundreds of millions of dollars over budget:

From: Richard Bowley (OT)
Sent: 19 July 2018 05:20
To: Fagen, Rosemary (RTHQ) <Rosemary.Fagen@riotinto.com>
Subject: RE: Call

Latest update.

12 months behind schedule.

\$300mill capital over budget. Expect this to rapidly escalate.

15. Nevertheless, Defendants continued to tell investors during the Class Period that the project remained on schedule to achieve sustainable first production in the first quarter of 2021 and was on budget at a \$5.3 billion total capital cost. In fact, in October 2018, after being told repeatedly by Bowley in emails forwarded by Fagen that the project was over a year behind schedule and hundreds of millions of dollars over budget, Defendant Soirat falsely told investors at a presentation in New York that the OT expansion was “on budget and schedule”—a statement Bowley later described in a sworn statement as “completely untrue” at the time it was made.

16. Rather than disclose the truth, as the delays and cost overruns continued to escalate, Defendants manufactured a false “re-forecast” of the OT expansion that they reported to investors in October 2018 to enable Defendants to continue concealing the project’s true costs. As Bowley internally reported at the time this statement was made, the “re-forecast” was just a way to “make the current position appear more tenable”—and, putting it mildly, was a “little light on the truth.” As one OT manager who had direct responsibility for Shaft 2 throughout the Class Period explained, the notion that the OT expansion was behind schedule but still on budget, as Defendants represented in their public October 2018 re-forecast, was not “accurate at all.” Nevertheless, Defendants’ deception worked, as investors were largely mollified that the nine-month delay announced in October 2018 would not impact the overall cost of the project.

17. Defendants Jacques and Soirat went to such great lengths to conceal the problems at OT because, at the same time the costs and delays at Oyu Tolgoi had spiraled out of control, the Mongolian Government was seeking to renegotiate the terms of the OT agreements. That effort was in part driven by Mongolia's newly-elected president, who had campaigned on the promise to secure better economic terms for Mongolia under the OT agreements. By the start of 2018, Swiss and Mongolian prosecutors had initiated criminal investigations into (and later jailed) several former Mongolian officials responsible for the OT agreements, including the former prime minister who personally negotiated the 2015 agreement with Defendant Jacques at his kitchen table in London. In fact, on March 22, 2018, the Swiss Office of the Attorney General ("OAG") confirmed that Rio was a focus of a criminal bribery investigation into OT, and a Swiss court issued a ruling on March 2, 2018 noting that the OAG's investigation into bribery at OT was supported by the fact that Rio was also the target of a separate bribery inquiry related to its mining assets in Africa.

18. That same month, in March 2018, the Mongolia Government announced the formation of a Parliamentary Working Group that would examine the project's progress together with the Mongolian National Audit Office and the Independent Authority Against Corruption ("IAAC"), which began conducting onsite inspections of the OT mine just before the beginning of the Class Period in June 2018. In light of this burgeoning scandal and the Parliamentary Working Group's review, Rio Tinto senior management—and Defendant Jacques in particular—were highly incentivized to avoid calling attention to problems at the mine. It was clear doing so would jeopardize Rio's fragile position with the Mongolian government, which would likely try to leverage any mismanagement failures to rescind or renegotiate the 2015 agreement.

19. Not wanting to expose the truth, Defendants sidelined Bowley, and later terminated

him and other senior OT managers who tried to force Defendants to disclose the problems with the OT expansion. Undeterred and in an effort to do the job he was hired to do, Bowley continued to urge Rio Tinto executives to address the problems at OT, and emphasized in contemporaneous emails to Defendant Soirat's gatekeeper and Rio's Chief Development Officer for OT throughout the fall of 2018 that Rio Tinto's public statements "watered down the truth," were "inconsistent with the truth (a lie)," and "suicidal."

20. After Bowley's continued internal reports and whistleblowing eventually triggered an internal compliance investigation, Defendants were eventually forced to begin disclosing what was actually happening at OT. In February 2019, two days after Rio Tinto finished an internal compliance investigation into Bowley's whistleblowing, Defendants began to admit that the OT expansion was in trouble.

21. Ultimately, Defendants disclosed that the expansion project required an additional \$1.2 to \$1.9 billion in capital and was 16 to 30 months behind schedule—revelations that caused dramatic declines in the price of Turquoise Hill shares. Indeed, when Defendants finally revealed the project was between \$1.2 billion to \$1.9 billion over budget and 16 to 30 months behind schedule, Turquoise Hill shares plunged by nearly 50% in a single day and analysts slashed their ratings, with one explaining the truth was "far worse than our already conservative estimates."

22. But even then, Defendants refused to come clean, and instead sought to blame the overruns on "unexpected and challenging geotechnical issues" and "complexities in the construction of Shaft 2." In reality, the problems with Shaft 2 were internally documented, well known, and had been the subject of at least two whistleblower complaints—including from Bowley, who sent numerous emails to Fagen (who communicated his concerns to Defendant Soirat) that Rio Tinto's public statements were false. And as former OT geotechnical engineers

have explained, to the extent the delays could be blamed on geotechnical issues, those issues had been documented and known by senior Rio Tinto executives during the Class Period.

23. After the end of the Class Period, the expert hired by Rio Tinto to assess and fix the problems at OT (Bowley) and Defendant Jacques' and Soirat's longtime executive coach (Duffy) reported Defendants' misconduct to securities regulators, including the SEC, the Australian Securities and Investments Commission, the U.K. Serious Fraud Office and Financial Conduct Authority, and the Mongolia Financial Regulatory Commission, and those agencies are now investigating the misconduct alleged in this action. In connection with those investigations, as well as in a separate employment dispute before a U.K. tribunal, Bowley provided a sworn statement in which he attests that Defendants' Class Period statements were "misleading," "completely untrue," and a "lie"—allegations that were confirmed by Lead Counsel's investigation, numerous former OT managers, and scores of internal Rio Tinto documents.

24. Defendants' fraud was also independently confirmed by Duffy, who reported nearly identical concerns to Rio Tinto senior management about Oyu Tolgoi as Bowley did before and during the Class Period. Further, once Duffy learned of the internal investigation Rio was conducting with outside law firm Baker McKenzie into Bowley's whistleblower claims, Duffy urged Rio's Board to reconsider its findings as the investigation "excluded information" reported to Rio by his firm since 2017. But instead of considering that information, Rio's lawyers at Baker McKenzie successfully sought to destroy the data Duffy's firm had collected.

25. Lead Plaintiff brings this action to recover the damages to Turquoise Hill investors caused by Defendants' misconduct and to seek accountability for the violations of the securities laws alleged herein.

II. JURISDICTION & VENUE

26. The claims asserted in this complaint arise under Sections 10(b) and 20(a) of the

Exchange Act, 15 U.S.C. §§ 78j(b) and 78t(a), and Rule 10b-5 promulgated under Section 10(b) by the SEC, 17 C.F.R. § 240.10b-5. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1337 and Section 27 of the Exchange Act, 15 U.S.C. § 78aa.

27. Venue is proper in this District under Section 27 of the Exchange Act, 15 U.S.C. § 78aa, and 28 U.S.C. § 1391(b). Turquoise Hill common stock is and was listed and traded on the New York Stock Exchange and was listed and traded on the NASDAQ during the Class Period, and a substantial part of the events or omissions giving rise to the claims in this action took place in this District, including the dissemination of many of the false statements at issue.

28. In connection with the acts alleged in this Complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including but not limited to, the United States mail, interstate telephone communications and the facilities of the national securities exchanges.

III. THE PARTIES

A. Plaintiffs

29. Plaintiffs consist of the following related private investment funds (collectively referred to as the “Pentwater Funds”), all of which are advised by Pentwater Capital Management LP as investment adviser: PWCM Master Fund Ltd., Pentwater Thanksgiving Fund LP, Pentwater Merger Arbitrage Master Fund Ltd., Oceana Master Fund Ltd., LMA SPC for and on behalf of the MAP 98 Segregated Portfolio, Pentwater Equity Opportunities Master Fund Ltd., and Crown Managed Accounts SPC acting for and on behalf of Crown/PW Segregated Portfolio.

30. The Pentwater Funds purchased TRQ common stock, as well as options and swaps referencing TRQ common stock and constituting economic long positions in the stock, on U.S. exchanges and in domestic transactions during the Class Period and were damaged thereby, as set forth in the attached certification.

31. In addition to their purchases on U.S. exchanges, the Pentwater Funds purchased 70 million TRQ shares on February 19, 2019 pursuant to a “block trade.” The Pentwater Funds placed the order for this transaction from Pentwater Capital’s Evanston, Illinois office, through a broker from TD Securities (USA) LLC, who is licensed with FINRA, Nasdaq, and 52 U.S. states and territories, under an account agreement with terms that show irrevocable liability attached in the United States. The Pentwater Funds’ account documentation with TD Securities (USA) LLC, which was executed in the United States, includes a “Trading Authorization” that authorizes its designated trader to place orders and provides that “[t]he undersigned hereby agrees to indemnify and hold TD Securities (USA) LLC harmless from and pay you promptly on demand any and all losses arising [from transactions by the authorized trader] or debit due thereon.” The Trading Authorization also provides that “[i]n all such purchases, sales or other transactions, or deliveries of securities or payments of monies, you are authorized to follow the instructions of the above named Agents in every respect concerning our account with you.” In addition, the Pentwater Funds paid for the February 19, 2019 trade in U.S. dollars through accounts at Citigroup Global Markets and Credit Suisse Securities (USA) in the United States, with 50 million shares received in the account at Citigroup Global Markets in the United States and 20 million shares in the account at Credit Suisse Securities (USA) in the United States. Thus, the Pentwater Funds incurred irrevocable liability to take and pay for these TRQ shares in the United States, and title to these shares was transferred to the Pentwater Funds in the United States.

32. Similar to the February 19, 2019 “block trade,” the Pentwater Funds purchased 800,000 TRQ shares on September 27, 2018, 1 million TRQ shares on September 28, 2018, 2 million TRQ shares on October 3, 2018 and 2 million TRQ shares on October 5, 2018 from its Evanston, Illinois office through a broker at TD Securities (USA) LLC under the same agreement

and Trading Authorization described in ¶31 above. All of these transactions were conducted in U.S. dollars and were paid for and the shares were received in accounts located in the United States. Specifically, the Pentwater Funds paid for and received the shares on September 27, 2018 and October 3, 2018 through an account at Citigroup Global Markets in the United States. The Pentwater Funds paid for and received 700,000 of the shares purchased on September 28, 2018 through an account at UBS Securities LLC in the United States, and purchased and received 300,000 shares through an account at Credit Suisse Securities (USA) LLC in the United States. The Pentwater Funds paid and received for 1.5 million of the shares purchased on October 5, 2018 through an account at UBS Securities LLC in the United States, and purchased and received 500,000 shares through an account at Credit Suisse Securities (USA) LLC. Thus, the Pentwater Funds incurred irrevocable liability to take and pay for these TRQ shares in the United States, and title to these shares was transferred to the Pentwater Funds in the United States.

33. On July 9, 2019, the Pentwater Funds bought a total of 22,150,000 shares of TRQ pursuant to a separate “block trade.” Pentwater Capital placed the order from its Evanston, Illinois office. The executing broker was BMO Capital Markets Corp., a U.S. broker-dealer, and the individual broker who agreed to the trade works for BMO Capital Markets in Chicago and is licensed with FINRA, Nasdaq, the NYSE, and 17 US states and territories. The Pentwater Funds paid for the trade in U.S. dollars through accounts at UBS Securities LLC and Credit Suisse Securities (USA) LLC in the United States. The Pentwater Funds received 14,362,500 shares in the account at UBS Securities in the United States and 7,787,500 shares in the account at Credit Suisse Securities (USA) in the United States. Pentwater Capital’s account documentation with BMO Capital Markets provides that transactions can be “executed orally, in writing or through an electronic order facility”; that Pentwater Capital “authorizes [BMO Capital Markets] to execute

orders for [Pentwater] as transmitted orally, in writing or through an electronic order facility”; and that Pentwater Capital, “whether placing orders orally, in writing, or through an electronic order facility, will be responsible for accurate and valid placement of orders.” In addition, the agreement is governed by New York law, and BMO Capital Markets’ address in the agreement is in New Jersey. In addition, the Pentwater Funds paid for the July 9, 2019 trade in U.S. dollars through accounts at Credit Suisse Securities (USA) and UBS Securities in the United States, with 7,787,500 shares received in the account at Credit Suisse Securities (USA) in the United States and 14,712,500 shares in the account at UBS Securities in the United States. Thus, the Pentwater Funds incurred irrevocable liability to take and pay for these TRQ shares in the United States, and title to these shares was transferred to the Pentwater Funds in the United States.

34. The Pentwater Funds also acquired options to acquire TRQ common stock and swaps referencing TRQ common stock. All of the Pentwater Funds’ purchases of TRQ common stock and options and swaps referencing TRQ common stock were domestic transactions in the United States. The Pentwater Funds’ transactions in Turquoise Hill stock options and equity swaps reference the U.S. (not Canadian) symbol for Turquoise Hill stock. The Pentwater Funds placed orders for Turquoise Hill options from the United States with a United States counter-party, which transacted on a United States-based securities exchange, and upon exercise or assignment, acquired Turquoise Hill United States-listed stock. The swap contracts were entered into by Pentwater Capital on behalf of the Pentwater Funds in the United States pursuant to contracts governed by New York law under which irrevocable liability attached at the time of the placement of the order. The swaps orders were placed by Pentwater Funds personnel located in the United States with U.S.-licensed brokers, and U.S. dollar payment was made, title was transferred and irrevocable liability was incurred under the relevant contracts, and the securities were received in

accounts located in the United States. With respect to the swaps transactions, Pentwater Capital's placement of telephonic orders to purchase the swaps constituted a binding contract under the terms of the relevant contracts between Pentwater Capital and the swaps counterparty, industry practice, or both.

35. All of the Pentwater Funds' transactions in Turquoise Hill securities were executed by the Pentwater Funds in reliance on the integrity of the market price of Turquoise Hill securities and the veracity of Defendants' public statements and financial disclosures.

B. The Turquoise Hill Defendants

36. Defendant Turquoise Hill is a mineral-exploration and development company headquartered in Montreal, Quebec, Canada, and a majority-owned subsidiary of Rio Tinto. Turquoise Hill's sole business is the operation and development of the Oyu Tolgoi copper-gold mine in southern Mongolia, the Company's only material mineral-resource property. Turquoise Hill was previously known for years as Ivanhoe Mines until 2012, when Rio Tinto acquired a majority interest in the company and renamed it Turquoise Hill.

37. Throughout the Class Period, Rio Tinto owned slightly over 50% of the common stock of Turquoise Hill, with the remainder of its common stock publicly traded and owned by investors like Pentwater. From before the Class Period and to the present, Rio Tinto has exercised near-total control over Turquoise Hill through control over the election of all members of TRQ's Board of Directors and the selection and appointment of TRQ's executive officers, all but one of whom have been employees of Rio Tinto. Further, TRQ has a majority vote policy in which any director who receives more "withheld" or "abstain" votes than "for" votes will be expected to tender his or her resignation—meaning Rio can block any nomination to the Board or force a resignation. In fact, after the end of the Class Period and after this lawsuit was filed, Rio intervened to bring about the resignation of the sole executive officer who was not a Rio employee during the

Class Period—Defendant Quellmann—after he took actions in support of TRQ’s minority shareholders that were contrary to Rio’s interests.

38. Further, from before the Class Period to the present, Rio Tinto has also exercised near-total control over the Oyu Tolgoi project through its contractual authority as manager of the project under the agreements between the Mongolian Government, Rio Tinto, and TRQ, as well as through Rio’s control over TRQ. Indeed, Rio lists TRQ as one of its principal subsidiaries and consolidates TRQ’s financials in its own financial statements. During the Class Period, TRQ represented one of Rio’s largest operating assets, a substantial portion of the project financing for OT was held on Rio’s books, and Rio earned a 2.5% management fee for providing certain guarantees on that project financing. For example, as of December 31, 2017, TRQ had cash and cash equivalents of over \$740 million deposited with Rio, which charged interest at rates equivalent to those offered by financial institutions or short-term corporate debt on those amounts, and in 2017 paid Rio approximately \$20.5 million in managements fees for amounts drawn under the project financing facility.

39. Turquoise Hill’s stock trades on the New York Stock Exchange and the Toronto Stock Exchange (and previously also traded on the Nasdaq) under the ticker symbol “TRQ.” In offering documents for its offerings of securities in the United States, Turquoise Hill has appointed an agent for service of process in New York and has stated that it “has been advised by its Canadian counsel, Norton Rose Fulbright Canada LLP, that a judgment of a U.S. court predicated solely upon civil liability under U.S. federal securities laws or the securities or blue sky laws of any state within the United States would probably be enforceable in Canada if the U.S. court in which the judgment was obtained assumed jurisdiction on the same basis that a court in Canada would assume jurisdiction.” As alleged in ¶¶264-378, Turquoise Hill made false and misleading

statements about the Oyu Tolgoi project in SEC filings and other statements disseminated in the United States while its shares traded on the NYSE and Nasdaq in the United States.

40. Defendant Ulf Quellmann (“Quellmann”) was the Chief Executive Officer of Turquoise Hill from August 1, 2018 until he was forced to resign by Rio Tinto on March 3, 2021. Before becoming the CEO of Turquoise Hill, Quellmann was Vice President of Strategic Projects, Copper and Diamonds at Rio Tinto from March 2018 to July 2018 and was the Chief Financial Officer, Copper and Diamonds at Rio Tinto from August 2016 to February 2018. He had been a member of the Board of Turquoise Hill since May 2017. Defendant Quellmann served on the Board of Directors of OT, along with Defendants Soirat, Colton, and Lane throughout the Class Period. Throughout the Class Period, Quellmann made false and misleading statements concerning the Oyu Tolgoi underground development, including statements related to the budget and schedule for completion of the project.

41. Defendant Luke Colton (“Colton”) has been the Chief Financial Officer of Turquoise Hill since October 9, 2017. Defendant Colton also briefly served as Turquoise Hill’s interim CEO after Turquoise Hill unexpectedly announced former CEO Jeff Tygesen’s resignation on May 29, 2018 and before Defendant Quellman assumed that role at the beginning of the Class Period. Colton has worked for Rio Tinto since 2004 in a variety of business units, and was employed by Rio Tinto while he was seconded to Turquoise Hill during the Class Period. Defendant Colton served on the Board of Directors of OT, along with Defendants Soirat, Quellmann and Lane throughout the Class Period. Throughout the Class Period, Colton made false and misleading statements concerning the Oyu Tolgoi underground development, including statements related to the budget and schedule for completion of the project.

42. Defendant Brendan Lane (“Lane”) became Turquoise Hill’s Vice President,

Operations and Development in February 2016 and unexpectedly resigned after the first partial corrective disclosure of the fraud alleged in this action, in March 2019. He was Finance Director of Rio Tinto Copper's Minera Escondida Limitada and Grasberg operation from 2013 to January 2016, earlier held various commercial roles in Rio Tinto's Copper and Coal divisions, and was a Rio Tinto employee while seconded to Turquoise Hill during the Class Period. Defendant Lane served on the Board of Directors OT, along with Defendants Soirat, Quellman, and Colton throughout the Class Period. Throughout the Class Period, Lane made false and misleading statements concerning the Oyu Tolgoi underground development, including statements related to the budget and schedule for completion of the project.

43. Defendants Quellmann, Colton, and Lane are sometimes referred to herein as the "Turquoise Executive Defendants."

C. The Rio Tinto Defendants

44. Defendant Rio Tinto, which consists of Rio Tinto plc (a United Kingdom company) and Rio Tinto Limited (an Australian company), is one of the world's largest metals and mining companies. Rio Tinto has joint head offices at 6 St. James's Square, London, SW1Y 4AD, United Kingdom and in Melbourne, Australia. Rio Tinto's primary business is the extraction of minerals. As alleged in ¶¶264-378, Rio made false and misleading statements about the Oyu Tolgoi project and TRQ in SEC filings and other statements disseminated in the United States while TRQ's shares traded over the Nasdaq and the NYSE in the United States.

45. Defendant Rio Tinto International Holdings Limited ("RTIH"), a wholly-owned subsidiary of Rio Tinto, is incorporated in England and Wales and its principal executive offices are located at the same London address as Rio's at 6 St. James's Square, London, SW1Y 4AD, United Kingdom. Rio Tinto exercised its control of TRQ and OT through RTIH. As stated by Turquoise Hill in its Forms 40-F for the years ended December 31, 2017 and December 31, 2018:

RTIH, as the holder of a majority of the [TRQ] Common Shares, as manager of Oyu Tolgoi, and as manager of a substantial portion of Turquoise Hill's receivables and liquid asset deposits, has the ability to exert a significant degree of control over [TRQ], Oyu Tolgoi LLC and Oyu Tolgoi.

RTIH, a wholly-owned subsidiary of Rio Tinto, together with other Rio Tinto affiliates, owns a majority of the outstanding [TRQ] Common Shares and can exercise its voting power to elect all of the members of the Board of Directors, subject to applicable securities legislation. RTIH can also exercise its majority voting power to unilaterally pass any ordinary resolution submitted to a vote of [TRQ]'s shareholders, except for resolutions in respect of which RTIH is an interested party and for which disinterested shareholder approval is required. In addition, under the HoA [i.e., the December 2010 Heads of Agreement between Turquoise Hill and RTIH], RTIH was appointed as manager of Oyu Tolgoi which provides RTIH with responsibility for the management of Oyu Tolgoi.

RTIH is also able to exert a significant degree of control over the management, development and operation of Oyu Tolgoi, as well as [TRQ], through a series of governance mechanisms and restrictive covenants established under the Private Placement Agreement, the HoA and other agreements entered into with Rio Tinto. These include the Technical Committee established under the Private Placement Agreement and the Operating Committee established under the HoA, through which RTIH is able to control decisions respecting the business of Oyu Tolgoi LLC subject to a veto of [TRQ] in respect of certain special matters.

46. Among other things, Rio Tinto's control of OT and Turquoise Hill was effectuated in part through the 2011 Amended and Restated Shareholder Agreement ("ARSHA"), which provided Rio Tinto with the ability to cause OT to raise funds from Turquoise Hill through the issuance of common equity, and required Turquoise Hill to deposit unused funds for the construction of the Oyu Tolgoi mine onto Rio Tinto's balance sheet. Turquoise Hill and OT's results are consolidated into and reported in Rio Tinto's financial statements, and their operations accounted for approximately \$1 billion in gross revenues and \$250 million in earnings reported by Rio Tinto every year during the Class Period. In all, Rio Tinto has directly received more than \$1.5 billion in compensation from OT and Turquoise Hill for its work at Oyu Tolgoi and related financings over the past decade.

47. Defendant Jean-Sébastien Jacques (“Jacques”) was the Chief Executive Officer of Rio Tinto from July 2016 to December 2020. He first joined Rio Tinto in 2011 and was appointed as the head of its copper business in 2013 and as the head of its copper and coal businesses in February 2015. He became deputy CEO in March 2016 and CEO in July 2016, largely as a result of his work in negotiating with the Mongolian government to restart underground development at Oyu Tolgoi. Throughout the Class Period, Jacques made false and misleading statements concerning the Oyu Tolgoi underground development, including statements related to the budget and schedule for completion of the project. In September 2020, after numerous scandals involving Rio’s conduct during Jacques’ tenure as CEO, including the revelation of the delays and cost overruns at the Oyu Tolgoi project, Rio announced that Jacques would leave Rio by the earlier of March 2021 or the appointment of his successor, and he was replaced and left Rio in December 2020.

48. Defendant Arnaud Soirat (“Soirat”) served as the chief executive of Rio Tinto’s Copper & Diamonds product group from 2016 to December 2020. Before becoming the chief executive of the Copper & Diamonds group, Soirat served as president and chief executive officer of Rio Tinto Aluminum Primary Metal group. Soirat served on the Board of Directors of OT, along with Defendants Quellmann, Lane and Colton, throughout the Class Period. Throughout the Class Period, Soirat made false and misleading statements concerning the Oyu Tolgoi underground development, including statements related to the budget and schedule for completion of the project. In December 2020, Soirat was appointed as Rio’s Chief Operating Officer.

49. Defendants Jacques and Soirat are sometimes referred to herein as the “Rio Executive Defendants” and, together with the Turquoise Executive Defendants, as the “Executive Defendants.”

D. Non-Party Oyu Tolgoi LLC

50. Oyu Tolgoi LLC (sometimes referred to herein as “OT”) is the company that owns the Oyu Tolgoi mine at the center of this action. Turquoise Hill owns 66% of the equity in OT, while the Government of Mongolia, through an entity called Erdenes Oyu Tolgoi LLC, owns 34%. Rio Tinto owns just over 50% of Turquoise Hill’s common stock, manages the Oyu Tolgoi project under agreements between OT, Rio Tinto, and the Government of Mongolia, and exercises near-total control over both the project and Turquoise Hill, including control over Turquoise Hill’s public statements about OT.

51. In fact, Turquoise Hill explicitly agreed with Rio Tinto that “any and all public disclosure regarding the OT project,” or “OT Disclosure,” would be “consistent with the information provided by the Rio Tinto Manager,” RTIH, and that Turquoise Hill would “not file or issue any OT Disclosure without providing the Rio Tinto Manager with a reasonable opportunity to review and comment thereon.” This agreement, which was documented in an April 2012 memorandum of agreement (“2012 MoA”), followed similar agreements providing Rio Tinto with control over Turquoise Hill’s public disclosures concerning OT. For example, Rio Tinto required Turquoise Hill to provide Rio Tinto and its counsel the opportunity to review and comment on drafts of public filings related to some of the initial financing agreements and transactions related to Oyu Tolgoi, including in the Heads of Agreement (“HoA”) dated December 8, 2010. Further, the ARSHA requires Turquoise Hill to comply with confidentiality requirements established by OT’s Board of Directors (which is controlled by Rio), and Turquoise Hill acknowledges in its Shareholder Engagement Policy that Turquoise Hill’s governance structure is

founded and limited by its contractual agreements with Rio Tinto, including the ARSHA.¹

52. As set forth above, Rio and RTIH also control decisions concerning OT's business through its Board of Directors—which during the Class Period included as directors Defendants Quellmann, Lane, Colton and Soirat—and the Board's Operating Committee, which sets the resolutions to be voted on at OT Board of Director meetings. The Operating Committee, which is composed of two Turquoise Hill nominees and two RTIH nominees, determines what resolutions will be considered by the Board by majority vote, with the exception of certain "special matters." One of the RTIH nominees serves as Chairman and holds the deciding vote in the case of a tie. As a result, Rio had the ability to determine the outcome of all Operating Committee decisions, and thus the agenda OT Board. Further, as noted above, Rio had the ability to determine the composition of TRQ's Board and management, and through the contractual arrangements described above had control over Turquoise Hill's public disclosures about OT. As a result of this arrangement, the leadership of OT reported to the Executive Defendants, and Rio was the maker of both its own and Turquoise Hill's false and misleading statements and omissions alleged herein.

53. Due to this relationship—*i.e.*, Rio Tinto's near total-control over the operations of Oyu Tolgoi, its controlling stake in Turquoise Hill (whose sole asset and business is OT), and Rio Tinto's control over Turquoise Hill's public disclosures about OT—investors and analysts looked to the public statements and representations of both Turquoise Hill and Rio in assessing investments in Turquoise Hill. In fact, Turquoise Hill repeatedly noted that much of the information it conveyed about OT was provided by Rio Tinto, so it was natural for investors to consider Rio Tinto and Rio executives' public statements about the project—indeed, Rio was

¹ In September 2014, Rio Tinto and Turquoise Hill entered into a Non-Disclosure Agreement that consolidated pre-existing confidentiality provisions contained in other agreements between Turquoise Hill and Rio Tinto, including the 2012 MoA.

required to report TRQ and OT's results and operations as part of its own financial reporting. And not surprisingly, as set forth below, Rio Tinto and Turquoise Hill's statements about OT were consistent throughout the Class Period.

54. Analysts covering Turquoise Hill routinely cited public statements by Rio in their reports about Turquoise Hill. For example, TD Securities Inc. wrote in a January 22, 2018 report about TRQ that "Rio Tinto, Turquoise Hill's majority shareholder (50.8%), announced plans to further strengthen its presence in Mongolia by establishing a new office in Ulaanbaatar and expanding its national employee numbers to around 80 through the course of 2018," noted that "Rio Tinto CEO J.S. Jacques commented in the announcement that 'Mongolia is one of Rio Tinto's most strategically important markets,'" and that, "[i]n our view, the move by Rio Tinto to increase its investment in Mongolia is a clear sign that the company is committed to the long-term future in Mongolia and should help ease investor concerns over any near-term political risks." Similarly, Canaccord Genuity Capital Markets issued a report about TRQ on February 27, 2019 entitled "OT scope change—context from the RIO call" that reported on Rio's statements about the delays in the underground expansion project at Oyu Tolgoi. Thus, the market looked not only to TRQ but also to Rio and its executives for material information about TRQ.

IV. DEFENDANTS MISLEAD INVESTORS CONCERNING THEIR MOST IMPORTANT AND VALUABLE ASSET

A. Defendants' Negotiation Of Rio And TRQ's Interests In The Oyu Tolgoi Mine

55. "Oyu Tolgoi," which means "Turquoise Hill" in Mongolian, is the name of a large copper deposit in Mongolia. A small amount of the copper ore is near the surface and is accessible to surface mining, but most of the ore is deep underground and is accessible only to deep subsurface mining. When fully developed, the Oyu Tolgoi mine will be one of the largest copper

mines in the world.²

56. The success of the OT mine was critical to both Turquoise Hill and Rio Tinto. The OT mine was not only the sole business and asset of TRQ but touted by Rio Tinto as the “cornerstone” of its copper strategy and key to its future. To explain, while Rio Tinto had historically enjoyed healthy margins from its vast iron ore resources, by 2016, the outlook for iron ore had dampened as the world’s largest purchaser—China—was expected to increasingly rely on recycling rather than importing fresh ore.

57. The demand for Copper, by contrast, was projected to grow dramatically given its increasingly widespread use in electric vehicles, renewable energy systems, and the “electrification of everything”—the phenomenon described by Defendant Soirat and others during the Class Period in which electric technologies were expected to replace combustible carbon-dioxide emitting energy sources like coal. As Defendant Jacques told investors at a Bloomberg conference in October 2015, “We will see a new metals age, with copper at the center.”

58. The Executive Defendants—including Defendants Jacques, Soirat, and Quellmann—were intimately involved in the development of Oyu Tolgoi and understood in exacting detail the challenges to bringing the mine to full production, including the construction and development of Shaft 2. Indeed, in 2015, before the Class Period, Defendant Jacques and Soirat led the negotiations with the Mongolian government to obtain Rio Tinto and Turquoise Hill’s rights to mine the deposit and establish the financial and other terms for the underground mine. At that same time, Defendant Quellmann drafted many of these agreements in his capacity

² The ore deposit also includes smaller amounts of gold, but enough gold to make Oyu Tolgoi the fourth largest gold mine in the world when fully developed.

as CFO of the copper division of Rio Tinto.³

59. Rio Tinto's and Turquoise Hill's interests in Oyu Tolgoi were first acquired in 2009, when the Government of Mongolia signed an investment agreement with Rio Tinto and Turquoise Hill (which was then called Ivanhoe Mines) for the development of the then-undeveloped Oyu Tolgoi mine. (Ivanhoe Mines had begun initial work on the mine as early as 2001.) The agreement gave Mongolia a 34% stake in Oyu Tolgoi LLC, which owns the mine, and Turquoise Hill/Ivanhoe Mines a 66% stake.

60. That same year, Ivanhoe Mines completed the first of five planned deep, large-diameter concrete-lined shafts—Shaft 1—a 1,385-meter-deep shaft to be used for preliminary exploratory and access work and services on the underground-mine project at Oyu Tolgoi. Work on a much larger shaft—Shaft 2—commenced by Ivanhoe Mines in 2007 as part of the development of the underground mine. Work on Shaft 2 was conducted in 2007 and again in 2010-13, when the sinking reached a depth of 1,167 meters.

61. But progress on Shaft 2 and underground expansion at Oyu Tolgoi came to an abrupt halt in 2013. While the Oyu Tolgoi mine had begun shipping copper concentrate from surface-mining operations to customers by July 2013, the underground work and funding for the project's underground-expansion phase came to a standstill in August 2013 amid a dispute between Oyu Tolgoi LLC and the Mongolian Government over financing and tax payments. At that time, Rio Tinto announced it would lay off as many as 1,700 employees and contractors—about 90% of whom were Mongolian nationals—as it negotiated with the Mongolian government over the scale of the investment needed, the number of Mongolians working on the project, and the government's

³ Defendant Quellmann's recently announced replacement, current TRQ CEO Steeve Thibeault, led those negotiations on behalf of Turquoise Hill as a seconded Rio employee and TRQ's CFO from 2014 to 2017.

involvement in decision making and other issues.

62. In 2015, the then head of Rio Tinto’s copper business—who was later the CEO of Rio during the Class Period—Defendant Jean-Sébastien Jacques, resuscitated the development of the mine. Jacques both served as a principal negotiator for the agreement with the Government of Mongolia and, in May 2015, helped orchestrate a financing agreement between Rio Tinto, Turquoise Hill, and the Government of Mongolia that settled their disputes and allowed Rio to resume underground development of the Oyu Tolgoi mine. That deal, signed in Dubai in December 2015, included a \$4.4 billion financing plan for the project with 20 international banks and financial institutions that Jacques personally negotiated with then Prime Minister Chimed Saikhanbileg, including at an October 2014 meeting over dinner at Jacques’ home in London.

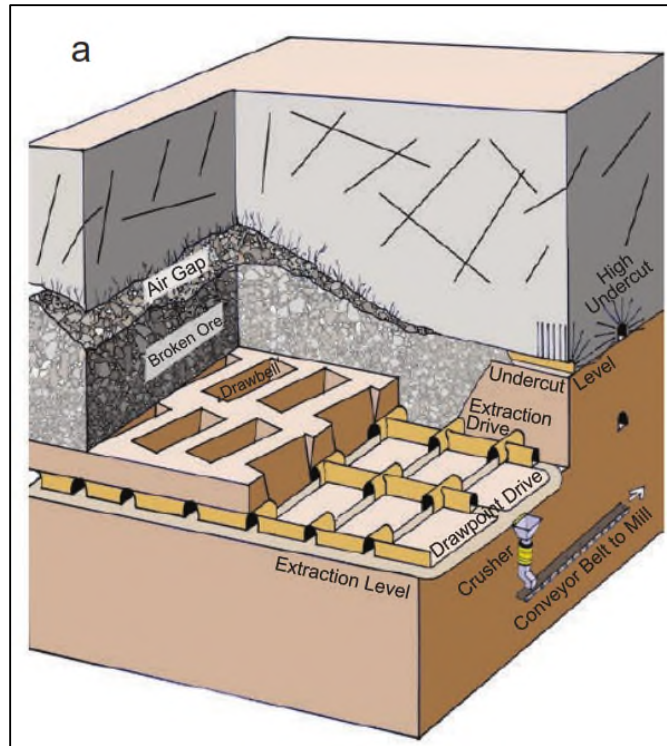
63. In large part as a result of Defendant Jacques’ efforts, the OT underground expansion was reinitiated in 2016. In May 2016, the Government of Mongolia gave Oyu Tolgoi LLC formal notice to restart second-phase underground construction and Rio Tinto, the Government of Mongolia, and Turquoise Hill publicly announced the approval of the \$5.3 billion development of the Oyu Tolgoi underground mine. Two months later, in July 2016, Defendant Jacques became the CEO of Rio Tinto, largely on the basis of his success in negotiating with the Government of Mongolia and the lenders for the Oyu Tolgoi project, which journalists described as his “flagship project” and “claim to fame at Rio.”

B. Defendants Restart Work On The Oyu Tolgoi Underground Expansion And Shaft 2

64. The planned development of the underground mine called for five shafts reaching mining levels located approximately 1,300 meters below the surface, as well as 203 total kilometers of lateral tunnels extending from the bottom of the shafts underneath and around the orebody.

65. These long lateral tunnels are necessary because the underground mine at Oyu Tolgoi was to be developed using a mining method called “panel caving,” a version of “block caving.” Cave mining methods—generically referred to as “block caving”—have become the preferred mass underground mining options for large, regularly shaped mineral deposits that are too deep to mine by open pit, and were particularly suitable for mining Oyu Tolgoi. As noted in the 2016 Technical Report, the “weak, massive nature of the orebody and its location between 700m and 1400m below surface make it well suited both geotechnically and economically to the large-scale caving method of underground mining”—a method that required a large early capital investment but offered a highly productive means of mining the ore with low operating costs.

66. In block caving, the mineral ore is undercut to initiate the collapse or caving process. The undercut zone is then drilled and blasted progressively, with some of the broken ore drawn off to create a void into which initial caving of the overlying ore can take place. As additional broken ore is drawn following cave initiation, the cave propagates upward through the ore deposit, or “block,” until the overlying rock breaks or caves under its own weight, and surface subsidence eventually occurs. Broken ore is removed through an extraction level developed below the undercut level and connected to it by drawbells, through which the ore gravitates to drawpoints on the extraction level where the ore is then conveyed to tunnels or shafts to be brought to the surface, as shown below:



67. A variation of block caving is panel caving, which divides the ore into sections and extracts it in a similar fashion to block caving. Panel caving allows the extraction of very large orebodies by dividing them into “panels,” which are mined progressively. The fundamental difference between the methods is that block caving produces from the full orebody footprint, while in panel caving the active caving zone moves across the panel—i.e., while one end is being undercut, the other end is producing. Once a panel becomes depleted, the adjacent panel is mined in sequence until the orebody is exhausted. Like the primary benefits of block caving, panel caving can offer low operating costs and lower development costs due to its progressive approach.⁴

68. Caving techniques are often chosen based on their high production rates that can be achieved at consistently low costs. Cave mines are also relatively simple to operate and therefore

⁴ See, e.g., Gideon Chitombo, Importance of geology in cave mining, SEG Newsletter 119, p.1 & 13-21 (2019).

do not require an extensive team of specialists or skilled workers, especially considering that typically only limited further drilling is required once the draw-points are set up. If the draw-points and handling facilities are correctly implemented for the specific orebody, then cave mining is generally the most cost-effective way of mining subsurface—even if the initial mine development is cost-intensive. As discussed in the 2016 Technical Report, Hugo North, the principal orebody at Oyu Tolgoi, was considered to be “highly suitable for the cave method of mining.”⁵

69. In any block-caving operation, the construction of appropriate shafts is critical. In an underground mine, a properly constructed shaft is essential for moving people, equipment, supplies, and mined ore up and down between the surface and the underground mining area. Building a mine shaft requires first drilling and blasting to make the hole, and then inserting concrete “sets” or lining and associated steelwork to make the shaft suitable for moving people and materials up and down. A mine’s schedule requires placing a certain number of sets per day to stay on schedule.

70. By the start of the Class Period, the key to the success of Oyu Tolgoi’s underground expansion—and thus the success and profitability of the mine—was the construction of Shaft 2. In fact, as confirmed by numerous former OT employees, internal Rio documents, and Defendants themselves, the whole underground-expansion project depended on Shaft 2 being delivered on time, as Shaft 2 would serve as the main logistics hub for both personnel and equipment. When completed, Shaft 2 would allow a further 350 people to reach underground work (each time the transport “cages” went up and down), bring construction materials underground, and, equally importantly, enable workers to remove muck (i.e., rock or blasted ore) away from the lateral

⁵ 2016 Technical Report at 16.2.21, p. 303.

development of the mine. Further, Shaft 2 would be able to bring workers and materials up and down the shaft at a speed of up to 59 kilometers per hour. To illustrate, just in terms of labor, Shaft 2 would increase mining expansion and productivity by at least a factor of five, enabling 350 workers to descend 1.3 kilometers in two minutes, as compared to Shaft 1, which could only transport 60 workers. Bowley estimated that if Shaft 2 was not delivered on time, the planned underground lateral development goal of 16km per year would be reduced to at best 10 to 11km—a massive decrease in underground development rates.

71. Defendants made clear that the single “most important value driver for Turquoise Hill is to deliver on the underground development timetable and production ramp-up schedule,” and that the development of Shaft 2 was the lynchpin of ensuring that timetable would be met. That timing was critical to the mine’s profitability in light of the fact that the global copper supply was expected to return to a structural deficit by early 2021. As Defendant Jacques told investors in May 2016, “production from the Oyu Tolgoi will commence at a time when copper markets are expected to face a structural deficit”—enabling Rio Tinto and Turquoise Hill to capitalize on the mine’s copper production just as copper prices were rising. In fact, in the first part of 2021, copper has approached near all-time highs and prices not seen for nearly a decade—i.e., at the very time OT was supposed to have reached first sustainable production under the timeline represented to TRQ investors throughout the Class Period. As a result of the delays that were concealed from investors throughout the Class Period, TRQ may be unable to capitalize on this market dynamic.

72. As former Turquoise Hill CEO Jeff Tygesen explained on a November 2017 investor call, Turquoise and Rio were intently focused on “Shaft 2 development including further mass excavation and final sinking before 2018 fit-out” because “Shaft 2 is key to future increases in lateral development.” Tygesen assured investors that the “sinking of Shafts 2 and 5 continue to

move deeper” and that TRQ “maintain[ed] our expectation of first draw bell around mid-2020 and first sustainable production in early 2021.”

C. OT Managers Decry The Work On Shaft 2 As Dangerous, Abysmal, And Necessitating A Rebuild Costing Hundreds Of Millions Of Dollars And Months Of Delay

73. There are three key steps in building a mine: engineering, procurement, and construction management, often abbreviated as “EPCM.” At a high level, under an EPCM model, engineering personnel tell the procurement personnel what to buy so that the construction personnel can then complete the project. Poor execution of any of these functions can cause and compound problems in subsequent stages, resulting in delays and cost overruns. At Oyu Tolgoi, Rio Tinto’s engineering of Shaft 2, procurement of supplies for the shaft, and construction of the shaft were all severely flawed and caused significant delays and cost overruns from the outset of the renewed work on the underground mine in 2016.

74. In June 2016, Rio selected Jacobs Engineering Group Inc. (“Jacobs”) for the principal EPCM contract for the underground expansion at Oyu Tolgoi. The first step in building a shaft for an underground mine is engineering, *i.e.*, designing the shaft and the concrete and steel components to be constructed in the shaft. When work resumed at the Oyu Tolgoi project in 2016, there were numerous engineering and procurement problems that resulted in potentially catastrophic and “criminal” conditions that presented “immediate safety concerns” at Shaft 2 and caused and would continue to contribute to massive delays and cost overruns.⁶

⁶ On October 21, 2016 Turquoise Hill filed the Oyu Tolgoi Technical Report—the report required by National Instrument 43-101 (Form 43-101) under the Canadian Securities Administrators’ Standards of Disclosure for Mineral Projects in Canada—which stated that sustainable first production would be achieved in the first quarter of 2021. The NI 43-101 rules and guidelines aim to protect investors by improving the accuracy and integrity of the scientific and technical information companies provide about their mineral reserves and resources and were developed by Canadian securities regulators following the infamous Bre-X Minerals Ltd. “gold” scandal in the 1990s.

75. For example, during the shutdown of the underground expansion project from 2013 to 2016, care and maintenance inspections of the steel headframes—the above-ground structures over mine shafts—for Shafts 2 and 5 identified multiple, potentially catastrophic issues with the work that had been done by a Chinese contractor.

76. Those problems required Defendants to perform a massive amount of work to address safety concerns before construction could even begin. For example, Former Employee (“FE”) 1, a project manager from January 2016 until March 2020 for Red Path Mining, the main contractor responsible for sinking Shafts 2 and 5, was brought in to lead what was called the Shaft 2 Headframe Construction Readiness Program (“CRP”). FE 1 said that during care and maintenance inspections during the underground expansion shutdown from 2013 to 2016, engineers found multiple, potentially catastrophic problems on the Shaft 2 headframe—including structural steel not properly installed, bolts not tightened, bolts missing, extremely poor welds, missing welds, as well as significant steel fabrication issues. As a result, Rio commissioned the CRP initiative to rehabilitate and fix issues with the Shaft 2 headframe to “get it ready to continue shaft sinking and construction” once the underground project resumed in May 2016. As FE 1 explained, the problems were so severe and presented such a clear safety risk that all work was stopped on the sinking of Shaft 2 until the CRP team was able to get it fixed.

77. According to FE 1, the initial Shaft 2 headframe construction would have been considered “illegal” if built in North America and not addressed, and the work required to fix it was extensive. To illustrate, FE 1 said that the CRP was originally commissioned with a budget of \$17 million and a six-month schedule in mid-2016. However, due to the severity of the issues the CRP team found, those numbers were ultimately raised to over \$30 million and eight months—an extraordinary amount. To put the figure in context, FE 1 explained that the total budget for

sinking Shaft 2 was \$300 million—meaning that the work required to simply restore the headframe to a functional condition amounted to one-tenth of the total cost of the entire Shaft 2 sinking effort.

78. As the project manager for the CRP, FE 1 would provide daily, weekly, and monthly progress reports on this work to FE 1's supervisor, who would sign off on them, and those reports were then provided to senior Oyu Tolgoi executive managers, such as Oyu Tolgoi Phase 2 Project Director Chris Aitchison, who reported to Rio Tinto's Oyu Tolgoi Managing Director Michael Charron and Armando Torres—Oyu Tolgoi's CEO since May 2017 who reported to and served on the OT Board of Directors with Defendants Soirat, Quellmann, and Colton during the Class Period.

79. Because of the need to fix the headframe, by the summer of 2016, Shaft 2 was delayed by at least eight months—a material delay that had been baked into the schedule two years before the Class Period again. Moreover, FE 1 explained, the steel supplied for Shaft 2 throughout FE 1's tenure on the project—from January 2016 until March 2020—was consistently subpar, had structural defects and issues with fabrication, including steel parts not being made to specifications, had poor joints, and was otherwise unusable and dangerous. According to FE 1, “[t]here were constantly issues with the steel we were receiving. It was almost every time. We put six thousand tons of steel into Shaft 2, and it all had to come out or be modified.” According to FE 1, approximately 95% of the steel in Shaft 2 “had to be worked on” before being installed.

80. Other former Oyu Tolgoi managers and internal emails corroborate the severity of the construction problems impeding the completion of Shaft 2. For example, the problems with the headframes reported by FE 1 were confirmed by FE 2, one of Red Path Mining's top managers at Oyu Tolgoi from 2013 to 2019 who was responsible for the sinking of Shafts 2 and 5. According to FE 2, OT senior management—including Phase 2 Project Director Aitchison and OT CEO

Torres—knew from at least the beginning of the pause in underground construction in 2013 that the Chinese contractors used for the initial work on Shaft 2 and Shaft 5 had cut corners and caused serious safety issues by not properly installing the reinforcing bolts into the rock. FE 2’s team found multiple instances where the contractors had simply drilled the holes in the shaft-wall rock, then put a bolt cap on top of the hole and painted over it to make it seem like the bolts were properly reinforced. As a result, FE 2 reported, there were multiple instances of bolts falling out—a clear safety hazard.

81. According to FE 2, the initial construction work on Shaft 2 was so deficient it would have been criminal if not addressed. As FE 2 explained regarding Shaft 2’s initial construction, “Shaft 2’s headframe construction would’ve been a criminal investigation in Canada. They could’ve killed people.” The dangers posed by these construction defects were repeatedly discussed in meetings with senior leadership, including Oyu Tolgoi LLC’s CEO Torres. In order to address the deficiencies, Oyu Tolgoi workers had to ultimately replace significant amounts of steel in the headframes, working underneath the defective steel while slowly replacing it over time. Senior OT leadership knew from at least 2013 that serious work needed to be done to fix the problems with Shaft 2.

82. The same problems with defective bolts in the Shaft 2 headframe were also present in the Shaft 5 headframe, creating another hazardous condition. As an email from FE 2 to senior OT and Rio managers on June 1, 2016 explained, “previous deficiencies at Shaft 2 magnified the concern of loose bolts and siding at Shaft 5” after workers identified a nut that had fallen from the Shaft 5 headframe and identified loose and missing bolts that presented “immediate safety concerns.” A proposed plan to fix these issues on the Shaft 5 headframe called for inspecting and replacing 11,480 bolts under a time and materials contract that would take 60 days. As shown in

that email correspondence and confirmed by numerous witnesses, while Oyu Tolgoi managers had originally decided to fix these problems during the shutdown maintenance when the underground expansion was on pause due to the issues with the Mongolian government, that work only began once Phase 2 restarted in 2016. According to FE 2, the refusal to take any action to address defective bolts on the Shaft 5 headframe introduced eight months of delay on Shaft 5 alone.

83. Beyond delays caused by the need to remedy the faulty Shaft 2 headframe construction, FE 2 explained that further delays to Shaft 2 resulted from numerous engineering problems. For example, FE 2 reported that the engineers that created the designs for the shaft excavation and those that designed the steel to be used to did not ensure that their schematics matched. To illustrate, FE 2 explained that FE 2 and FE 2's team would carve out Shaft 2 to the parameters provided by Rio Tinto. But when the steel housing would show up from the Chinese steel manufacturers, even though it was purportedly done to specifications, there would be a six-foot gap between the shaft wall and the steel housing. When the steel did not match the excavation, it would have to be sent back to be modified to fit, which added months to the project.

84. Numerous other former Rio Tinto employees and Oyu Tolgoi managers confirmed that the senior leadership at Oyu Tolgoi and the Executive Defendants were acutely aware of the schedule and cost overruns resulting from these faulty construction and steel quality problems. For example, Grant Brinkmann, Rio Tinto's Senior Area Manager of Shafts at Oyu Tolgoi from June 2016 through May 2018 and the senior-most manager with direct responsibility for Shaft 2, reported that Rio Tinto senior management were fully aware of the delays and cost overruns, including due to the problems with the Shaft 2 headframe.

85. Brinkmann was responsible for \$1 billion worth of work at Oyu Tolgoi, with \$300 million directly accountable to him and another \$700 million through Jacobs, the primary EMPCM

contractor that Brinkmann managed. Brinkmann reported directly to Greg Field, Rio Tinto's General Manager of Underground at OT, and to Aitchison, Charron, and David Joyce, Rio Tinto's Global Head of Projects, who reported directly to Defendant Jacques.

86. According to Brinkmann, each of these senior managers—Field, Aitchison, Charron and Joyce—knew about the delays and cost overruns at Shaft 2 before the beginning of the Class Period. For example, Brinkmann explained that Joyce would come to the site for about five days per month and would spend an entire day with Brinkmann during those visits. As a result, Brinkmann said, Joyce “knew things were delayed” by at least the end of 2017. Brinkmann also confirmed that the problems with the headframe could have been—but were not—addressed during the OT shutdown before Phase 2 began in 2016, and that senior Rio Tinto management was well aware of that fact. As Brinkmann explained, Joyce was “100% aware” of the issues during the shutdown because he received the budget proposals that were made to address them.

87. Brinkmann also confirmed FE 1 and FE 2's accounts of the problems with the Shaft 2 headframe. For example, Brinkmann confirmed that OT had to go through and replace every bolt in the Shaft 2 headframe because they were not the right grade, that a significant portion of the structural steel had to be replaced because it was wrong and defective and compromised the safety of the design, and that the steel quality problems presented such safety concerns that OT was required to redesign how the shafts were roped up because the infrastructure was simply not strong enough.

88. As Brinkmann explained, building the steel infrastructure for Shaft 2 once it had been sunk was a disaster. The steel and other key components used to line the 1,300 meters in Shaft 2 came in piecemeal and late—by 4-to-5 months—such that only certain sections could be completed at a time. The steel was not only late, but defective, and consistently had incorrect

fabrication or designs, both of which were Jacobs's responsibility. As Brinkmann explained, "By the time I left [in May 2018], we had only been constructing [the Shaft 2 infrastructure] for six months, and we were already six months behind. We hadn't advanced very far at all....It was a very poor start and just didn't get any better." Brinkmann estimated that, by May 2018, Shaft 2 was 14 months behind its scheduled commissioning deadline.

89. Other senior OT managers confirmed Brinkmann's account. FE 3, a manager in a commercial role who was directly involved in the aspects of construction that led to the delays and budget overages from 2017 to 2020, and was previously involved in the sinking of Shafts 2 and 5, described the situation at Oyu Tolgoi during the Class Period as a "nightmare scenario."

90. As FE 3 explained, there were constant problems with the steel procured for the site, which frequently had to be re-engineered and refitted on-site, which required OT managers to send investigation teams to the Chinese factories to figure out what was going on—a step that created "huge delays." FE 3 estimated that up to 25% of the steel for the entire Shaft 2 project had to be "reworked," and explained that a defect rate over 5% would have been unacceptable under industry standards and in any reasonable scenario a contractor with a 25% defect rate would have been terminated without question. But that did not happen at Oyu Tolgoi, where these issues persisted throughout FE 3's tenure from 2017 to 2020.

D. Numerous Former Oyu Tolgoi Managers Confirm That Defendants' Publicly Reported Timeline And Budget Were False And Unachievable Before The Beginning Of The Class Period

91. The engineering and procurement problems at Oyu Tolgoi caused massive delays and cost overruns before the start of the Class Period, as confirmed by numerous former Oyu Tolgoi managers.

92. For example, FE 2 said that it was clear from when they restarted Phase 2 (in 2016) until Defendants began to publicly announce delays that Shaft 2 was not going to be completed on

the timeline represented to investors. FE 2's job was to approve and submit the progress schedules for Shaft 2; FE 2 always provided accurate schedules to superiors; and FE 2 said that there was complete awareness of where the schedule really was by senior leadership of Oyu Tolgoi—from OT CEO Torres to senior management at Rio Tinto, who received progress reports and schedules—and there is no plausible basis for anyone at Rio Tinto to claim they were unaware. As FE 2 put it, “it was just awful. I’ve been mining for 40 years and have never seen anything like it.”

93. FE 3 similarly confirmed that the Shaft 2 and 5 projects FE 3 worked on were six to nine months behind schedule by the time FE 3 started at Oyu Tolgoi in August 2017—and that the schedule never had any hope of getting back on track. As FE 3 explained, “It was well understood by all levels of management that the project was at least nine months delayed, if not more.”

94. Similarly, FE 4, a planning technician at Oyu Tolgoi LLC from July 2017 to February 2020, who was responsible for producing and disseminating short-term progress reports of the underground lateral expansion project on a weekly and monthly basis, stated that, when FE 4 joined Oyu Tolgoi in July 2017, or a year before the Class Period began, the underground project was 2,000 meters behind schedule—or over three months behind under the project's target of constructing 700 meters per month. The reports FE 4 prepared compared the completion schedule to the actual progress in meters and were sent via email on a monthly basis to a Rio Tinto mining engineer on site, an Oyu Tolgoi LLC technical services manager, Oyu Tolgoi LLC's CEO Torres, to Rio Tinto's Mine Planning Team in Brisbane, and beginning in October 2018, weekly to Defendant Jacques. According to FE 4, Defendant Jacques demanded these reports be sent to him weekly because he was so concerned about the extent of the delays. To address the delays, FE 4

said the targets were reset in late 2017 to be 110% of what the schedule should have called for “because we were delayed and we were trying to catch up—but that never happened, and it just made us even more delayed.” According to FE 4, the effort to compress the schedule was intended to hide the delays. The reports prepared by FE 4 and sent to senior Rio management showed that from the end of 2017 until June 2019, OT’s actual monthly progress consistently was short around 100-200 meters per month under a schedule calling for the construction of 800 meters per month.

95. FE 5, a Jacobs Health Safety and Engineering Superintendent, who worked at OT from August 2018 through February 2020, said that, as soon as he arrived, “It was very apparent [the project] was delayed” and that the “targets they were talking about publicly were obviously not going to be met.” FE 5’s primary responsibility was the central heating plant (“CHP”), which was critical in ensuring the mine was warmed to a temperature of 22 Celsius (as required by Mongolian mine safety law). While the CHP was supposed to have been fully online by Christmas 2017, the schedule plans in August 2018 showed that it was least eight months behind, and it was ultimately delayed by almost two years before coming online in September 2019. FE 5 recalled that when that Rio Tinto first disclosed to investors that there would be some delays to completing Shaft 2 in October 2018 (although it still falsely maintained the project was on budget), “We were all laughing and saying that wasn’t the truth. Just CHP was seven months behind schedule and that was critical to get the underground going.”

96. FE 6, who worked in Contracts and Procurement Management for Rio Tinto at OT from October 2016 to May 2017, said that the lack of progress would have been obvious to any of the senior TRQ or Rio Tinto leadership who toured the site. FE 6 knew about the schedule delays by speaking to others in procurement, including FE 6’s supervisor, Sarah Holling, but said the delays were obvious to anyone who saw Shaft 2.

E. Before The Start Of The Class Period, Rio Tinto Hires An Expert To Investigate The Delays And Cost Overruns And Develop A Plan To Address Them

97. Consistent with the above accounts, by 2017, senior Rio Tinto executives knew that the Oyu Tolgoi underground expansion project was seriously behind schedule and over budget. Accordingly, two senior Rio Tinto executives decided to hire an experienced mining executive—Bowley—to investigate the problems at Oyu Tolgoi. These two senior Rio executives were (i) Defendant Arnaud Soirat, who had been the CEO of Rio Tinto’s Copper and Diamonds division since July 2016, and (ii) Craig Kinnell, a Rio Tinto veteran who was the President and CEO of Oyu Tolgoi LLC from September 2013 to December 2014 and sat on its Board and was the Chief Development Officer of Rio Tinto’s Copper and Diamonds division in charge of the Oyu Tolgoi project from December 2014 to July 2018.

98. Kinnell told Bowley that Bowley was being hired because the project faced difficulties and Kinnell wanted Bowley to tell him the truth about how bad the situation was. Kinnell indicated his view in email exchanges with Bowley over a year before Bowley was hired that the project was in trouble. For example, in a September 13, 2016 email exchange, Bowley and Kinnell discussed the four weeks on, two weeks off schedule set by Jacobs for its employees, which Bowley highlighted as “costing the business probably hundreds of thousand’s, if not millions over the life of the project.” Kinnell responded: “Don’t get me started Richard, it has me so pissed off I am trying to resign from the OT Board – I can only see bad things on the horizon.” Similarly, in an email to Bowley on December 2, 2016, Kinnell said it was “Best not to talk about OT, neither the Project, nor the Operation are near where I want them to be.”

99. FE 3 independently confirmed the four-week on, two-week off schedule when FE 3 joined the project in 2017 and its impact on the project. FE 3 said the schedule was something FE 3 had never seen before, called it unacceptable, and said the schedule had “inherent daily,

weekly, and monthly delays” given the project lost 50% of its expertise for a two-week period every month.

100. Bowley was in an excellent position to assess the project’s status given that he was highly knowledgeable about OT, having previously worked at the OT mine from 2011 through 2015 as an employee of AMEC Foster Wheeler (“AMEC”), which was at the time engaged to develop the underground study, value, and detailed engineering for Phase 2 of the OT underground expansion. Kinnell had first met Bowley in 2013 when Kinnell was the President and CEO of Oyu Tolgoi, and the two remained in contact after Bowley left Mongolia.⁷

101. In July 2017, Kinnell agreed with Bowley the OT project was in trouble and needed intervention, including with respect to scheduling work, capital expenditures, problems with the EPCM contractor, Jacobs, and safety issues. For example, in a July 3, 2017 exchange, Bowley reported to Kinnell that, based on his discussions with senior managers on the ground at OT, “two out of three of your senior guys on the project have told me Jacobs are failing badly” and that the “mess will lead straight to OTs door in the shape of schedule overruns and cost.” Kinnell agreed, responding immediately that “[i]t is all getting messy Richard and needs intervention to stop it getting significantly worse.”

102. To address those issues, Kinnell tasked Bowley with writing a paper to address the problems at OT and how Bowley would propose addressing them. Following an hour-long interview with Defendant Soirat in November 2017, during which Bowley discussed his paper—which noted, among other things, that what was “clear is Jacobs are [sic] failing”—Bowley was

⁷ Kinnell served as CEO of OT from October 2013 through 2014, followed by Andrew Woodley (November 2014 through September 2016), Stephen Jones (September 2016 through May 2017), and Armando Torres (May 2017 to present).

hired. His role was to work in Rio Tinto's Copper & Diamonds division as general manager for strategic projects and chief advisor for the Oyu Tolgoi project. Notably, just before being hired by Rio Tinto in July 2017, Bowley had been preparing a paper for the Mongolian Government about the risks of Oyu Tolgoi expansion.⁸

103. Within a few short months, Bowley confirmed concerns about the state of the OT underground expansion, and informed Kinnell, Soirat and other Rio Tinto executives about the truth at OT—that Rio Tinto could neither complete the underground project for \$5.3 billion nor achieve sustainable first production in the first quarter of 2021.

104. Bowley quickly determined that the project had serious delays that were causing cost overruns. He received information about the delays from multiple project personnel from Rio Tinto's Growth and Innovation ("G&I") division, including two general managers for the project, who knew that the project was seriously behind schedule and told him the project was six months behind schedule within its first year since resuming work in 2016. Bowley also discussed the delays with Greg Field, who served both as the General Manager-Underground at OT from May 2015 to December 2018 and as the General Manager of Project Execution at Rio Tinto from May 2013 to December 2018, and reviewed monthly reports from Jacobs, the EPCM contractor, that identified problems with the scope of work under its control.⁹

⁸ Bowley's wife is Mongolian, and Bowley's father-in-law held a senior-level position in the Mongolian Government. He asked Bowley to draft a paper so that the Mongolian government could independently understand and assess its position in terms of OT. At around the same time, Bowley was also approached by SailingStone Capital, one of Turquoise Hill's largest shareholders, that was similarly seeking assistance in assessing OT in connection with its investment.

⁹ The Oyu Tolgoi project was overseen by both Rio's G&I division, which was headed by Stephen McIntosh, a member of Rio's Executive Committee who reported to Defendant Jacques, and by Rio Tinto's Copper and Diamonds division, headed by Defendant Soirat, who also oversaw the project throughout the Class Period including through his role on the OT Board.

105. Bowley also confirmed his assessment of the delays with Shaft 2 and how to address them with Brinkmann, the most senior manager of Shaft 2. Brinkmann knew Bowley well and fully briefed him on the status of the project. As Brinkmann put it, Bowley was hired to conduct “an audit and a health check looking for potential blowouts....I think London had asked him to come in and do it....Richard knew about all my concerns and had access to all my reports.” As a result, Brinkmann said, “Richard was aware of all the stuff that was going on,” including the 14 month-or-more forecast delay for Shaft 2, and “he was pushed out for it too.”

106. With access to the those responsible for the underground expansion and their reports, it was immediately clear to Bowley that the engineering could hardly be worse, and he understood that bad engineering—particularly in a large project like Oyu Tolgoi—would inevitably lead to delays and cost overruns. As Bowley reported, when work on the underground mine resumed in 2016, Rio Tinto put its engineering team for the project in Santiago, Chile, a twelve-hour time-zone difference from the project site. Moreover, the engineers did not understand Mongolian legal codes so their work had to be rewritten and translated to go through Mongolian permitting procedures. This caused additional delays and cost overruns.¹⁰

107. In addition to the steel engineering problems in the Shaft 2 headframe described above, Bowley identified that the concrete sets that were to be placed in Shaft 2 and secured with steel bolts in precast holes in the concrete were misaligned, and the steel work was badly engineered, making it necessary to redo all the steel bolts. This faulty design of the sets led to over 40,000 steel bolts that were installed in Shaft 2 having to be removed and reinstalled, which caused significant delay and added considerable cost.

¹⁰ When Bowley first worked on the Oyu Tolgoi project as an AMEC employee from 2011 to 2015, he insisted on moving the engineers from Vancouver, a fifteen-hour time-zone difference, to Shanghai, in the same time zone as Mongolia, and this worked well.

108. Consistent with the accounts of FE 1, FE 2, and FE 3, Bowley also investigated and identified substantial procurement problems at OT and found that the wrong types of steel and other supplies for fitting out the shaft were procured, and that those issues alone caused at least three to six months of additional delay. As Bowley concluded, the procurement problems at the Oyu Tolgoi project resulted in part from Rio Tinto's bringing in people who had no experience in Mongolia or similar countries, where supply chains do not work the same way as in more developed countries, and were compounded by the significant engineering failures described above.

109. The procurement cost overruns identified and reported by Bowley to Rio Tinto senior management were confirmed by former OT procurement employees. Their accounts demonstrate that industry-standard procurement practices were disregarded not only as a matter of policy but also precisely because the OT underground expansion project was so far behind schedule. For example, FE 7, a procurement specialist at Oyu Tolgoi from March 2016 until April 2018, reported that OT's procurement practices were severely deficient and contrary to industry standards, including because only one quote was required for any procurement that was less than \$100,000. As FE 7 explained, "I've been in procurement for many years. I sent emails and said in meetings that this was not the norm in the industry. It will cost the project lots of money because it was not by the book." Further, when FE 7 raised these concerns in a meeting in the second half of 2016 with Sara Holling, the Manager of Contracts and Procurement at Rio Tinto from 2016 to November 2018, Holling said, "This is a time driven project, not a cost driven project"—a comment that stunned FE 7, who had never heard anything like that in FE 7's 30-year career.

110. According to FE 7, "It was a disaster. It was a complete joke. I've never seen anything like it in my life." FE 7 confirmed that poor procurement contributed to the project's

delays, which were well known internally while FE 7 was there: “Everyone was always talking about the underground delays and overruns. It was a permanent fact. It was a surprise to no one” when Defendants ultimately disclosed the delays and cost overruns. “There was going to be overruns on time and budget. Everyone knew that.”

111. In addition to engineering and procurement, the construction phase of Shaft 2 also encountered serious problems. During the construction phase of building a shaft, the drilling of the shaft and the construction of the built elements in the shaft have to be done seamlessly and concurrently. But according to Bowley, there was no synchronization of mining and construction at the Oyu Tolgoi project. The shaft was inadequate for moving the necessary people and equipment for both mining and construction up and down, and there were conflicts between the mining personnel and the construction personnel over-use of the shaft. These problems caused additional delays and cost overruns.

112. Bowley explained that Field, the General Manager-Underground at OT and General Manager of Project Execution at Rio Tinto until December 2018, identified the lack of synchronization of mining and construction for Shaft 2 as disastrous for the schedule and cost. Field, who was in charge of the underground mining at OT, became so frustrated that he decided to try to meet his lateral development schedule without coordinating with construction—a frustration that resulted in part from construction being managed by Rio Tinto personnel from Australia who did not understand what was needed for the proper construction of Shaft 2.

F. Rio Tinto’s Longstanding Executive Consulting Firm Independently Identifies Problems With Overestimation And Unethical Conduct At OT And Reports Them To Senior Management

113. At the same time Defendant Soirat and Kinnell hired Bowley to investigate the delays and cost-overruns at OT, Rio Tinto’s longtime executive consulting firm began identifying the problems at OT through its work in Mongolia. That firm, called GFI Blackswan, and its head,

Dr. Maurice Duffy, had served as an executive coaching consultant for Rio Tinto since 2007. Throughout that time, the firm had an excellent relationship with Rio Tinto, and was consistently recognized by Rio, including as recently as 2016, as having “superb supplier status.” As part of his work for Rio for nearly a decade, Duffy coached and provided leadership consulting services to Rio Tinto’s senior leadership, including every CEO and every member of the executive committee during that time period, under a £1 million (about \$1.8 million) annual contract—Blackswan’s largest, representing about 70% of its business.

114. Blackswan began performing executive coaching services in Mongolia in around 2015, providing those services to around 50 of Rio Tinto’s senior management stationed there and in London. In connection with that work, Duffy said that he began to hear reports and concerns from senior leaders in Mongolia about unethical behavior and “potential overstatements” at OT in around 2016. Further, while Duffy’s firm had provided monthly and quarterly reports to the head of Rio’s human resources department—first to Hugo Bague, and then Kirikova when she took over Bague’s role at the beginning of 2017—concerning its work and interactions with senior Rio leaders in Mongolia, and the head of human resources delivered those reports to the CEO and Board chairman, Duffy was instructed to discontinue providing those reports in mid-2017.

115. That development was so troubling to Duffy that he felt compelled to bring his concerns—including concerns about the cost overruns and schedule delays at OT—to the attention of Rio Tinto’s senior leadership in London. He did so by specifically raising them with the Head of Human Resources, Vera Kirikova, at a meeting on September 6, 2017. After Duffy reported the concerns he was hearing about Oyu Tolgoi and the instruction to discontinue the reports his firm was providing from senior leaders in Mongolia, Kirikova told Duffy he would have to drop and disregard those concerns. As Duffy explained, Kirikova was an intermediary for Defendant

Jacques, and told Duffy that Defendant Jacques would not appreciate hearing about his concerns, and that Duffy would regret reporting them to him—telling Duffy that “you will regret it” if he continued to report concerns about Rio’s conduct in Mongolia. Duffy understood that Kirikova would report what he told her to Defendant Jacques.

116. Uncomfortable with that response, and with other “serious misgivings” after reporting “multiple, unprofessional [and] unethical behaviors” by Rio’s most senior executives since Defendant Jacques took over as CEO to Rio’s Board and chairman—who “took no action” in response—Duffy resigned and terminated his firm’s contract with Rio in December 2017. As Duffy recounted, he explicitly communicated to Rio’s senior leadership that concerns about unethical behavior in Mongolia was a reason he was terminating his contract.

117. As the executive coach to nearly all of the senior management at Rio Tinto, Duffy had unique and unparalleled access and insight into the senior leaders at Rio, their motivations, and how they operated. Indeed, Duffy had overseen executive coaching services for Defendants Jacques and Soirat for several years.

118. According to Duffy, Defendant Jacques “knew without a doubt” about the problems at Oyu Tolgoi by 2017, as Defendant Jacques’ role as CEO and career depended upon the project’s success. As Duffy explained, Defendant Jacques was distrustful of other Rio Tinto executives and surreptitiously tracked their work through other intermediaries at Rio Tinto, and closely followed the developments in Mongolia: “He doesn’t trust anyone. There is no way in hell that a flea flew down the mine and he wouldn’t know about it.” As Duffy recounted, it was clear Defendant Jacques knew the “wheels were coming off” the project at OT by at least January 2018, when Defendant Jacques personally traveled to Mongolia to meet with the Mongolian prime minister.

G. Rio Tinto's Expert Informs The Executive Defendants That Oyu Tolgoi Is In Distress And That Construction Is A Year Behind Schedule And Hundreds Of Millions Over Budget

119. Shortly after Duffy independently reported the concerns he was hearing about OT to Rio's senior leadership in London, Bowley provided a separate presentation in London to Rio Tinto's Copper division addressing how bad the problems were at OT and how to fix them. On February 1, 2018, Bowley made that presentation at Rio's London headquarters to Kinnell and Rosemary Fagen and reviewed the cost overruns, schedule delays, and Shaft 2 problems. Fagen, who was the Vice President for Human Resources for Rio Tinto's Copper & Diamonds group since July 2016 and for Rio Tinto Copper since September 2014, reported directly to Defendant Soirat, participated in the meeting on behalf of Soirat, and, according to Bowley, reported the substance of the meeting to Defendant Soirat. As Kinnell made clear to Bowley, Fagen served as a gatekeeper and approver of everything that went to Soirat.¹¹

120. In this February 2018 presentation, Bowley proposed to establish a Project Integration and Implementation Group, which his slides stated "offers Rio Tinto Copper & Diamonds a substantial value add option with the ability to save hundreds of millions of dollars in cost and schedule overrun, and ultimately liabilities." His proposed group would oversee the management of capital project assurance and would include experienced mining executives with experience at major mining companies, and his proposal provided a "road map" to systematically reduce cost overruns and schedule delays and a stakeholder management plan that would ensure transparency.

¹¹ Fagen's role as Defendant Soirat's intermediary was confirmed by Duffy, supported by the clear knowledge she exhibited concerning the matters under Defendant Soirat's purview, and reflected in comments she made in emails like the one she sent to Bowley on July 3, 2018, asking him to call her: "I'm keen to get things happening for you, not that you actually report to me but I've finally been able to pin Arnaud [Soirat] down on a few things."

121. Following the February meeting, Bowley continued to follow up with Defendant Soirat and Fagen about the need for immediate action to address the cost overruns and delays, and both of them were aware of the problems at OT. For example, a March 6, 2018 email Bowley wrote to Kinnell warned of “potential disaster” unless “we change strategy rather rapidly and someone gets a hold of this” and recounted a conversation that Bowley had with Soirat warning him of the problems with the underground expansion project.

122. Bowley spoke with Defendant Soirat for an hour in May 2018 and again discussed the problems facing the expansion. Bowley wrote in an email to Fagen on May 28, 2018, that “what I tried to engrain in him [Soirat] was the factors around strategy, exposure to schedule risk, and how changing path in terms of timing and where we may be in terms of the project, will cause us massive risk, and what that risk looks like to Arnaud [Soirat] and the business.”

123. Bowley continued to make clear to Soirat—including in emails to Fagen, Soirat’s intermediary—that the OT project was doomed and could not be completed on the schedule represented to investors, i.e., that sustainable production would be achieved by 2021.

124. Specifically, Bowley wrote to Fagen about a dispute between Rio Tinto and its EPCM contractor caused by the delays. Jacobs was behind schedule because it was not getting sufficient cage space for moving people and equipment up and down the much smaller Shaft 1 when necessary. Jacobs told Bowley in the third quarter of 2018 that this was making it fall behind schedule, and Jacobs wanted to offset the costs against Rio Tinto, resulting in a dispute between Rio and Jacobs because the schedule delay was becoming obvious and costly. Jacobs’ EPCM contract provided for a target cost of \$240 million on a reimbursable cost basis for its management of the supply chain, construction companies, procurement, and other functions, but this money was going to run out in December 2018. When this amount was reached after just two years, Rio Tinto

panicked, according to Bowley, and Rio considered doing the EPCM work itself—which Bowley considered laughable. Instead, Rio decided to raise Jacobs’ cap by 50% to \$360 million—a step approved by the OT Board (which included Defendants Soirat, Quellmann, Lane and Colton). The increase in Jacobs’ contract was also confirmed by Brinkmann, who said that during his tenure, Jacobs’s budget tripled from \$150 to \$450 million with a minimal increase in the scope of its work.

125. Bowley reported on these events in email correspondence on July 3, 2018, to Fagen, who reported to Defendant Soirat:

Budget for the EPCm runs out by Christmas

Entry for EPCm \$240mill / expected exit just on current expectations \$360mill

Massively under performing

The kicker !!!

G&I are considering binning Jacobs and “self managing / performing.

A self performing operator trust me is more risk than an under performing engineering group !!

I will get some exact detail on this but senior OT / G&I people told me this last Sunday.

126. Fagen responded a couple hours later: “Oh wow and wow!!”

127. Later that day, Bowley followed up, stating:

From: Richard Bowley (OT)

Sent: 03 July 2018 15:49

To: Fagen, Rosemary (RTHQ) <Rosemary.Fagen@riotinto.com>

Subject: Re: Call

I am not blowing my own trumpet, but this has been coming from day one !!

Oppppppps !!

I will firm the details and numbers up.

The realization and magnitude of what is happening is starting to dawn I think on a few.

128. Fagen responded the same day, acknowledging the problems were well known to Rio: “Oh don’t worry, we’ve known it from the start, just haven’t been able to do anything about it. Arnaud [Soirat] has played a very card [sic] here, which is why you now see ‘things’ surfacing.” On the same day, Fagen wrote to Arshad Sayed, Rio’s Copper & Diamonds Chief Development Officer, who replaced Kinnell in March 2018: “At the end of the day, Richard [Bowley] is a resource on the ground in Mongolia and we need him in the tent, not out of it!”

129. Then, on July 19, 2018, Bowley emailed Fagen:

From: Richard Bowley (OT)
Sent: 19 July 2018 05:20
To: Fagen, Rosemary (RTHQ) <Rosemary.Fagen@riotinto.com>
Subject: RE: Call

[Latest update.](#)

[12 months behind schedule.](#)

[\\$300mill capital over budget. Expect this to rapidly escalate.](#)

130. In other words, by the start of the Class Period in July 2018, Defendants had written confirmation—as stated in contemporaneous emails and a later sworn Witness Statement by the expert Rio Tinto hired to investigate and fix the scheduling delays and cost overruns at OT—that the project was 12 months behind schedule and \$300 million over budget and that these amounts were expected to escalate rapidly.

H. Defendants Scapegoat Managers Who Told Them About The Shaft 2 Delays And Cost Overruns

131. In the face of escalating costs and delays, Defendants fired the senior manager of Shaft 2 in May 2018—a step that not only provides clear evidence that Defendants knew their public statements about the project were false, but demonstrates their effort to conceal the truth. According to FE 3, Grant Brinkmann, the senior-most manager of Shaft 2 and Rio Tinto’s Area

Manager of Shafts at the Oyu Tolgoi project from June 2016 to mid-2018, was fired in or around May 2018 as a scapegoat after repeatedly warning senior management about Jacobs' poor performance and steel-quality issues—a description that Brinkmann confirmed was accurate.

132. As Brinkmann recounted, the “proverbial shit hit the fan and the rest of the senior hierarchy realized” the extent of the delays in April 2018 when Brinkmann was on leave. During a monthly progress report during the first week of April 2018, one of Brinkmann's direct reports, Andrew Duff, Rio Tinto's Senior Construction Manager at OT, explained and was upfront with Rio's Global Head of Projects, David Joyce, that Shaft 2 was, by that time, at least five months behind schedule. According to Brinkmann, the five-month delay in April 2018, forecasted out, meant that the commissioning of Shaft 2 was approximately 14 months behind schedule—a fact that was known and reported internally to senior Rio Tinto management.

133. When Brinkmann returned in mid-April, he was asked to explain the reason for the delays, and he did—but the response from Aitchison and Charron was “to make me the scapegoat.” According to Brinkmann, shortly after he returned from April leave, Field told him to get the documentation evidencing his efforts to force Jacobs to get back on track because the delays reported by Duff had been immediately reported to Defendant Jacques and London leadership. Instead of any review, however, several weeks later Brinkmann was called into Aitchison's office on a Monday morning and summarily terminated, told his contract would not be renewed, and that he needed to be out of the country by Friday that week. Brinkmann was shocked, as he had received excellent personnel reviews and Rio Tinto senior management had openly discussed mentoring him to be advanced into a project director role. But, as Brinkmann recounted, “all that changed completely with this one conversation” when Aitchison told Brinkmann he was let go.

134. Given that Brinkmann was one of only a handful of people in the world qualified

to run a project like Shaft 2, his critical role at OT was not filled until after the end of the Class Period when Donna Rathbone was hired as Senior Manager of Shafts—which meant there was effectively no one overseeing Jacobs and the rest of the project during the Class Period, which Brinkmann said was “insane.” Further, Rathbone had no experience overseeing shaft projects and “had never worked in shafts in her life” before Oyu Tolgoi. According to Brinkmann, “at a minimum they should’ve had someone acting in that role of oversight and governance. That’s a critical flaw. They needed someone to be there to oversee and control was going on. The QA/QC, the design, the work, it was all just allowed to get out of control.” Moreover, by the time Brinkmann was terminated, the schedule was already six months behind which, forecasted out, meant that the commissioning of Shaft 2 was at least 14 months behind schedule.

135. Brinkmann’s termination was an extraordinary event that demonstrates senior management’s knowledge of the problems with Shaft 2 given that, according to FE 3, Brinkmann was “the manager of the whole project” and was one of maybe five people in the world who had the expertise and ability to handle a project of this size and complexity. According to FE 3, Brinkmann had been warning senior management “for a long time” about the problems with Shaft 2, and senior management then turned around and fired Brinkmann “to protect their own asses knowing that there were going to be significant delays.”

136. But Brinkmann was not the only prominent OT manager who was let go at this critical time at the project. Just like Brinkmann, FE 8, the surface construction manager at the Oyu Tolgoi project from May 2016 to May 2018, was also terminated in May 2018. FE 8 said that when FE 8 left the project in May 2018, it was \$2 billion over budget and at least a year and a half behind schedule. FE 8 explained that these facts were documented in the cost and schedule reports FE 8 reviewed, and discussed by project control personnel who would brief FE 8 on the costs and

schedule. As FE 8 explained, “We all knew the schedule was overrun. . . . It was well known how far behind we were.” FE 8 repeatedly told senior management about the issues and suggested that OT needed to slow the project down to fix them and re-examine their contractors, and these problems and the need to address them were communicated verbally as well as in emails.

137. After raising concerns about cost overruns and delays with FE 8’s managers, FE 8 was let go. While FE 8 had every expectation that his contract would be renewed in May 2018, while on leave in mid-2018, FE 8 was informed via email that the contract was not going to be renewed. FE 8 said that, just like Brinkmann, “I was thrown under the bus because I kept trying to tell them we should try to sort these things out.”

138. After Brinkmann and FE 8 were terminated, FE 3 was assigned to coordinate with Rio/TRQ, Jacobs, and Red Path on a fully integrated schedule and to get a handle on the major delays—the very measures that Brinkmann had been urging OT to implement “for a long time.” As FE 3 put it, “as soon as [Brinkmann] was gone, they asked me to do exactly what Grant had been asking to do for a couple years....They asked me to do exactly what he wanted to get a handle on the delays.”

139. As part of that role, FE 3 ran weekly integration meetings with leadership from all three parties. These meetings addressed engineering, fabrication, major component delivery, and completion of the fully integrated schedule. David Joyce, Rio Tinto’s Global Head of Projects, who reported to McIntosh, the head of Rio’s Projects & Innovation division (who reported to Defendant Jacques), was fully briefed on the meetings, and thus detailed information concerning the true status and causes of the delays would have been reported to Defendant Jacques starting before and continuing throughout the Class Period. As part of that work, FE 3 identified over 60 actions that were required to “get things back to being remotely on schedule”—but nothing was

ever done, and the EPCM leadership from Jacobs stopped attending. Six months after this steering committee was created, nothing had been done to address the 60 critical actions, and Joyce told FE 3 to cancel the meetings moving forward.

I. At The Beginning Of The Class Period, Defendants Falsely Reaffirm That The Oyu Tolgoi Expansion Remained “On Target,” “On Budget,” and “On Track”

140. Despite being told repeatedly that the reported timeline for the OT expansion project completion was unachievable, and that the project was “massively underperforming” and hundreds of millions of dollars over budget, Defendants reassured investors everything remained “on target” at OT. Specifically, on August 1, 2018, executives at Turquoise Hill and Rio Tinto falsely told investors that OT had “remain[ed] on target for the first drill point blast in mid-2020 and sustainable production in early 2021” and that all material assumptions underpinning their publicly reported production targets “continue to apply and have not materially changed.”

141. In fact, in direct response to analysts’ questions probing the reliability of TRQ’s statements about the progress at OT and the concern that TRQ was somewhat on the “outside looking in,” Defendant Quellmann reassured investors that he and Turquoise Hill had “good visibility” and were “plugged-in” to the “various processes, cost reviews and the like,” including with respect to the “the progression of the underground construction.” Specifically, during the Turquoise Hill’s second quarter 2018 conference call on August 1, 2018, Defendant Quellmann committed to transparency and touted his and Turquoise’s intimate knowledge of the actual facts on the ground at OT: “where I am today, what I see, I think we’re in a good place [and] we’ll continue to monitor that, we’ll make sure that we are set—well set up to provide good visibility to the board and to our shareholders.”

142. Defendants’ statements reassured analysts, who commented in reports immediately following the August 1, 2018 conference call that the “underground development seems to be

progressing very well,” that “all progress metrics continue to indicate that the Hugo North Lift One project is ahead of schedule on budget,” that lateral development for the Phase 2 project was “on track” for the year, and that “OT continues to expect first draw bell in mid-2020 and sustainable first production in 2021” and maintained their positive ratings on Turquoise Hill stock.

J. Rather Than Disclose The Truth, Rio Tinto Develops “Forecast 2” And Continues To Misrepresent That OT Is “On Time And On Budget”

143. As costs and delays continued to mount, Rio Tinto manufactured a false story to conceal the true extent of the problems at OT. Indeed, the true situation at OT was dire and could not be squared with Defendants’ repeated public representations that the underground expansion was “on time and on budget.”

144. Bowley made this fact explicit in an August 31, 2018 email to Fagen that was intended to warn Defendant Soirat to correct Rio Tinto’s false statements to the market about the status of the project. Specifically, Bowley forwarded a link to a news article regarding the development of the London Crossrail transit line, which had recently disclosed that the project would “come in a year late, and in the region of \$600mill over budget.” As Bowley pointed out, “the uncanny relationship to the [OT] expansion is we are looking at the same schedule overrun and a very similar capital value,” and he noted parallels between Defendants’ false public statements about OT and the claims by Crossrail executives, who had similarly repeatedly and wrongly claimed that the Crossrail project was “on time and on budget.”

145. Fagen, who served as Soirat’s gatekeeper, immediately agreed, responding “Yes I completely agree and now we’re trying to be clever by doing ‘forecast 2’!”

146. As Fagen recognized, “forecast 2” was simply a “clever” way to continue concealing the true extent of the problems concerning the underground expansion. As Bowley explained in a response email several hours later, forecast 2 was:

just another re-base line of the schedule that just makes the current position appear more tenable. All this does is makes us look good, pulls back aspects of schedule that are knackered, and makes people feel a little bit better about their inadequacies to deliver. The root cause why this happens will remain constant, and will not change.

147. After terminating Brinkmann and FE 8 in May 2018, Rio Tinto and OT management were able to manipulate the schedule to hide the delays by transferring costs and projects related to the major infrastructure of Shaft 2 to secondary phases. According to FE 3, this “de-scoping” allowed OT to show an accelerated completion schedule and to then go back and ask for additional funding at a later time. FE 3 explained, “You would reduce the scope of projects. If Task One has steps ‘A’ through ‘I,’ you reduce that to steps ‘A’ to ‘D.’ You then make steps ‘E’ to ‘I’ a whole new project and push that into a secondary phase. But that means the costs of those pieces are going to be additional. They’re just moved further down the road.”

148. The tasks that were being de-scoped were critical infrastructure and had to be completed before Shaft 2 could become active. FE 3 said that Shaft 2 had been repeatedly “de-scoped” from the beginning of the Class Period and estimated that, by the second quarter of 2019, 10% of the entire Shaft 2 schedule had been de-scoped in this way—a process that was approved and carried out by OT senior leadership, including Charron, Rio Tinto’s Oyu Tolgoi Managing Director, who reports to OT CEO Torres and is close to Defendant Soirat. It also meant that contractors were essentially being paid twice and their schedules were being duplicated. As FE 3 explained, contractors were being paid for time and materials, even though they had not completed the full scope of the project that was initially budgeted. He recalled that Dayan (a joint venture with Red Path and Hasu Megawatt that performed underground mining and support services) received an additional \$20 million to do the work that was de-scoped from their original project.

149. Bowley similarly described how Jacobs engaged in this kind of “re-forecast” or

“de-scoping” after the EPCM budget was increased to \$360 million at the end of 2018. Because this amount was still not nearly enough money to complete the project, Jacobs cut out key parts of the execution team, including the commissioning team, to meet Rio’s expectation of \$360 million. But, as Bowley explained, commissioning is one of the biggest risks in an underground mining project, and inadequate commissioning is likely to result in delays at the back end because of optimization issues and bottlenecks. Thus, in addition to the two-year delay and \$1.2-\$1.9 billion cost overrun that Rio Tinto disclosed at the end of the Class Period, cutting the commission team will likely result in additional costs and delays at the completion of the project.

150. Brinkmann later learned that his absence from OT facilitated the manipulation and “de-scoping” of the schedule. In January 2019, when Rio Tinto finally filled Brinkmann’s vacancy by hiring Rathbone, one of her first tasks was to prepare a report on the delays to Joyce. To do so, she reached out to Brinkmann to understand them. According to Brinkmann, Rathbone informed him that the paperwork Rathbone had been reviewing to understand the history of the project showed Brinkmann signing off on de-scoping and other trimming changes to the schedule in September 2018, months after he left Rio Tinto and when he was no longer in Mongolia. In other words, Rio Tinto not only used Brinkmann as a scapegoat but falsified schedule changes using his name to make it appear as though he approved them.

151. The manipulation and “de-scoping” of the schedule, together with the rebranding of the OT expansion with “forecast 2,” were intended to further conceal the extraordinary cost overruns and delays plaguing the project. As part of this effort to preempt investor concern about the progress at OT, Defendant Soirat met with investors in New York during the week of October 2, 2018 to discuss the project. During this “road show,” Defendant Soirat used a presentation that falsely touted that the OT “underground project [was] *on budget and schedule*,” that “First

drawbell production [was] *expected mid 2020*,” and that the project had maintained “*\$5.3 billion development capex projected*”—statements Bowley said were at the time “completely untrue.”

152. Then, after the market closed on October 15, 2018, Turquoise Hill announced an underground development “update” and “re-forecast,” disclosing a two-quarter delay to sustainable first production to occur at the end of the third quarter instead of the first quarter of 2021, but not disclosing the hundreds of millions of dollars in cost overruns or the year-long delay that existed at the time:

Rio Tinto has undertaken a second annual re-forecast of underground development schedule and costs and preliminary results have concluded that capital costs remain in line with the overall \$5.3 billion budget and the project remains on schedule to complete in 2022. However, there are certain delays, most notably to the completion of Shaft 2, which includes schedule contingency, that are ultimately expected to result in a revised sustainable production start from the first quarter of 2021 to late in the third quarter 2021.

153. Similarly, Rio Tinto disclosed before market open on October 16, 2018 that under an “annual re-forecast,” sustainable first production could be delayed by two quarters but that “capital costs remain in line with the overall \$5.3 billion budget and construction of the first draw bell is still expected in mid-2020.” According to Rio Tinto, the “preliminary re-forecast assessment indicates ground conditions and shaft sinking challenges” that resulted in the revised “ramp-up schedule” and two-quarter delay.

154. Defendants’ reassurances comforted investors because the “re-forecast” included “over four months of schedule contingency” and, more importantly, the critical fact supporting the Turquoise Hill investment thesis was unchanged: “the project is expected to be completed at the \$5.3 billion budget estimate disclosed in the 2016 Oyu Tolgoi Feasibility Study and the 2016 Oyu Tolgoi Technical Report.” Indeed, Defendants not only minimized the true extent of the delays and denied the cost overruns—which were internally confirmed to be between 12 and 18 months and hundreds of millions of dollars—but also sought to blame the minimal several-month delay

they did disclose on unspecified “ground conditions.” In reality, as Defendants knew, the delays were caused by the abysmal engineering, construction, and procurement management of Shaft 2.

155. Defendants’ misrepresentations had their intended effect, and analysts were largely unmoved by what was represented to be a minor and manageable issue that did not impact the overall timeline and budget for the project. For example, analysts at RBS noted that “Oyu Tolgoi appears to have been struggling with ground conditions which will see a revised ramp up but is still inline on capex with unchanged \$5.3bn cost estimate.” UBS analysts similarly attributed the delays primarily to “adverse ground conditions,” brushing off the disclosure as “disappointing” and writing that “in the context of the greater OT project the impact to value is minimal.” Canaccord analysts concluded that the “9-month delay [was] immaterial to our overall thesis,” noting that, beyond the nine-month delay in sustainable production, “other elements appear to be on plan,” including Rio’s confirmation of “key elements of the project including the \$5.3 billion budget, the completion of construction in 2022, and first drawbell in mid-2022.”

156. While analysts were reassured by Defendants’ statements, Rio Tinto and Turquoise Hill senior executives internally acknowledged that they were false and were urged internally to correct them. For example, after Defendants made the first public statement about potential delays in the project on October 15, 2018, Bowley emailed Fagen the next day that Rio had not disclosed “the real truth”:

I see TRQ put out a very watered down statement of the truth regarding the Underground yesterday. It’s a good job the market does not know the real truth, and that Rio knew this was very likely over 12 months ago. I think GoM [Government of Mongolia] and our other shareholders may want heads. Arnaud [Soirat] needs to be clever here. He has consistently put out messages to the market the project was on schedule and budget. He may take some heat in terms of not seeing what was coming, even though he knew.

157. As Bowley explained, Rio Tinto knew that the disclosure was misleading because Bowley had previously told Defendant Soirat that the project was 12 to 15 months behind schedule

and at least half a billion dollars over budget. Bowley urged Rio Tinto to disclose these facts then, rather than face more severe criticism when the truth came out later, but Rio Tinto refused to do so.

158. As Bowley subsequently recounted in his sworn Witness Statement submitted to the U.K. Employment Tribunal:

Extraordinarily, in October 2018, Arnaud Soirat issued a press release which included a review of the OT project....At page 12 it states that OT is one of the world's highest quality developments with projected capital expenditures of US\$5.3bn. It states emphatically, "Underground project on budget and schedule" with productivity improvement across project and operations and an excellent safety performance. This was completely untrue and I raised this with Rosemary Fagen on 16 October 2018 in an email entitled "TRQ share price."

159. Other former employees confirmed that it was widely known and discussed internally that Defendants' public statements were false. For example, FE 3 said that Defendants' statements in October 2018 that the project was behind schedule but still on budget were not "accurate at all"—and in fact the "de-scoping" and "re-forecasting" of the schedule only added to the total costs of the project.

160. As Bowley explained, by "re-forecasting" the schedule, Defendants were able to pull the schedule back "over night" to an "improved" position—a fact that was documented in weekly progress reports generated by Jacobs for work Jacobs was contracted to deliver for the OT underground expansion project. Specifically, those reports reflected that, before the October 2018 re-forecast, the total overall progress was at least 14% behind the original plan by August 2018—which translated over the life of a four-year project to months of delay and approximately \$750 million over budget. But as Bowley explained, by replacing the original plan with a new "re-forecasted" schedule—"FC2"—the project went from being 14% behind to only 5% behind the original plan "with the flick of a switch."

K. Defendants Were Highly Motivated To Conceal The Problems At OT In The Face Of A Burgeoning Scandal That Jeopardized Rio Tinto and TRQ's Stake In The Mine

161. At the same time delays and costs at the OT underground expansion had skyrocketed, several key developments in 2017 and 2018 created a strong motive for Defendants to cover up these problems. As Defendant Jacques' executive coach explained, the first quarter of 2018 is when the "wheels were coming off the project" at Oyu Tolgoi.

162. *First*, beginning in 2017 after Defendant Jacques took over as CEO, financial regulators began pursuing inquiries into bribery and fraud related to Rio's mining operations in the Republic of Guinea and Mozambique. In July 2017, the U.K. Serious Fraud Office announced an investigation into "suspected corruption" into a \$10.5 million payment Rio made to a consultant who had provided "advisory services" in connection with Rio's Simandou iron ore project in Guinea in 2011—a matter that Rio had self-reported to regulators in 2016 and which had already cost two top Rio executives (including one of Defendant Jacques' primary rivals for the CEO spot) their jobs. In a separate action announced on October 17, 2017, the SEC charged Rio and its former CEO and CFO with misleading investors concerning the value of its coal deposits in Mozambique which Rio had purchased for \$3.7 billion but sold three years later for \$50 million. That same day, Rio disclosed that it had paid a £27,385,400 fine to resolve the FCA's investigation into the same claims—at the time, the largest such penalty the FCA had ever issued. Moreover, as discussed below, by no later than August 2016, Swiss prosecutors had initiated a criminal corruption and money laundering probe into the negotiation of the 2009 OT agreements.

163. *Second*, on January 15, 2018, Turquoise Hill announced that OT had received a \$155 million tax assessment from the Mongolian Tax Authority based on an audit of the taxes paid by OT from 2013 to 2015. This sizable tax bill was quickly followed by a report by prominent nonprofit watchdog group, the Centre for Research on Multinational Corporations (SOMO),

suggesting Rio’s true tax debt to Mongolia was far greater, and detailing that the underlying OT agreements unfairly benefited Rio by enabling Rio and TRQ to illegitimately lower the taxes paid to Mongolia by hundreds of millions of dollars.

164. The Mongolian government’s efforts to recoup these allegedly unpaid taxes coincided with several other developments suggesting that the government would seek to renegotiate the 2015 agreement—a possibility that seemed increasingly likely after Mongolian voters had elected politicians that had promised to extract further economic benefits from OT for the Mongolian people in July 2017. Indeed, newly elected President Battulga Khaltmaa had made the renegotiation of the OT agreements a key campaign platform, telling voters that the “government should hire experts and take control of everything, including Oyu Tolgoi.” And shortly after his election, President Battulga pushed through a law providing him with significant powers to dismiss members of the judiciary, prosecutors, and the head of the country’s top anti-corruption body—broad powers that he immediately put to use.¹²

165. Undoubtedly aware of the ongoing inquiry by the Swiss OAG, the ongoing tax dispute, and the forthcoming release of the SOMO report, on January 22, 2018, Defendant Jacques personally visited Mongolia to meet with the newly-appointed Prime Minister and to publicly convey Rio’s commitment to OT. As part of that effort, Defendant Jacques announced Rio’s opening of a new office in the country’s capital, UlaanBaatar, and an expansion of Rio’s national employee numbers to around 80 throughout the course of 2018. As Defendant Jacques said at a press conference that day, “Mongolia is one of Rio Tinto’s most strategically important markets

¹² Mongolia has a semi-presidential government, with an elected parliament, a Prime Minister who is chosen by the party (or coalition) with the majority of the seats in parliament and acts as the head of government, as well as a popularly elected president, who acts as the head of state and commander-in-chief.

and we are here to stay.”

166. The next day, January 23, 2018, Defendants Jacques and Soirat met with Mongolia’s Prime Minister Ukhnaagiin Khürelsükh—who had taken over from his predecessor in October 2017—and other government representatives to discuss Oyu Tolgoi and quell the growing concern the Mongolian Government had been expressing about it. The meeting addressed whether funding costs could be reduced to improve benefits from the Oyu Tolgoi project, the funding and development of a power solution for OT (an ongoing, hotly debated source of contention between Rio and the government), and OT’s strategy to improve private and public investments in neighboring areas. As Prime Minister Khürelsükh said at the beginning of their meeting, “As a partner, the Government of Mongolia aims to increase the benefit of the project; hence, there is a need to reduce the project’s financial expenses and loan interest rate”—a clear reference to the terms of the 2015 agreement. For his part, Defendant Jacques underscored the importance of the agreements he had negotiated during the 2013-2015 shut down, expressing readiness to cooperate on “creating long-term sustainable solutions that benefit all stakeholders and the country while staying true to the established investment frameworks.”

167. At the same time Defendants Jacques and Soirat were addressing renewed concerns about the OT agreements directly with the leaders of the Mongolian government, the operations at OT had been threatened by a strike by Chinese coal workers at the Mongolia-China border. On January 18, 2018, Turquoise Hill disclosed that this strike had forced OT to declare a *force majeure* event because Chinese coal haulers had blocked the main access road used by OT to ship copper concentrates from the open pit production to customers. In doing so, Turquoise Hill reassured investors about continued progress on the underground expansion, telling investors that “there has been no disruption to goods and services arriving for underground development.” Indeed, when

the protests first began, Defendant Jacques pointed to his work in negotiating the OT agreements to reassure investors that the situation would be resolved, saying that “each time we would work with the authorities and each time it was resolved. I’ve no doubt it will be resolved this time.”

168. **Third**, beginning in March 2018, reports surfaced that Swiss and Mongolian government prosecutors had initiated criminal corruption investigations into the key government officials responsible for negotiating the core agreements underlying Rio’s, Turquoise Hill’s and the Mongolian government’s ownership and economic interest in OT. In the second week of March, OT received an information request from the Mongolian Independent Anti-Corruption Authority (“IAAC”) pertaining to the negotiation of the 2009 Oyu Tolgoi Investment Agreement between the Government of Mongolia, Rio, and Turquoise Hill. A week later, on March 19, it was reported that Switzerland’s highest court upheld the freezing of \$1.8 million in Swiss bank accounts as part of the corruption probe by the Swiss Office of the Attorney General (“OAG”) into a former Mongolian finance minister who helped clear the way for the Oyu Tolgoi underground development. The Swiss court wrote the action was warranted in light of the “concrete clues that large amounts of money of questionable origin” that were “typical of money laundering” were in the accounts, and that “[i]t is very suspicious that the minister of a foreign country, immediately after taking a ministerial post, would be the recipient of such a large sum.” And the lower Swiss court that initially approved the asset freeze specifically credited the OAG’s investigation in light of the fact that, at the time, Rio was the subject of an ongoing corruption inquiry into its iron ore assets in Africa. Indeed, on March 22, 2018, *Bloomberg* confirmed that the OAG was in fact investigating whether Rio itself had paid bribes in connection with the development of OT and had opened criminal proceedings against former finance minister Bayartsogt Sangajav, who had signed the 2009 OT agreement.

169. Commenting on these developments, Mongolia's then Deputy Mining Minister Zagdjav Deleg said in March 2018 that "[i]f there was corruption, the [Mongolian] government's ownership [of OT] could grow from 34 percent to 100 percent," and indicated that the Mongolian government would seek to revisit the terms of its agreement with Rio Tinto and Turquoise Hill.

170. The next month, the Mongolian government's inquiries intensified, and the IAAC disclosed that it had arrested and jailed several of the top government officials responsible for the 2009 and 2015 agreements—including two former prime ministers: former Prime Minister Saikhanbileg Chimed, who negotiated the 2015 agreement directly with Defendant Jacques; former Prime Minister Bayar Sanj, who was prime minister when the original 2009 investment deal was signed; Bayanjargal Byambasaikhan, the former CEO of the state-owned entity that holds the Government's stake in Oyu Tolgoi LLC; and Ariunsan Baldanjav, the former Director General of the General Department of Taxation. Former Prime Ministers Bayar Sanj and Chimed Saikhanbileg and former Finance Minister Bayartsogt Sangajav were held in jail for three months until June 2018, and Bayartsogt Sangajav was rearrested in January 2019 and is currently jailed.¹³

171. At the same time government criminal prosecutions were intensifying, in March 2018, the Mongolian government established a Parliamentary Working Group ("PWG") to investigate the OT project in cooperation with the Mongolian National Audit Office and the IAAC.

172. In other words, it was clear that Rio Tinto had every reason to be concerned that

¹³ Both Byambasaikhan, the government's chief negotiator of the 2015 agreement, and Davaadorj Ganbold, who served as CEO of Erdenes Oyu Tolgoi LLC and signed the 2015 agreement on its behalf, were given jail sentences in Mongolia on charges relating to their work on OT, while Chimed Saikhanbileg is in exile in the United States to avoid prosecution in his home country. Chimed Saikhanbileg states on his website that "[c]laims by the current government that the Oyu Tolgoi agreements were negotiated illegally are being used for dual purposes—for [current] President Battulga to persecute his political opponents, and to cajole Rio Tinto into signing a 'better' agreement which the current government can take credit for while tarnishing Mongolia's international business reputation in the process."

government officials were closely scrutinizing the OT relationship, and could uncover facts suggesting the Mongolian government had legitimate reasons to question the fairness of the OT agreements. As a result, Rio and TRQ actively sought to conceal Rio's responsibility for the OT project's cost overruns and delays to minimize the Government's leverage in potential renegotiation of the agreements—fears that were well founded, as that is exactly what happened after the end of the Class Period, as discussed in ¶¶235-36 below.

173. Indeed, after the Swiss investigation made headlines, Defendant Jacques flatly denied that the Swiss investigation was going to have any impact on OT and falsely claimed that the project was on track, telling a *Bloomberg* reporter on March 25, 2018 that “I went there in January as you know, the project is progressing very, very well.” The next month, Rio fired the key OT managers that had been warning about the cost overruns and delays in the underground expansion—terminating Brinkmann, the lead manager of Shaft 2, and requiring him to leave the country in mid-April. And in May 2018, just a month after the ominous developments in the Mongolian investigation into possible corruption into the 2009 and 2015 OT investment agreements, Defendant Soirat, the head of Rio's Copper division, came to Bowley's office and told him to stop looking at what he was originally hired to look at—the problems that were causing delays and cost overruns.

174. While Rio was secretly taking these drastic measures to conceal the project's problems, externally, Defendants continued to positively portray the progress and OT and stressed the importance of honoring the OT agreements with the government of Mongolia. For example, on May 22, 2018, as three of the former Mongolian government officials responsible for negotiating the OT agreements with Rio sat in jail, Defendant Soirat gave a speech at the Mongolia Economic Forum urging the Mongolian government to honor the OT agreements, telling an

audience of government officials and dignitaries that:

The world is watching how Oyu Tolgoi develops. It is a test case for future investment in Mongolia which brings with it jobs, new business opportunities and community development.... Protecting agreements and honoring contracts is critical – particularly in mining where time horizons are long and upfront investment is massive. When agreements and contracts are honored – it gives international investors’ confidence the same will be done for them.

175. Defendant Soirat even obliquely referenced the pending tax dispute, urging that Mongolia “foster dispute resolution mechanism and forums that yield fair and fact-based results.”

176. Then, in June 2018—after Rio Tinto senior management had removed or sidelined managers who had been vocal about the project delays—the Parliamentary Working Group began conducting on-site inspections of Oyu Tolgoi. Publicly commenting on one of those inspections, Torres tweeted on June 16, 2018 that “OT is cooperating fully & transparently with Parliamentary Working Group, National Audit Office and IAAC reviews. . . . Today we are #OTProud to host members of PWG at OT site and showcase our development.”

177. **Fourth**, at the same time Defendants were taking drastic measures to conceal the truth about OT, they were being urged by Turquoise Hill’s then largest shareholders to improve transparency into the mine’s progress. For example, on February 1, 2018, SailingStone Capital which at the time owned more than 10% of TRQ’s common stock, publicly filed a letter criticizing the corporate governance failures at TRQ and Rio’s control over it, pointing to the fact that TRQ’s management team consisted of seconded Rio employees (who had until recently received long-term compensation entirely in the form of Rio stock), that TRQ lacked authority to hire employees without Rio’s approval, and that “TRQ independent directors and management are solely reliant on Rio Tinto for information.” To remedy these problems and improve transparency to TRQ shareholders, SailingStone asked TRQ to conduct “an independent technical report so that we can be certain that existing estimates of capital intensity and the development schedule are reasonable,”

and to give TRQ’s managers employment contracts and further modify their compensation plans to align their interests with TRQ shareholders.

178. TRQ publicly responded to these concerns, promising investors in a March 2018 letter that TRQ’s Board was “committed to robust and effective corporate governance” and would “consider sensible enhancements to Turquoise Hill’s governance that are consistent with the existing contractual framework.” On May 3, 2018, TRQ announced that its Board had met with Rio and agreed on several steps in response to SailingStone’s criticisms—but, importantly, those steps did not include implementing an independent TRQ technical review of the project to increase transparency for TRQ investors into the actual progress at OT.

L. Defendants Attempt To Silence A Whistleblower Who Repeatedly Urged Them To Tell Investors The Truth

179. In light of the extraordinary pressure the Mongolian government was placing on Rio to reopen the OT agreements, and the very real possibility Bowley would disclose the truth, Rio sought to silence him. As Bowley recounted, Defendant Soirat did not act on Bowley’s recommendations to address the problems at OT and implement his proposal presented to Kinnell and Fagen in February 2018 because doing so would eliminate Soirat’s ability to escape accountability for the disaster at OT. As Bowley explained, Soirat’s career ambitions would be stymied if the disaster at OT fell on him, and thus Bowley’s proposal to address it:

put Arnaud Soirat in a really uncomfortable position. He knew already in Q1 2018 the project was massively underperforming. Craig Kinnell (Chief Development Officer) Copper & Diamonds and my boss at the time, wanted action, and wanted answers. . . . Craig went long term sick in early March 2018, and never returned to Rio Tinto after 33 years with the company.

At exactly the same time, I was warned by Soirat in my office on the 12th floor of the Monnis Tower [in Ulaanbaatar, Mongolia] that he knew why I had been employed, but he did not want me touching anything to do with Rio Tinto Growth & Innovation or Jacobs. In short, I was warned to keep away.

My group was set up to identify exactly what was wrong, and then go and fix it. This would [have] created a situation for Soirat tha[t] would [have] become very difficult as he is also in control of TRQ. By distancing himself from me, he could claim deniability in terms of not knowing.

180. As a result, Soirat sought to sideline Bowley because, as Bowley put it, “someone did not like the reports I had made.” The fact that Rio Tinto sought to silence Bowley—rather than terminate him and risk Bowley telling others the truth—was documented in internal Rio Tinto emails. Explaining that Bowley had been approached by an investor seeking information about the state of affairs at OT, Fagen wrote to Sayed in a July 3, 2018 email, “Richard is a resource on the ground in Mongolia and we need him in the tent, not out of it!”

181. Bowley was therefore marginalized within Rio Tinto by Soirat, and his role in addressing the problems at Oyu Tolgoi was significantly reduced. Bowley’s office prior to that time was in the senior Oyu Tolgoi executive suite, about four offices from Torres, the CEO of Oyu Tolgoi LLC. As Bowley would later recount in his Witness Statement, Bowley’s marginalization but continued employment at Rio was “in order to prevent me from working outside the business and from telling the market the truth.”

182. Nevertheless, Bowley continued to report on the cost overruns and delays to Soirat and Fagen as discussed above in ¶¶156-60, urging Sayed, Fagen, and Soirat to correct the misleading statements issued by Rio Tinto concerning OT.

183. On October 26, 2018, Bowley met Sayed at the Shangri-La Hotel and discussed with him the fact that the business was at significant risk in terms of schedule and capital damage relating to the OT expansion. As Bowley recounted in his sworn Witness Statement:

I clarified what we [Sayed and Bowley] had spoken about in an email the same day, stating that I had discussed with the business nearly 10 months ago what the likely issues were which would present themselves to the business in terms of schedule, slippage, cost escalation and loss of valuation from production. I had told the business it needed to step in and if it did not, the situation would deteriorate further. I clarified that the schedule was currently 12 months behind schedule.

184. Bowley told Sayed that Rio Tinto and Soirat's October 2, 2018 roadshow presentation's representations that the "UG [underground] project is on time to deliver mid-2020" and that "all material assumptions underpinning these production targets continuing to apply and not having changed materially" were not true.

185. As Bowley told Sayed, "in my view this is grossly misleading and conflicts with what I had reported," and Fagen knew that the presentation "watered down the truth," which "put it mildly" because, in fact "it was inconsistent with the truth (a lie)." As Bowley told Sayed, "The true schedule damage was around 12 months at that time and that will only increase. This was news that RT knew about. Mining had never been the issue. It was construction, an inexperienced team with the EPCM not having sufficient quality."

186. Following Rio Tinto and Turquoise's initial disclosure of the "re-forecast" on October 15, 2018, Bowley again wrote to Sayed, Fagen, and Soirat to point out that Defendants' statements were false and required correcting.

187. For example, on October 29, 2018, Bowley again wrote Sayed repeating his concerns, referring Sayed to the presentation he had earlier given to Kinnell and Fagen in February 2018, and reminding Sayed of the 12 to 18 month overrun and the cost implications. Referencing the nine-month delay Defendants disclosed on October 15, 2018, Bowley told Sayed that "stating this [nine-month reported delay] will have a limited impact on first drawbell again is a suicidal statement."

188. In an email the next day to Fagen, Bowley urged Rio Tinto to act on delays that had been concealed from the market, highlighted the "need to act now," and pointed out that the target number of sets to be installed in Shaft 2 for October was 100 sets—and it was by then October 30, and only 3 sets had been installed:

From: Richard Bowley (OT)
Sent: 30 October 2018 03:08
To: Fagen, Rosemary (RTHQ) <Rosemary.Fagen@riotinto.com>
Subject: Bit more info and thinking for you !

Hi R.

You and me both know the TRQ statement is a little light on the truth. Nine months is already twelve months, and if you don't know commissioning being one of the biggest risks to any project may add a further three to six months. It's easy to state we can still blow first drawbell with limited exposure to schedule slippage, but if the decline and the conveyors are not commissioned, I am not sure how people think we get that ore to the surface ??? The risks are only going to get bigger.

I know in shaft 2 this month the target was 100 sets. Month to date I think its around 3 !!!!! You do the numbers ?? It's not rocket science, and it's certainly not a Geo issue as TRQ stated, it's purely construction.

189. In the same email to Fagen, Bowley repeated his concern that Rio was inviting damage to its business by failing to honestly and straightforwardly deal with the problems the underground expansion was facing, noting that he had “told Arshad [Sayed] exactly the same as I have stated above Rosemary.”

190. Bowley repeated these concerns in a November 12, 2018 email to Sayed that highlighted the discrepancy between Defendants' public statements and the true facts, specifically identifying Defendants' October 2018 statements as false:

[T]he October 15th TRQ news release, as I told you this was a very watered down version of what are actually the issues. Shaft 2 is behind schedule due to construction and procurement issues, and not geo issues as TRQ state. Our schedule issues are of our own making.

At the present my belief is we will be around 12 months behind schedule, but what no one will talk about and is always one of our biggest risks on any project is commissioning. Commissioning I believe will add a further 3-6 months of schedule risk, which may entail we finally come in around 18 months behind schedule.

191. On November 26, 2018, Bowley wrote to Fagen, saying “Don't get confused with pulling schedule back on the Expansion as shaft 1 has a 450 person capacity and we are a country mile behind schedule on shaft 2 which should of [sic] now been accommodating the additional

350 people a day we need underground to meet the staffing histogram for the project...If they do not want to listen Rosemary, honestly the business in [sic] a bad place, and if our stakeholders and GOM [the Government of Mongolia] wake up, next year could be a nightmare for OT and Rio Tinto.” Fagen did not dispute Bowley’s assessment and responded the next day, “Thank you Richard very thorough assessment, have you discussed with Arshad [Sayed]?”

192. On December 10, 2018, Bowley again wrote to Fagen, warning of the severe implications for the business, and reminding her (and thus Defendant Soirat) that the delays had been known for a long time and that Rio Tinto could only ignore the truth for so long “before it will slap us in the face properly along with GOM and other TRQ shareholders....sorry to be honest.”

193. On December 13, 2018, Fagen replied that “Hi Richard I hear you!!!! I will have a discussion with Arshad [Sayed] and Arnaud [Soirat] – again!”

194. As Bowley explained in his sworn Witness Statement, the statements in Rio Tinto’s 2018 Annual Report that Oyu Tolgoi’s “detailed engineering work and overall construction progress is mostly on track” and that the underground development was “proceeding well” were false. In addition, the statements that Shaft 2 would be delayed by only several months were contrary to “the reports and the warnings I gave to Craig Kinnell, Rosemary Fagan [sic], Arshad Sayed and Arnaud Soirat during the preceding months.”

M. Rio Tinto Terminates The Whistleblower And Attempts To Cover Up Its Misconduct Through A Whitewash Investigation

195. In January 2019, Rio Tinto told Bowley—who had repeatedly warned his superiors, including Defendant Soirat, that their statements about OT were false—that he was being terminated without reason.

196. The next day, Bowley wrote a sharply critical letter to Sayed and Fagen stating that

Rio Tinto's compliance was deficient. Within three days of sending the letter, Bowley received a phone call from a Rio Tinto compliance manager, Jason Landers, who said he was coming to Mongolia to investigate.

197. But as Bowley described in his Witness Statement, that investigation amounted to a coverup. Urging Landers to investigate the concerns he had been raising for months, Bowley provided Landers with a description of his communications with Rio senior management about the true costs and schedule at OT, including email dates and subjects, and identified the monthly reports that would detail the costs and budget problems. While Bowley had been cut off from Rio's IT systems and no longer had access to email, he forwarded to Landers the communications he had from his personal Hotmail account. Those emails included an exchange Bowley had with Kinnell on July 3, 2017—a year before the Class Period began—in which he reported that OT managers had told him “Jacobs are failing badly” and Kinnell confirmed “[i]t is all getting messy Richard and needs intervention to stop it getting significantly worse.”

198. In response, Landers told Bowley these emails provided “context” but that he needed more documentation, repeatedly asking Bowley for all the documents and evidence he had—even though that was already available to Landers through his access to Rio's email servers—saying that it was “critical from an integrity perspective that the comments are supported with evidence and can be shown to be more than mere opinion or hearsay” and that he needed “supporting corroboration of accounts instead of simply relying on hearsay.”

199. Landers completed his investigation in six days in late January 2019 and concluded—two days before Rio Tinto released its 2018 year-end results in February 2019—that there were no compliance breaches. Specifically, Landers informed Bowley in a phone call on February 25, 2019 that he had not reviewed the documents Bowley cited because the time frame

was impossible because doing so would take six people three months. But without reviewing the documents Bowley told Landers evidenced the fraud, Landers told Bowley his investigation concluded there was “no evidence” supporting Bowley’s claims.

200. According to Bowley, that the investigation did not even consider any of the evidence Bowley identified at Rio Tinto shows it was designed to determine what documents Bowley personally had, assess the company’s exposure, and provide a rubber stamp to falsely legitimize Defendants’ statements to investors—not to uncover the securities law violations Bowley identified. Indeed, two days after closing its investigation, on February 27, 2019, Rio filed its annual report and Turquoise Hill provided an “underground development update” in which Defendants first began to reveal the problems at OT. But rather than tell investors the truth, Defendant Jacques falsely told investors that the OT expansion project had made “good progress,” with TRQ and Rio reporting that the project was “proceeding well,” “mostly on track,” and “on budget.” And Defendants blamed the risk of delays that were disclosed on that date on unexpected “challenging ground conditions”—not the cost overruns and delays Bowley had reported to Rio senior management throughout the Class Period and its compliance officer just days before.

201. After Landers closed Rio’s investigation concluding there was no evidence of wrongdoing, Bowley sent a letter about his concerns to Ann Godbehere, a member of Rio Tinto’s Board of Directors since 2010. Specifically, on March 27, 2019, Bowley wrote to Godbehere to tell her about deficiencies in the company’s investigation, that two senior OT managers that Rio spoke to in connection with the investigation called Bowley to say they were not impressed with the process, and that Rio was not a compliant mining company and that the truth would come out.

202. Bowley then emailed Defendant Jacques and Godbehere on April 2, 2019, telling Jacques how behind schedule the project was. Stephen Storey, the global head of Rio Tinto’s

Ethics and Integrity section, responded immediately. Storey called Bowley and said Rio's Board wanted to get his evidence. But again, while Storey pressed Bowley for documents, and "further context and detailed information," Bowley observed that Storey selectively ignored parts of his complaints—while again inviting Bowley to forward "any further supporting facts, documents, detail and context which I believed substantiated my claim."

203. Rio Tinto then engaged the law firm Baker McKenzie to do a compliance review, and Storey asked Bowley to help Baker McKenzie. On May 9, 2019, Bowley had a two-hour call with Baker McKenzie and told the partner in charge of the law firm's team that Rio Tinto would give the law firm only selected information so that Baker McKenzie would conclude that there were no compliance violations. On July 16, 2019, Rio Tinto reported that delays at OT were the result of "ground conditions" being more challenging than expected—despite the facts Bowley provided proving the delays were caused by serious construction and procurement issues that had "nothing to do with ground conditions."

V. DEFENDANTS ARE FORCED TO DISCLOSE THAT THE OT PROJECT IS MONTHS BEHIND SCHEDULE AND WELL OVER A BILLION DOLLARS OVER BUDGET

A. Defendants Are Forced To Issue A Public Disclosure About The Delays And Cost Overruns After Terminating The Whistleblower—But Continue to Mislead Investors

204. Having been forced to make some disclosure following Bowley's whistleblowing and increasing investor scrutiny into the progress at OT, on February 27, 2019, Turquoise Hill issued a press release stating that sustainable first production was likely to be delayed beyond Q3'21, blaming "ground conditions." Turquoise Hill stated that it had conducted its own review of Rio Tinto's schedule and cost re-forecast and "found that project cost was expected to remain within the \$5.3 billion budget but that there was an increasingly likely risk of a further delay to sustainable first production beyond Q3'21." Turquoise blamed that delay on "certain delays to the

completion of Shaft 2, which continued to experience challenges during Q4'18 with structural, mechanical, piping and electrical installation productivity below expectations,” as well as “challenging ground conditions” and new, “more detailed geotechnical data than what was previously available.” Significantly, according to Turquoise Hill, this purportedly new geotechnical information could require some “potentially significant changes to the design of some future elements of the development, and the development schedule”—which together could result in an “overall schedule delay to sustainable first production beyond the end of Q3'21.”

205. That same day, Rio Tinto issued its year-end results, and provided an update on the progress of OT underground expansion, stating that while “underground lateral development has proceeding well,” the fitout of Shaft 2 would be “delayed by several months” and that “difficult ground conditions encountered had slowed progress in some areas of underground development.”

206. In the Turquoise Hill press release and a Rio Tinto conference call on that same day, Defendants again reassured investors that the underground project remained within budget at \$5.3 billion. Thus, the additional disclosure about delays that day did not reveal the full truth about the project’s already-existing problems. For example, in response to an analyst’s question seeking clarity on “what exactly . . . you [are] experiencing,” Defendant Jacques continued to downplay the seriousness of the delays and blamed new “geotech” data as responsible for the revised schedule—omitting any mention of the massive delays and cost overruns and problems that he had been informed of since at least May 2018:

So where we are in the project today. Remember, 5 years to build the infrastructure, 7 years to ramp it up. We are mining in the ore body as we speak. So the quantum of geotech data that we are accessing, we have access to is very significant. And we need to go through a process of updating the model to make sure that the infrastructure is the right location on the back of the geotech data that we have. This is, absolutely, a normal process.

207. In response to the February 27, 2019 disclosures, TRQ shares dropped nearly 13%,

from \$2.10 per share on February 26, 2019 to close at \$1.83 per share on February 27, 2019, on heavy trading volume of more than 18 million shares. As the market continued to absorb these disclosures the next day, TRQ shares dropped again by nearly 7%, from \$1.83 per share to \$1.71 per share on heavy volume of almost 9 million shares.

208. While noting that the disclosed delay was negative, analysts focused on TRQ's reassurances that the \$5.3 billion budget remained on track. For example, Scotiabank wrote in a February 27, 2019 report that "[d]espite this latest delay, TRQ reaffirmed the \$5.3B total project budget."

209. Despite the announced delay, Turquoise Hill continued to reaffirm the \$5.3 billion budget for the OT expansion. On March 14, 2019, Turquoise Hill issued a press release stating that the OT project was expected to remain within the \$5.3 billion budget. In a conference call the next day, Defendant Colton referenced the \$5.3 billion estimated cost for the underground expansion, informing investors that Turquoise Hill had "spent \$2.3 billion on our underground expansion, representing just over 40% of the total \$5.3 billion estimated cost."

B. News Reports Reveal PWG Review Findings, Disclose That Rio Tinto Is Conducting An Internal Investigation Of Its Oyu Tolgoi Disclosures, And Cast Doubt On Defendants' Geotechnical Data Explanation

210. After the close of the market on April 4, 2019, news reports revealed that the PWG had submitted a 200-page report recommending that the original 2009 agreement should be revised, and that the 2015 agreement be scrapped entirely—suggesting that the PWG's review uncovered flaws with the underground expansion. The head of the PWG who led the review, Terbishdagva Dendev, indicated the 2015 agreement did not sufficiently benefit Mongolia, a fact that was exacerbated by the actual costs of the project incurred since its signing. In response to this news, TRQ shares declined approximately 4%, falling from \$1.76 per share on April 4, 2019 to close at \$1.69 per share on April 5, 2019.

211. Then, on May 21, 2019, the *Australian Financial Review* reported that Rio Tinto had retained the law firm Baker McKenzie to investigate allegations by an unnamed whistleblower—named in this Complaint as Bowley—about when Rio knew about problems with the underground-mine project. The article quoted a source as saying that Baker McKenzie was “looking at how Rio had discovered and then communicated the geology challenges, and their potential impact on project cost and schedule.” According to the article, “Baker McKenzie is understood to be working for Rio, but Rio declined to comment when asked about the firm’s work on the matter.” While this report revealed that a Rio Tinto insider’s reports were significant enough to warrant the involvement of an outside law firm, little detail was provided about the reports themselves or what they meant for OT. TRQ’s stock price declined that day, falling about 3% from the prior day’s close on heavy volume.

212. The *Australian Financial Review* provided an update to the Baker McKenzie investigation on June 11, 2019 in connection with a report questioning the Australian Federal Police’s failure to join the corruption investigation into the Oyu Tolgoi LLC 2009 investment agreement. Again, however, the article disclosed little detail about the whistleblower, his reports, or any impact to OT. Then, on June 12, 2019, Rio Tinto disclosed new information concerning its tailing dams following an earlier commitment to improve transparency over safety risks following the catastrophic collapse of rival miner Vale’s Brumadinho dam in Brazil in January that year. That report demonstrated that the tailings dam at Oyu Tolgoi received a “High A” hazard grade, the second most severe category, reflecting the severe consequences if there were to be a failure of the dam. On June 12, 2019, TRQ shares declined by nearly 6%, closing at \$1.15 per share compared to a close of \$1.22 per share on June 11, 2019.

213. Then, on July 8, 2019, the *Australian Financial Review* published a report

suggesting that the problems at OT that Rio had sought to blame on newly available “geotechnical data” may have in fact been known by Rio years earlier, by at least 2012. Specifically, the newspaper reported that, in 2012, “alarm bells started to ring for the engineers working underground at Rio Tinto’s Oyu Tolgoi mine when they had to abandon attempts to drill a fairly simple borehole for ventilation.” As the article reported:

Rather than carve a discrete tunnel through the rock to surface, the bore collapsed into an ungainly void, unfit for use.

As they conducted a post mortem into the borehole failure, the engineers were mindful the incident could be the proverbial canary in the coal mine for Rio's plan to build a huge network of tunnels more than a kilometre beneath the Mongolian desert as part of a \$US5.3 billion expansion.

“We are pretty confident that it is stress-related and or fault-related, or both,” wrote Oyu Tolgoi’s then manager of Vertical Development and Mass Excavation Scott Ramsay, when discussing the cause of the bore failure.

“If it is stress alone due to depth, then we recognise that we have a much, much greater problem, as you'd be aware, because we have not only internal vent raises, but also vertical ore passes and ore bins and underground crusher stations to excavate at 1300 metres below surface for the success of this mine.”

214. In other words, these newly disclosed facts that rock stability concerns had been previously identified by Rio cast doubt on TRQ and Rio’s explanations for the delays disclosed in February, and prompted additional concerns by investors about the status of the underground expansion. In response to this news, TRQ shares declined over 6%, falling from \$1.16 per share on July 8, 2019 to close at \$1.09 per share on July 9, 2019 on extraordinarily high volume.

215. The following day, on July 10, 2019, TRQ disclosed that TRQ director Dr. James Gill had resigned from the Board, ending his term abruptly after five years and without explanation.

C. Defendants Stun Investors By Disclosing That The OT Expansion’s Cost Will Increase By \$1.2 To \$1.9 Billion And The Schedule Will Be Delayed By 16-30 Months

216. Just five days later, and after falsely assuring investors for a year that the underground-mine project remained on budget at \$5.3 billion despite repeated internal warnings about massive cost overruns, Defendants belatedly admitted that they had missed not only the schedule but also the budget. Specifically, on July 15, 2019, Rio Tinto and TRQ disclosed a substantial delay for sustainable first production of 16 to 30 months compared to the original feasibility study guidance in 2016—resulting in sustainable first production now being expected between May 2022 and June 2023—as well as that the capital spend for the project would increase by \$1.2 to \$1.9 billion over the \$5.3 billion previously disclosed.

217. In a press release issued by Rio that day, McIntosh, who had been repeatedly briefed on the problems with Shaft 2 throughout the Class Period, stated:

We have made significant progress on a number of key elements in the construction of the underground project during 2019. However, the ground conditions are more challenging than expected and we are having to review our mine plan and consider a number of options. Delays are not unusual for such a large and complex project but we are very focused as a team on finding the right pathway to deliver this high value project.

218. In response to this news, Turquoise Hill’s common stock price closed at \$0.60 per share, down nearly half—**43.9%**—from the prior day’s closing price of \$1.07 per share, with over 50.2 million shares traded.

219. Analysts were taken by complete surprise by the extent of the cost overruns, disturbed by Defendants’ disclosures, and drastically cut their price targets for TRQ shares. For example, analysts from Canaccord reported the “significant capex increase at OT” was “far worse than our already conservative estimates,” highlighted the need for additional external financing, and cut their price target for TRQ shares nearly in half. RBC analysts reported that it was “hard

to focus on the long term forecast with so many clouds on the horizon,” and cut their price target by one-third. TD Securities similarly slashed its price target nearly in half, and increased its risk rating to “Speculative,” noting the 30-month delay for first sustainable production and development cost increases. On July 17, CIBC analysts reduced their price target by more than half, and downgraded TRQ to Neutral from Outperformer as a result of the company’s announced capex overruns. Similarly, Barclays analysts covering Rio Tinto noted the “major negative surprise” of a 16 to 30 month delay to “commercial production at Oyu Tolgoi underground in Mongolia and a preliminary capex overrun of \$1.2-1.9bn vs. the original \$5.3bn estimate”—“a much longer delay and bigger capex overrun than we previously estimated (18 month delay and \$0.5bn overrun) with negative implications for NPV.”

220. On the last day of the Class Period, on July 31, 2019, Turquoise Hill repeated its July 15, 2019 disclosures about the delays and cost overruns and added that new financing would be needed to complete the project (diluting existing stockholders other than Rio), that a definitive estimate review was not expected to be completed until the second half of 2020 (when TRQ’s existing funds would run out, forcing it to take financing from Rio on unfavorable, non-market terms), and that it would be required to take a \$600 million impairment charge.

221. In response to the July 31, 2019 disclosures, TRQ’s stock price fell **8.6%** on August 1, 2019, from a close of \$0.58 per share on July 31 to a close of \$0.53 on August 1.

222. However, multiple former employees state that geotechnical issues were not the driver of the underground-expansion project’s cost overruns and schedule delays. Rather, as Bowley explained, Rio Tinto falsely blamed the delays on geotechnical problems because this type of problem is outside its control, whereas the concealed engineering and procurement problems were within its control. Thus, Bowley said that Rio Tinto lied to investors about the causes of the

delays and cost overruns in an attempt to evade its responsibility for the problems. Bowley also said that Field, the former General Manager-Underground, told him that the purported rock stability issues were “a load of bollocks” and that these issues were addressed in the original mine design, but Rio erroneously removed that element of the design.

223. FE 2, the Red Path Mining senior manager at Oyu Tolgoi from 2013 to 2019, likewise said that the notion that the geological issues cited by Defendants was the primary driver of the delays was “one hundred percent pure horseshit. . . . It was a management issue and an engineering issue.” Red Path was responsible for sinking Shaft 2 and Shaft 5, and FE 2 saw all the progress reports. “The project was being delayed because of engineering and execution. There may have been some pockets of bad ground, but that’s expected in any mine.” FE 2 said that he “would have been intimately aware of any rock instability” and that it “was just not present.”

224. Indeed, this was the same conclusion reached by analysts at Scotiabank who visited OT and saw first-hand the progress at the mine, and concluded that in light of the evidence “it is now clear to us that the ~15 month delay in completing shaft 2 . . . appears to be the primary driver behind the recently disclosed Phase II development delay and capex overrun” as opposed to any geo-technical issues, which appear to be “manageable.”

225. In addition, Turquoise Hill’s own descriptions of the rate of progress in developing the mine undermine the notion that the delays could be blamed on geotechnical problems. For example, TRQ’s Chief Operating Officer, Joanne Dudley, explained to investors visiting the mine after the end of the Class Period that the geotechnical problem is only in the ore body and does not cause delay because after the first team puts in the originally planned steel bolts and mesh, a separate team can put in extra steel bolts and stronger steel mesh to keep the ceiling and walls of the tunnels from collapsing for \$5,000 per meter, a total of \$100 million. Thus, any geotechnical

problems around the orebody account for only a small part of the \$1.2-\$1.9 billion cost overruns and do not account for the delays.

226. Rather, the delays have been caused by the problems with Shaft 2. According to COO Dudley, before Shaft 2, Rio could drill 1.1 kilometers of lateral tunnels per month, and with Shaft 2 complete Rio was supposed to be able to drill 1.8 kilometers of lateral tunnels per month. Before block-caving mining production can start, 50 kilometers of tunnels surrounding the orebody have to be completed, “drawbell” funnels have to be dug, and a primary crusher has to be installed underground. Thus, the delay and inadequate construction in finishing Shaft 2 caused a year’s delay in completing the 50 kilometers of tunnels.

227. In addition, to the extent that geotechnical problems caused any of the delays and cost overruns associated with Shaft 2 or the lateral tunnels, Rio Tinto was aware of these problems before the Class Period and actively suppressed them during the Class Period.

228. In fact, several former contractors and geotechnical engineers who worked at Oyu Tolgoi expressed significant concerns about the feasibility studies originally conducted to develop the mine, which they report identified the geotechnical problems that Defendants sought to blame for the delays, and they stated Rio Tinto could not credibly claim any supposed geotechnical issues were anything “new.” For example, FE 9, a Construction Manager at Fluor (a contractor at OT) who was one of the head construction managers for Phase 1 of the Oyu Tolgoi project from 2013 to 2014, reviewed portions of the non-public feasibility study conducted Rio Tinto and a Canadian engineering firm in advance of Phase 2 in 2012, including the rock stability and makeup sections. He said, “I saw the numbers,” and it was clear that the mine presented geotechnical challenges, but those issues were brushed aside because Rio Tinto needed the project to succeed. FE 9 said, “On a scale of one to ten, with ten being the absolute worst, [the feasibility study] was a nine.

People had knowledge of what was coming. The CEOs had to know.” He also said, “If Rio Tinto failed [on the Oyu Tolgoi project] they would lose the company. That’s why they did everything to hide it.”

229. Similarly, FE 10, a Rio Tinto Senior Geotechnical Engineer at Oyu Tolgoi from May 2019 through September 2020, who reviewed the 2012 and 2016 feasibility studies—internal documents that are different from the Technical Reports made available to investors—explained that from a geotechnical point of view, the prior feasibility studies did not have the necessary data about the ground conditions, and had no recovery plans in place if something were to happen. Similar to the account provided by Rio Tinto’s former manager of Vertical Development and Mass Excavation Scott Ramsay in ¶213 above, FE 10 said that the lack of reliable geotechnical data in the original feasibility studies (in both 2012 and 2016) meant that the OT Mine Planning Team (“MPT”) could not rely on the long-term plan to design the lateral tunnels that were excavated. Instead, the MPT had to regularly redesign the short-term plans based on the observed situation—i.e., from the data collected on-site at the time.

230. Worse, according to FE 10, Rio Tinto did not update the feasibility studies with observations from the MPT’s work in developing short-term mining plans and in fact deliberately discouraged Rio geotechnical engineers and the outside consultants Rio hired from obtaining the data needed to properly assess the ground conditions at OT. In fact, Rio Tinto management required OT geologists like FE 10 to keep the ground condition data they did obtain a secret—precisely because that information showed how difficult and dangerous the mines actually were.

231. As FE 10 explained, Rio Tinto executives knew from the initial 2012 feasibility study that the ground conditions were challenging but, because of the mismanagement and delays at Shaft 2, no one at Rio Tinto in a leadership role was willing to accept responsibility for any

decision that would cause delays or cost money. As FE 10 recounted: “We all knew that it was a very bad situation, but as a response they always delayed or tried to keep it quiet. They always wanted us to discuss our concerns face to face, never email or in writing.” According to FE 10, Rio Tinto did not want to be charged with knowledge of the ground conditions that existed because addressing them would require Rio to spend significant amounts of money.

232. Rio Tinto’s approach raised serious safety concerns for FE 10, the MPT, and the outside consultants who feared the lack of sufficient geotechnical data heightened the risk of a collapse of the mine. According to FE 10: “We discussed this with the consultants every day. We were to a point that a failure [collapse] is going to happen with an 80% probability.” Based on FE 10’s review of the 2020 feasibility draft, it still did not include a recovery plan despite the high likelihood of a failure. In all events, Rio management’s efforts to bury the geotechnical data its geotechnical engineers had been urging Rio Tinto to incorporate into the OT feasibility studies demonstrates that Rio Tinto’s claim that the delays could be blamed on the discovery of previously unavailable “geotechnical data” were false, and corroborate the accounts of OT managers who said that this was a lie designed to conceal Rio’s mismanagement of Shaft 2.

VI. POST-CLASS PERIOD DEVELOPMENTS

233. After the end of the Class Period, in early March 2020, Bowley—the expert hired by Rio Tinto to assess and fix the problems at OT turned whistleblower—reported Defendants’ misconduct to securities regulators, including the SEC, the Australian Securities and Investments Commission, the U.K. Serious Fraud Office and Financial Conduct Authority, and the Mongolia Financial Regulatory Commission, and those agencies are now investigating the misconduct alleged in this action. In connection with a separate employment dispute before a U.K. tribunal, Bowley provided a 62-page sworn statement detailing Defendants’ fraud. As summarized in that document:

My case, in a nutshell, is as follows:

- 4.1 In 2017, Craig Kinnell said that he had concerns about the OT project.
- 4.2 He recruited me to address his concerns and to suggest solutions.
- 4.3 I reported my concerns and suggested solutions to Craig and Rosemary Fagen in London.
- 4.4 Despite repeating those concerns about schedule delay and cost overrun and proposing solutions, Rio Tinto made no disclosure of the true facts to their partners and investors or the market.
- 4.5 I was then sidelined but was not released from my contract and the confidentiality obligations that went with it.
- 4.6 Not only did RT not disclose the true facts but Arnaud Soirat, Craig Kinnell's boss, told the market that the project was on schedule and on budget, misleading the Government of Mongolia and others.
- 4.7 I continued to report my findings and fears over a) non-disclosure and b) misleading the market until my contract was brought to an early end, having continued to be sidelined and left completely unoccupied until then, marooned in Mongolia.
- 4.8 Being sidelined and then dismissed was the direct result of my whistleblowing reports to the Company.
5. Having reported the true facts to Rio Tinto, and having seen the misreporting of the facts to the market, I conclude that Rio Tinto is seeking to suppress my reports and, by delay, to enable it to shape the narrative for its later disclosures to stakeholders and the market generally regarding the state of the OT project. It has had every opportunity to take corrective action based upon my reports but has declined to do so. Not only has it suppressed my reports but it has made misleading statements to the market regarding the OT project which I was instructed to investigate and report on in London. There were no major geographical [sic] reasons for the delay in the project although this is what Rio Tinto claimed in order to conceal the true causes.

234. Around the same time Bowley filed his Witness Statement, on March 20, 2020, Turquoise Hill disclosed that it would require at least an additional \$4.5 billion in financing to complete the Oyu Tolgoi underground expansion, and said that this financing was required on top

of the \$2.2 billion Turquoise Hill had in available liquidity.

235. In December 2020, the PWG proposed resolutions, which were unanimously passed by the Mongolian Parliament, that the Government should “take comprehensive measures to improve the implementation” of the 2009 agreement, the ARSHA, and the 2015 agreement. In a December 18, 2020 videoconference, members of the PWG, and in particular Minister Luvsannamsrain Oyun-Erdene, raised concerns with Rio’s senior executives—including Defendant Soirat and Sayed—that the cost overruns in the OT underground mine and the decline in project benefits had confirmed the necessity to increase the project’s benefits to Mongolia and that the Government would, if necessary, terminate the 2015 agreement.

236. Last, giving validity to Defendants’ concerns about the Mongolian Government citing cost overruns and delays at OT in the parties’ negotiations, on February 8, 2021, Mongolia announced it was seeking to cancel the Oyu Tolgoi deal with Rio Tinto and would replace that deal with a new agreement, explaining that the significant cost increases at Oyu Tolgoi eroded the economic benefits the Mongolian government expected to receive from the mine.

VII. ADDITIONAL ALLEGATIONS OF SCIENTER

237. Numerous facts including those detailed above, considered collectively, demonstrate that Defendants knew they were misrepresenting the status of the OT expansion or, at minimum, acted recklessly.

238. *First*, Defendants were repeatedly informed in detail about delays and cost overruns at OT and were told that their statements to investors that the project was “on time and on budget” were false. In fact, the Rio Executive Defendants hired Bowley in 2017 precisely because they knew that progress at OT was far behind schedule and wanted an expert like Bowley to address those issues and propose solutions. As Kinnell told Bowley in July 2017, “the project was in trouble” and “needed intervention” and the “problem was with scheduling work and potential

capital expenditure.” After Bowley was hired by Defendant Soirat and Kinnell to conduct that intervention in November 2017, Bowley quickly identified the cost overruns and schedule delays and reported them to Kinnell and Fagen, who relayed them to Defendant Soirat, in a meeting in London in February 2018. At the start of the Class Period, on July 19, 2018, Bowley informed Kinnell and Fagen in writing (who delivered the report to Defendant Soirat) that the project was 12 months behind schedule and \$300 to \$400 million over budget, which was expected to escalate rapidly, and was “massively underperforming.” The schedule delays and budget overruns were known by Defendant Soirat and Rio Tinto management, as confirmed by Fagen, who responded to Bowley, “Oh don’t worry, we’ve known it from the start, just haven’t been able to do anything about it. Arnaud [Soirat] has played a very card [sic] here, which is why you now see ‘things’ surfacing.”

239. Thereafter, Bowley sent repeated emails and had numerous discussions with Defendant Soirat, Kinnell, and Fagen about the status of the OT expansion, warning them that Defendants’ statements to the market that during the Class Period that OT “on time and on budget” were false and required correcting. For example, after the timeline to complete Shaft 2 was internally delayed from October 2018 to January 2019, Bowley sent emails to Defendant Soirat through his gatekeeper, Fagen, in December 2018 stating that Shaft 2 could not be completed by January 2019 and could be completed by the end of 2019 only with luck. As Bowley informed Defendants, their representations concerning OT “watered down the truth” and were “inconsistent with the truth (a lie),” and “completely untrue,” noting that Defendants’ representations in October 2018 concerning the disclosure that the announced nine-month delay would have a limited impact on first drawbell was a “suicidal statement” and concealed the actual 12- to 18-month overrun and associated cost implications that existed. Defendants’ receipt of this information from the expert

they hired to report on OT's schedule and cost overruns—as well as Bowley's repeated urging that Defendants correct their misstatements at the time they were made—is powerful evidence of scienter.

240. **Second**, during the Class Period, Defendants engaged in a machination designed to stage-manage and conceal the true extent of the delays and cost overruns in the fall of 2018. As Bowley recounted, “Rio Tinto understood that the project was now trending out of control” by August 2018 and that the completion of Shaft 2 set for October 2018 would be delayed until at least the third or fourth quarter of 2019, and was concerned about its own liability for mismanaging it. The true state of the progress on Shaft 2 was also reflected in a report from OT's ECPM contractor, Jacobs, that was sent to Rio's senior management in August 2018, and showed that the project was already falling behind the original plan by approximately 14%. As Bowley explained, this confirmed that, as of August 2018, the project had already been delayed by several months and was in the region of \$750 million over budget. In fact, because Jacobs could not meet its \$240 million contractual target cost for finishing its ECPM work in 2018, Jacobs asked to raise the target cost to \$360 million. The OT Board (which included Defendants Soirat, Quellman, Colton and Lane) approved that request in December 2018, a development Bowley described as “totally shocking.” Thus, Defendants clearly knew the project was behind schedule and exceeding its budget.

241. Moreover, instead of disclosing the true facts about OT, Defendants engaged in a “re-forecast” of the schedule that was designed to continue concealing the true extent of the problems with the underground expansion. As shown in monthly progress reports, Rio's initiative to “re-baseline” or “reforecast” the schedule artificially lowered current delays from 14% to 5%. As Fagen wrote in an email to Bowley on August 31, 2018 responding to his description of

the delays and cost overruns, “Yes I complete [sic] agree and now we’re trying to be clever by doing ‘forecast 2’!” As Bowley said to Fagen at the time, “forecast 2” was just a way to “make the current position appear more tenable” and “make[] us look good, pull[] back aspects of schedule that are knackered” but ultimately increased costs. That is because, as Bowley and FE 3 explained, the “re-forecasting” simply pushed out and defunded critical and necessary tasks, such as commissioning work, that would be required before Shaft 2 would be operational. For this reason, according to FE 3, Defendants’ statements concerning the October 2018 reforecast that the project was a bit behind schedule—but still on budget—were not “accurate at all.” The fact that Defendants engaged in this “clever” maneuver to “reforecast” the schedule in a manner that concealed the true status of the project—and did so by falsifying the schedule changes as being approved by Brinkmann after he had been terminated and left Mongolia months earlier—is highly indicative of fraudulent intent.

242. **Third**, Defendants and senior management of Rio and TRQ received and had access to detailed reports documenting the true status of the OT underground expansion. Those included monthly project reports that detailed the status of various OT expansion projects and compared percentages of progress-per-month and cumulative progress-to-date to the development plan reported to investors, as well as commentary from the assigned Project Director summarizing key issues. For example, in a December 2018 report prepared by Jacobs, OT’s EPCM contractor, which was delivered to Rio’s senior management after the October 2018 “re-forecast” that artificially reduced current delays from 14% to 5%, Jacobs noted that “the extent of the work to go is more than reflected in the contractor and master schedule.” The reports FE 4 prepared demonstrating that from the end of 2017 until June 2019, OT’s actual monthly progress consistently totaled around 100-200 meters under a schedule calling for the construction of 800

meters per month were sent to OT and Rio senior management every month, and to Defendant Jacques weekly beginning in October 2018.

243. In addition, monthly and quarterly reports concerning the executive consulting work on behalf of Rio's senior leaders in Mongolia that were provided to Rio's human resources chief, Defendant Jacques and his predecessor, and Rio's Board chairman, identified unethical behavior and "potential overstatements" at OT beginning around 2016. In fact, soon after Defendant Jacques was promoted to CEO, Duffy's firm was ordered to discontinue providing those regular reports to Rio's top leadership in mid-2017—a development that led Duffy to terminate his firm's long-term consulting engagement with Rio.

244. Defendant Jacques and senior management at Rio Tinto also received reports through Rio Tinto's Technical Evaluation Group ("TEG"), which was responsible for ensuring technical aspects around any capital expenditure met Rio's requirements and reported directly to Rio's Investment Committee, which was chaired by CEO Jacques. They also received reports from a Business Evaluation Department ("BED"), which reported to the Evaluation Committee and provided a critique to management about those capital expenditures, which was chaired by Rio's CFO Jakob Stausholm, who reported to Defendant Jacques (and who replaced Jacques as CEO in December 2020). According to FE 11, a senior project manager from 2007 to 2019 who routinely attended Oyu Tolgoi Board meetings, both the TEG and the BED performed week-long on-site reviews of the Oyu Tolgoi project twice per year, including in August-September 2018, which would have identified and reported the cost overruns and delays and reported them Rio Tinto's top leadership.

245. As FE 12, who was Oyu Tolgoi LLC's financial controller from October 2014 to March 2017, explained, Defendant Jacques was fully informed about the project's status: "If the

question is did [Defendant Jacques] know the plan's status, then yes, he definitely did. We constantly had reports that went up the chain [to him]." Given that the Defendants possessed these reports and were responsible for reviewing them, there is a strong inference that they knew what the actual costs and schedule were at the time they made their material misrepresentations.

246. **Fourth**, Defendants were highly motivated to conceal the problems at OT in light of the Mongolian government's aggressive efforts to renegotiate the OT agreements. The Executive Defendants were rightly concerned that the government of Mongolia would use the cost overruns that then existed at OT to renegotiate the terms of their partnership—as it did just that after the Class Period when the overruns were revealed—but also that such a corruption inquiry posed an acute risk to them personally. Indeed, in 2013, the Mongolia government detained (and later jailed) a U.S. citizen who was a well-known member of the expatriate community in Mongolia and the president of SouthGobi Resources—a coal mining company partly owned by Rio and Turquoise Hill—and would not let him leave the country until he was pardoned in February 2015. In fact, Rio Tinto's silencing of key OT managers coincided with the Mongolian Government's seeking \$155 million in tax payments from OT, jailing the former Mongolian government officials involved in negotiating the OT agreements, and initiating inspections into the progress and finances of OT by the Parliamentary Working Group and Mongolian National Audit Office.

247. These developments posed such a serious threat that Defendant Jacques personally traveled to Mongolia to meet with Defendant Soirat and the Mongolian prime minister about Oyu Tolgoi in January 2018, while Defendant Soirat gave a speech in May 2018 urging government officials to respect the existing OT agreements. If Rio had promptly and accurately disclosed the problems at Oyu Tolgoi, its negotiating position relative to the Government would have been

significantly weakened. Indeed, following the disclosure of the cost overruns and delays at the end of the Class Period, the Mongolian Government has done just that, demonstrating the Rio Tinto Executives' motives for concealing the problems to avoid disclosure to the Mongolia Government were well founded. The confluence of these events, and Defendants Jacques' and Soirat's intimate involvement in them, supports a strong inference that they were acting to cover up the truth about Oyu Tolgoi in 2018.

248. *Fifth*, Defendants attempted to silence Bowley to prevent him from disclosing the truth about OT, terminated him for blowing the whistle on the fraud, and tried to keep his information secret as long as possible. As Bowley recounted, in May 2018, Defendant Soirat instructed Bowley to stop looking into delays and cost overruns at OT—i.e., the issues Bowley was hired to address—because Bowley continued to report facts that Soirat wanted to keep secret. To prevent Bowley from continuing to do so, Rio instructed him not to come to work from June 2018 to January 2019, even while Rio kept him on its payroll.

249. According to Bowley, during their one-on-one meeting in May 2018, Defendant Soirat “seemed to be saying that he knew that there was a big problem with the project but he did not want anyone else to know this.” Although he no longer had any work to do, Bowley was kept on Rio's payroll “due to my knowledge and the desire from senior C&D [Copper & Diamonds] individuals for [the problems at OT] not to become public and to keep me ‘in the camp’.” The sidelining of Bowley in May 2018 coincided with Rio's firing of Brinkmann, the head of Shaft 2, and instruction that he leave the country, as well as the unexpected termination of FE 8, who was vocal about the 18-month delay and approximately \$2 billion in cost-overruns the project had incurred by that time.

250. After Bowley repeatedly emailed Rio Tinto senior management, including

Defendant Soirat, about the cost overruns and delays at OT, Rio Tinto terminated Bowley in January 2019 without providing any reason. The next day, Bowley wrote a letter to Rio Tinto complaining that its compliance was seriously deficient—and Rio Tinto responded with an internal investigation that Bowley called a coverup. In fact, despite Bowley providing detailed information and citation to the emails documenting Defendants’ fraud, Rio never reviewed those documents—claiming doing so would take months—and instead concluded there was “no evidence” to support Bowley’s claims before publishing its annual report just two days later. Bowley then sent a letter about his concerns to Godbehere, a member of Rio Tinto’s Board, which prompted Rio Tinto to hire Baker McKenzie, which conducted another investigation whose results have never been publicly released. In his Witness Statement, Bowley wrote: “My impression has been that through conducting two reviews, Rio Tinto has sought only to establish the extent to which I am in a position to prove the facts rather than to establish and investigate the true facts.”

251. Following his termination, Bowley filed a wrongful-discharge case against Rio in the U.K. Employment Tribunal in late 2019. Bowley’s witness statement filed in that proceeding on March 16, 2020, a detailed, 62-page account of the Rio Defendants’ knowingly or recklessly false statements about the Oyu Tolgoi underground mine’s cost overruns and schedule delays, was signed under penalty of contempt of court.¹⁴ Under the U.K. Employment Tribunal’s rules, Bowley’s Witness Statement would remain nonpublic unless and until a public hearing was held on his claims, at which point the Witness Statement and other evidence in his case would become publicly available. On the eve of the scheduled public hearing, Rio settled Bowley’s wrongful-

¹⁴ Specifically, Bowley signed the Witness Statement with the affirmation that “I believe that the facts stated in this witness statement are true” which, under English law, is a “statement of truth” that subjects the maker to contempt of court.

discharge case to avoid the public hearing and keep his evidence of Rio's knowingly or recklessly false statements to investors about the Oyu Tolgoi mine from becoming public. Bowley's Witness Statement (which has not yet become public) repeatedly states that Rio committed "securities fraud" by misrepresenting the underground mine project's schedule and costs. He states: "Having reported the true facts to Rio Tinto, and having seen the misreporting of the facts to the market, I conclude that Rio Tinto is seeking to suppress my reports and, by delay, to enable it to shape the narrative for its later disclosures to stakeholders and the market generally regarding the state of the OT project."

252. *Sixth*, Defendants silenced, terminated, forced out and sought to discredit numerous senior OT managers and other witnesses who reported problems at OT to senior management. Indeed, Bowley was far from alone in internally reporting the problems at OT. For example, Grant Brinkmann, Rio Tinto's Area Manager of Shafts who was one of a handful of people in the world capable of handling the construction of Shaft 2, was fired in or around May 2018 after warning senior management "for a long time" about the problems with the project. According to FE 3, Brinkmann was fired because other members of senior management could "protect their own asses knowing that there were going to be significant delays." And FE 8 was terminated in May 2018 at the same time as Brinkmann and was "thrown under the bus because I kept trying to tell them we should try to sort these things out."

253. Similarly, Field, Rio's former General Manager-Underground at OT, was removed from his position precisely because he was an outspoken critic of Rio Tinto's performance. Field reported to Charron, a managing director in Rio Tinto's Growth & Innovation Division at OT who is close to Defendant Soirat, and, according to Bowley, Field was removed by Defendant Soirat and McIntosh (who reported directly to Soirat) in 2018 because of his criticisms of Rio's handling

of OT. Further, Field's replacement, David Hume, left the project after just three months because, according to Bowley and Brinkmann, Hume recognized just how serious the project's problems were and feared the liability associated with the project would destroy his career.

254. In addition, as reported in the *Financial Times* and *Australian Financial Review* in November 2020 and confirmed by Lead Counsel, an executive leadership consultancy firm that had worked with Rio Tinto for more than a decade terminated its multi-year contract in 2017 because of "serious misgivings about unethical behaviour" at Rio under Defendant Jacques' leadership, including in connection with OT. In a November 2019 email from the consultancy firm to Rio's Board, executives, and lawyers at Baker McKenzie, Duffy highlighted concerns about "potential overstatements" at the Oyu Tolgoi project and said that Baker McKenzie's supposedly independent investigation into OT "excluded information" known by his firm since 2017.

255. Rather than consider that information, Rio's lawyers at Baker McKenize pursued Duffy throughout the Class Period seeking to destroy the data his firm had collected from Rio Tinto executives—including data about OT—and successfully did so after the Class Period. In response to Duffy's repeated requests to Rio Tinto's Board and chairman to address the concerns he had identified before the Class Period, they "took no action"—and did not do so during the Class Period in response to multiple repeated requests from Duffy after Duffy terminated his firm's contract with Rio in December 2017. As Duffy explained in a January 2019 email to Rio Tinto's directors, "We have informed your organization many times since 2017 that we have information that might be pertinent on some legal and ethical grounds." Instead of asking what information Duffy had, Rio actively sought to discredit Duffy by spreading misinformation about his firm's relationship with Rio. Rio's failure to respond to serious concerns about overstatements at Oyu

Tolgoi and other unethical conduct—and its successful effort to destroy Duffy’s evidence of that misconduct—strongly supports an inference of fraudulent intent.¹⁵

256. *Seventh*, Defendants professed to know about the mine’s actual progress, repeatedly spoke knowledgably about it in detail on conference calls with investors, and personally oversaw the problems causing the delays and cost overruns. For example, Defendant Soirat said in an interview on November 10, 2018 that he spent one week every month at Oyu Tolgoi, spent more time in Mongolia than in London, and called Oyu Tolgoi “very important to me.” Similarly, Defendant Jacques personally negotiated the 2015 agreements that resulted in the restart of the underground expansion, which was his “claim to fame” at Rio, and the media has observed that there is “no one at Rio whose standing is more closely connected to the copper business generally and to Oyu Tolgoi particularly than Jacques.” And Defendant Jacques personally visited Mongolia in January 2018 to specifically reaffirm that “Mongolia is one of Rio Tinto’s most strategically important markets and we are here to stay,” and to quell the Mongolian government’s attempt to renegotiate the OT agreements.

257. In addition, Defendants Quellmann, Colton, and Lane, all of whom regularly visited OT, spoke about the underground mine project and its schedule and budget in detail on every investor call during the Class Period. During these presentations, these Defendants assured investors that they knew about the project’s actual status and progress. For example, in direct response to an analyst’s question, Defendant Quellmann said on the first investor call during the Class Period that he and Turquoise Hill’s management were “well plugged-in” to the “processes, cost reviews and the like,” on the underground construction and had “good visibility as to what’s

¹⁵ Lead Counsel understands that at least certain of the data collected by Duffy’s firm was provided to regulators in the U.K. before Rio was able to destroy the data in Duffy’s possession.

going on.” Defendant Colton similarly explained on that call that “we definitely have visibility” into both the “day-to-day” and strategic issues at OT given that Quellmann, Lane, and Colton each had personal responsibility for them and the negotiations with Mongolia, including that Colon was a member of the “joint working committee” and “working group for the shareholder loan,” that “Brendan’s [Lane] involved in power,” and that “Ulf [Quellmann] has been involved throughout [and] will continue to be very involved.”

258. Moreover, since before the Class Period, Turquoise Hill senior management had been actively engaging with TRQ’s then-largest minority shareholder, SailingStone, about its criticisms over the lack of transparency about OT. Those concerns were shared by analysts, who reported that they were “disillusioned by the ongoing lack of clarity provided by TRQ management with regard to key elements affecting the true value of the company,” that TRQ’s disclosures on key regulatory matters “lack clarity,” and that there was a lack of “material update regarding the ongoing uncertainty surrounding the timeline and capex for the development of Phase II” after TRQ began disclosing problems with the project in February 2018.

259. In response to SailingStone’s and other investor concerns, TRQ management purported to take significant measures to ensure TRQ management was fully aware of the progress at OT and reported on that progress to investors, telling investors in a March 14, 2018 letter “that the Board and senior management of Turquoise Hill fully recognize our responsibility to serve the interests of the company and all of its shareholders” and were “committed to the principles of transparency and good governance.” Given that Defendants admitted they knew about the actual progress at OT and committed to investors that they would closely track and report on that progress, there is a strong inference they knew the project was over a year behind schedule and hundreds of millions of dollars over budget when they made their statements. Further, to the extent

that the Turquoise Executives Defendants were unaware of the true facts, they were reckless in making statements to the contrary—particularly in light of the fact that OT is Turquoise Hill’s sole asset and business—and misrepresented the “visibility” they claimed to have into OT’s operations.

260. ***Eighth***, Defendants Jacques and Soirat were personally motivated to conceal the problems at OT. Defendant Jacques understood that he was under serious threat from Oyu Tolgoi’s delays and cost overruns because Jacques’ involvement in OT was the basis of his ascension to CEO at Rio Tinto—a fact that Kinnell, OT’s previous CEO, explained to Bowley, and was independently confirmed by Defendant Jacques’ longtime executive coach. Kinnell also said that he believed that if the truth came out, Jacques would attempt to blame the problems on Soirat. In fact, Defendant Jacques was forced to resign as CEO in September 2020 and was to leave Rio by March 2021 or when his successor was appointed, and did so in December 2020 when Jakob Stausholm was appointed as Rio’s new CEO. As Defendant Jacques’ executive coach explained, Defendant Jacques closely tracked developments in Mongolia and “knew without a doubt” about the problems at OT.

261. Similarly, as Bowley recounted, Defendant Soirat internally sought to distance himself from the project—attempting to force responsibility for it onto the G&I division instead of C&D, which Soirat headed—because Soirat knew that its problems were so severe that being accountable for managing it would risk destroying his career. Bowley said that Soirat knew how bad the problems were throughout 2018 even while he falsely told the market that the project remained on schedule and on budget, contrary to the undisclosed facts known to him.

262. ***Ninth***, Defendants’ scienter can be inferred from the fact that they sought to blame the cost overruns and up to 30-month delay on “geotechnical” problems as opposed to Rio Tinto’s malfeasance in managing the project. As noted above, the initial engineering and construction

work on Shaft 2 necessitated OT to effectively rebuild much of the Shaft 2 headframe from scratch and replace over 40,000 bolts. Rio Tinto did not want these facts to come to light, and blaming the delays and cost overruns on a geotechnical issue provided Rio Tinto with a false reason to deny it knew its statements about the progress at OT were false when made. Rio Tinto was, Bowley said, desperate to conceal the truth about the cause of the delays and cost overruns.

263. To the extent that geotechnical problems with instability of the rock in Shaft 2 caused any part of the delays and cost overruns, Rio Tinto was aware of these geotechnical problems by as early as 2012 as a result of the feasibility report completed that year, as reported by FE 9, FE 10, and other Rio Tinto geotechnical engineers as alleged in ¶¶228-32. In fact, Rio Tinto senior management not only knew about these conditions but actively sought to conceal them by requiring Rio geotechnical engineers to communicate about the rock conditions they studied face-to-face—“never email or in writing”—because they knew “it was a very bad situation.” Defendants’ active concealment of the true facts concerning the geotechnical conditions at OT is additional powerful evidence supporting an inference of scienter.

VIII. DEFENDANTS’ MATERIALLY FALSE AND MISLEADING STATEMENTS AND OMISSIONS

264. Throughout the Class Period, Defendants made a series of materially false and misleading statements and omissions that were disseminated to investors during investor calls and presentations, in Turquoise Hill and Rio Tinto’s SEC filings and press releases, and through other news and media outlets.

265. Most significantly, Defendants made repeated misstatements concerning the schedule and budget for the Oyu Tolgoi mining operation in Mongolia. Specifically, while Defendants told investors that Oyu Tolgoi was progressing on schedule and that costs for the project were on budget, in truth, the underground construction of Oyu Tolgoi faced significant

delays and cost overruns.

A. Defendants Tout The Progress Of The Oyu Tolgoi Underground Project, Concealing \$300 Million In Cost-Overruns And A Year-Long Schedule Delay

266. At the beginning of the Class Period, on July 16, 2018, after the market close, Turquoise Hill issued a press release entitled “Turquoise Hill announces second quarter 2018 production and completion of Shaft 5,” which it also filed as an exhibit to Form 6-K with the SEC. The press release stated the following about development of the Oyu Tolgoi underground project:

Oyu Tolgoi has achieved an important underground development milestone with the completed commissioning of Shaft 5, which is 1,178 metres deep and 6.7 metres in diameter. *There is expected to be a step-up in underground activities with the increased ventilation capacity from Shaft 5. The Company continues to expect the first draw bell in mid-2020 and sustainable first production in 2021.*

267. Echoing Turquoise Hill’s press release concerning the development of the Oyu Tolgoi underground project, on July 17, 2018, Rio Tinto issued its own press release entitled “Rio Tinto releases second quarter production results,” which it also filed as an exhibit to Form 6-K with the SEC. The press release made the following statements about the status of development of the Oyu Tolgoi underground project:

The major growth projects remain on track, with . . . construction of the first drawbell at Oyu Tolgoi Underground anticipated in mid-2020.

* * *

Shaft two equipping and headframe fit-out is in progress, *and the shaft five ventilation system has been fully commissioned and is now operational. Construction of the first drawbell is still expected in mid-2020.*

268. The statements above in ¶¶266-67 that the “major growth projects remain *on track*,” that “first drawbell” was “still expected in mid-2020” and that Defendants expected “sustainable first production in 2021” were materially false and misleading because, in truth, the schedule and major growth projects were not “on track” but at least a year behind schedule and

hundreds of millions of dollars over budget. In fact, according to FE 8, by the time these statements were made, the Oyu Tolgoi expansion project was \$2 billion over budget and at least a year and a half behind schedule—a fact that was confirmed by Bowley, who was hired by Defendant Soirat in 2017 to investigate the state of the expansion because senior Rio Tinto executives were so concerned about cost overruns and delays, and Brinkmann, who reported that Shaft 2 alone was 14 months behind schedule and hundreds of millions of dollars over budget. Further, it was materially false and misleading for Defendants to state that “construction of the first drawbell is still expected in mid-2020” because, in fact, they had no such expectation given that “everyone” involved in the Oyu Tolgoi project knew about the delays, particularly senior Rio and OT managers. The statements in ¶¶266-67 that “[t]here is expected to be a step-up in underground activities with the increased ventilation capacity from Shaft 5” and that “the shaft five ventilation system has been fully commissioned and is now operational” were false and misleading because the CHP heating unit—which was required by Mongolian law to maintain the minimum air temperature for safe underground work by human beings—was supposed to have been fully online by the end of 2017 but was at least eight months behind schedule as of August 2018, so it was not possible to properly perform Shaft 5’s ventilation function.

269. In fact, as reported by numerous former OT managers, including the former employees identified in ¶¶91-96, 129-30, and 136-38 above, the Oyu Tolgoi expansion project was between 12 and 18 months delayed by the start of the Class Period, a fact that was confirmed in monthly and weekly progress reports sent to senior executives. For example, FE 5 reported that by August 2018 was “very apparent” to everyone at OT that the “targets [Defendants] were talking about publicly were obviously not going to be met,” and FE 8 said the project was \$2 billion over budget and at least 18 months behind schedule when FE 8 left in May 2018.

270. Further, Defendants’ statements were also materially false and misleading because they failed to disclose the highly material facts that, among other things, (i) the expert hired by Defendant Soirat to examine the progress at Oyu Tolgoi and “everyone” associated with the project knew it was at least a year behind schedule and extraordinarily over budget; (ii) the headframe for Shaft 2 effectively had to be rebuilt, with the headframe Construction Readiness Program team required to replace approximately 95% of the steel originally installed; (iii) improper engineering and construction required Oyu Tolgoi to remove and replace over 40,000 bolts in Shaft 2, causing months of delay; (iv) the CHP heating unit was at least eight months behind schedule as of August 2018; (v) as Field reported, and despite urging from senior OT leadership, there was no synchronization between construction and engineering, a fundamental necessity for a project like Oyu Tolgoi; (vi) Rio Tinto had, several months earlier, terminated the senior-most manager responsible for Shaft 2, Brinkmann, as a scapegoat after he had repeatedly warned management about the delays in completing Shaft 2; and (vii) Rio had rejected a proposal from Bowley—the expert Defendant Soirat hired to investigate and address the massive cost overruns and schedule delays at OT—and sidelined him in an effort to deliberately prevent the delays and cost overruns from becoming known to investors and other stakeholders.

271. In addition, Defendants’ statements were materially false and misleading because they were accompanied by concrete statements of facts concerning progress at OT that were false. First, in representing that OT was on track to meet the 2020 drawbell deadline, Defendants pointed to “shaft two equipping and headframe fit-out” as being “in progress” when, in reality, in July 2018, the Shaft 2 equipping and headframe fit-out were woefully behind schedule because the headframe had to be rebuilt, and the equipping of Shaft 2 had been delayed by a year as a result of the abysmal conditions of the initial Shaft 2 installation. Second, Defendants supported their

statement that the 2020 drawbell deadline was “on track” by stating that the Shaft 5 “ventilation system has been fully commissioned and is now operational” when, in truth, Shaft 5 could not properly perform its ventilation function because the CHP heating system required by Mongolian law was eight months behind schedule and would not be ready until September 2019.

272. On July 31, 2018, Turquoise Hill issued a press release and an MD&A announcing the Company’s financial and operating results for the second quarter of fiscal year 2018, which it filed as exhibits to Forms 6-K with the SEC. Turquoise Hill reported a “record-level of...underground development” and assured investors that a review of Oyu Tolgoi revealed no material changes to the scope, cost, or schedule.¹⁶

Underground development progress

The main focus of underground development for 2018 continues to be underground lateral development, the fit out of Shaft 2, support infrastructure and the convey-to-surface decline. *The Company continues to expect the first draw bell in mid-2020 and sustainable first production in 2021.*

Underground lateral development was reduced during the first two months of Q2’18 partly due to the commissioning of the new Shaft 5 permanent fans and the resulting ventilation flow transition underground. However, June subsequently achieved a record-level of equivalent underground development with 0.9 kilometres developed. *Progress overall during Q2’18 was 2.4 equivalent kilometres with a total of 12.7 equivalent kilometres of lateral development completed since the re-start of development.* During 2018, underground development is expected to advance approximately 10.0 kilometres.

* * *

During Q4’17, Rio Tinto undertook a schedule and cost review. *Rio Tinto has provided Turquoise Hill with a high-level overview of the review’s outcomes, in*

¹⁶ Each of the MD&As filed by Turquoise Hill during the Class Period was accompanied by a certification signed by Defendants Colton or Quellmann as Turquoise Hill’s CEO and Colton as Turquoise Hill’s CFO stating that the MD&A and accompanying financial report did “not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made.” Defendant Jacques similarly certified that Rio’s 2018 annual report did “not contain any untrue statement of material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading.”

which Rio Tinto concluded there were no material changes in project scope, cost or schedule. Following analysis of the review’s conclusions, Turquoise Hill is in agreement with the findings.

273. During an investor conference call the next day, on August 1, 2018, Defendants Lane, Colton, and Quellmann reassured investors about the ground conditions at Oyu Tolgoi and provided a detailed report on numerous aspects of the progress purportedly made on the underground expansion.

274. In doing so, Defendants Lane, Colton and Quellmann each independently stated and confirmed that the schedule was on track and that Oyu Tolgoi was “on target” for “first drawbell in mid-2020 and sustainable first production in 2021”:

Colton: During the second quarter, underground progress continued and we completed a major milestone, with Shaft 5 ventilation system becoming fully operational. ***Lateral development continued to advance during the quarter, albeit at a slightly slower rate in the first quarter due to the completion of the Shaft 5 ventilation system.***

That said, June development rates were at record levels. Brendan [Lane] will provide more detail on underground development later in the call. ***We do maintain our expectation of first draw bell in mid-2020 and sustainable first production in 2021.***

Lane: Overall, the main focus areas for the project continue to be critical headings development, Shaft 2 infrastructure work, that also includes an underground ore bin and materials handling development, as well as surface infrastructure like the new mine drive facilities and essential heating plant expansion.

Finally, we will remain on target for the first drill point blast in mid-2020 and sustainable production in early 2021.

Quellmann: We’ve hit several underground milestones thus far in 2018, including the completion of Shaft 5. And finally, we continue to expect production from the first draw bell mid-2020 and sustainable first production in 2021.

275. The statements above in ¶¶272-74 that the “major growth projects remain on track,” that “first drawbell” was “anticipated in mid-2020,” and that Defendants expected “sustainable

first production in 2021” were materially false and misleading because, in truth, the schedule and major growth projects were not “on track” but at least a year behind schedule and hundreds of millions of dollars over budget. Further, Defendants’ statements were materially false and misleading because they omitted the highly material facts set forth in ¶¶75-90 concerning the abysmal construction and engineering work of Shaft 2 and the other major problems with the expansion.

276. Last, these statements were misleading because they were accompanied by additional false statements of fact. For example, the statement that the slow pace of lateral development during the quarter was a result of the commissioning process related to Shaft 5 was materially false and misleading because the progress during the quarter was, in truth, impacted by the highly material delays identified in ¶¶91-96, 129-30, and 136-38.

277. Defendants also misrepresented numerous other aspects of the actual progress of the OT underground expansion. For example, Defendant Lane spoke at length and provided a detailed chronology of the progress purportedly made at Oyu Tolgoi, suggesting that the only slowdown that had occurred during the quarter resulted from the Shaft 5 ventilation commissioning and, in any event, that slowdown would not prevent OT from reaching its 10-kilometer lateral development target. Moreover, Defendant Lane omitted any mention of a slowdown concerning Shaft 2—which instead was presented as progressing smoothly and without any issue:

Shaft 2 and associated work will continue throughout the year following the completion of shaft stripping and bracket installation in the last quarter. Equipping is well underway with the cable and piping installation initiated during the period.

Shaft 2 cages and skips are expected to be delivered on-site late in the third quarter for installation during the fourth quarter.

* * *

Taking into account the rotating shifts, the daily average project workforce on-site

during the quarter was over 4,000. The Shaft 5 ventilation system was fully commissioned during the quarter and is now operational and adding additional air capacity to mine.

Shaft 5 is now a dedicated exhaust ventilation shaft fitted with 3 surface fans. It has 2 ventilation take-off points, one at the 1,141-meter level and one at the shaft bottom at 1,178 meters.

Impacts from the [Shaft 5] fan commissioning and the transition of airflows underground were felt during the quarter and resulted in the slowing of lateral development for the period, namely in April and May. Consequently, we recorded the first quarterly drop in development since project restart. However, the upward trend is expected to be back in the third quarter with June having a record month and July tracking quite well to date. ***We still expect to meet the target of 2018 of approximately 10 kilometers of development.***

278. The statements above that Shaft 2 equipping was “well under way with the cable piping installation initiated during the period” was materially false and misleading because, in truth, equipping for Shaft 2 was not “well under way” but instead was facing significant challenges in terms of planning and progress by July 2018, according to internal monthly project reports. In truth, Shaft 2 equipping had been mismanaged by Rio Tinto, including because there was no synchronization between engineering and construction, as Field reported. Moreover, it was materially false and misleading for Defendants to state that equipping for Shaft 2 was “well under way” without disclosing that Defendants had several months earlier terminated the senior-most manager responsible for Shaft 2, Brinkmann, as a scapegoat after he had repeatedly warned management about the delays in Shaft 2.

279. During the August 1, 2018 investor conference call, Defendant Colton downplayed analyst concerns about the financing of Oyu Tolgoi and available capital for completing the expansion:

So when you think about our funding requirements, and you think about the—what we currently have at our disposal, we’ve got about \$2.6 billion left of project financing. And we’ve got about \$1.5 billion in TRQ cash. So that gets you to around \$4 billion, \$4.1 billion just in cash that’s available now. We’ll obviously

use that to continue to fund the underground. If you look at the additional \$1.6 billion in supplemental debt that we can raise to before we hit our debt cap at an OT level, that is something that is continued to be looked at and will be progressed as necessary in order to complete the underground expansion.

280. Turquoise Hill's attempts to reassure investors that it had enough funding to complete the underground expansion because it had \$2.6 billion in project financing available as of July 2018 was materially false and misleading because, in truth, the costs and schedule overruns had by that time amounted to hundreds of millions of dollars over the original budget and had materially depleted the funds available for financing the completion of the Oyu Tolgoi project.

281. On August 1, 2018, Rio Tinto also commented on the Oyu Tolgoi underground project, filing a Form 6-K including its Unaudited Condensed Interim Financial Report for the six-month period ended June 30, 2018. The Interim Financial Report stated that the development of the Oyu Tolgoi underground project remained on budget and on schedule:

Oyu Tolgoi underground copper mine development in Mongolia (approved project spend of \$5.3 billion): *construction of first drawbell expected in 2020, with average annual production of 560 thousand tonnes between 2025 and 2030.*⁹

⁹ This production target was disclosed in a release to the market on 6 May 2016.

All material assumptions underpinning that target continue to apply and have not materially changed.

282. On August 1, 2018, Rio Tinto also held an investor conference call to discuss the six-month financial results. A written presentation for the call listed Defendant Jacques' name on the cover and was posted on Rio Tinto's website. The slides stated that the Oyu Tolgoi underground development remained "*on track*" (in two places) and on budget with "*\$5.3 billion Oyu Tolgoi underground first drawbell production in 2020.*"

283. The statements above in ¶¶281-82 that the "construction of first drawbell [was] expected in 2020, with average annual production of 560 thousand tonnes between 2025 and 2030"

and that “all material assumptions underpinning that target continue to apply and have not materially been changed” were materially false and misleading because, in reality, Shaft 2 was at least a year behind schedule and hundreds of millions of dollars over budget. Further, Defendants’ statements that “all material assumptions underpinning” the target of 560 thousand tonnes between 2025 and 2030 remained unchanged was materially false and misleading because, in fact, there had been material changes to those assumptions—including the fact that, by July 2018, the schedule was at least a year behind and the budget was hundreds of millions of dollars above the assumptions contained in the 2016 feasibility study.

284. Similarly, Rio’s statements that Oyu Tolgoi remained “on track” and on budget at “\$5.3 billion” with “first drawbell production in 2020” were materially false and misleading because, in truth, the schedule and budget were not remotely “on track.” Further, the statements above in ¶¶281-82 were materially false and misleading because they omitted highly material facts, including those set forth in ¶¶75-90 concerning the abysmal construction and engineering work of Shaft 2 and the other major problems with the expansion .

285. Last, these statements were false and misleading because they were accompanied by additional false statements of fact. For example, the statement that the slow pace of lateral development during the quarter was a result of the commissioning process related to Shaft 5 was materially false and misleading because the progress during the quarter was, in truth, impacted by the highly material problems identified in ¶¶91-96, 129-30, and 136-38.

286. On August 15, 2018, Defendant Soirat appeared on MBN World, a Mongolian news network, and discussed the Oyu Tolgoi underground project. During the interview, Defendant Soirat stated that he had recently visited the Oyu Tolgoi mine and met with mine employees, that Oyu Tolgoi was “37% complete,” and that the underground project was “*on plan and on budget.*”

287. Similarly, on September 26, 2018, Defendant Jacques gave a presentation on behalf of Rio Tinto at the Bernstein Pan European Strategic Decisions Conference in London. A written presentation for the conference listed Jacques' name on the cover and was posted on Rio Tinto's website. The presentation represented that Oyu Tolgoi would begin production according to the previously announced schedule, stating that the "\$5.3 billion Oyu Tolgoi underground first drawbell production" would take place in 2020.

288. The statements by Defendants Soirat and Jacques in ¶¶286-57 that the underground project was "on plan and on budget" for first drawbell production in 2020 with capital expenditures of \$5.3 billion were materially false and misleading because, in truth, the expansion project was a year behind schedule and hundreds of millions of dollars over budget by that time "with this expected to escalate rapidly"—a fact that Bowley had reported to Defendant Soirat's gatekeeper before Soirat made these statements. These statements were also materially false and misleading because they omitted highly material facts concerning the true state of the progress made at OT, as detailed in ¶¶75-130.

B. Defendant Soirat Falsely Reassures Investors That Oyu Tolgoi Is On Budget And On Schedule Two Weeks Before The "Re-Forecast"

289. On October 2, 2018, two weeks before Defendants would announce a false and misleading "re-forecast" of the Oyu Tolgoi underground development, Defendant Soirat gave a presentation on behalf of Rio Tinto at the Copper & Diamonds roadshow held in the United States. Soirat met with investors, reassuring them that the underground project was on track just before Defendants publicly announced a nine-month sustainable-production delay. Soirat's presentation included slides that again represented that the project was proceeding on track: "*Underground project on budget and schedule*"; "*\$5.3 billion capex projected*"; "*First drawbell production expected mid-2020*"; and "*UG [underground] project on time to deliver mid-2020.*"

290. The slides stated, as before, “This production target was disclosed in a release to the market on 6 May 2016.... *All material assumptions underpinning these production targets continue to apply and have not materially changed.*”

291. The statements above in ¶¶289-90 that the “Underground project [was] on budget and schedule”; that “\$5.3 billion capex [was] projected”; that “First drawbell production [was] expected mid-2020”; and that “UG project [was] on time to deliver mid-2020”—and that “All material assumptions underpinning these production targets continue to apply and have not materially changed”—were materially false and misleading. As Bowley stated in his sworn Witness Statement submitted in the U.K. Employment Tribunal, these statements were “completely untrue,” a fact that he raised internally at Rio Tinto just days after they were made. As Bowley recounted, these statements were “completely untrue” because, in reality, the OT expansion was hundreds of millions of dollars over budget and at least a year behind schedule, as Bowley had documented and reported to Soirat. These statements were also materially false and misleading because they omitted highly material facts concerning the true state of the progress made at OT, as detailed in ¶¶75-130, including that the lead manager responsible for Shaft 2 had recently been terminated and scapegoated after raising concerns about the delays and trying to address them, that up to 95% of the steel on the headframe of Shaft 2 had to be replaced because it was defective and that, as described above at ¶110, “everyone” at OT knew the schedule was at least a year behind where it should have been.

C. Defendants Issue A False And Misleading “Reforecast” In Order To Conceal Delays And Reassure Investors That Capital Costs And Schedule Remain In Line

292. On October 15, 2018, Turquoise Hill issued a press release entitled “Turquoise Hill Announces Third Quarter 2018 Production and Provides Underground Development Update,” which it filed with the SEC as an exhibit to Form 6-K. Specifically, TRQ disclosed that there

would be a two- or three-quarter delay in achieving sustainable production, which it attributed to unspecified delays and “challenging ground conditions” affecting the completion of Shaft 2. At the same time, the Company reassured investors that “*capital costs remain in line,*” and “*the project remains on schedule to complete in 2022.*”

293. The October 15 press release included a statement by Defendant Quellmann:

Rio Tinto has undertaken a second annual re-forecast of underground development schedule and costs and *preliminary results have concluded that capital costs remain in line with the overall \$5.3 billion budget and the project remains on schedule to complete in 2022.* However, there are certain delays, most notably to the completion of Shaft 2, which includes schedule contingency, that are ultimately expected to result in *a revised sustainable production start from the first quarter of 2021 to late in the third quarter 2021.* We are undertaking a review of the cause and the impact of these delays and will announce the results as soon as possible.

294. The press release also stated that the underground development remained on budget despite the delay:

Rio Tinto, in its role as manager of Oyu Tolgoi and underground construction contractor, has undertaken its second annual schedule and cost re-forecast for the project. *According to this re-forecast, lateral development has progressed well, construction completion schedule remains on track for 2022 and the project is expected to be completed at the \$5.3 billion budget estimate disclosed in the 2016 Oyu Tolgoi Feasibility Study and the 2016 Oyu Tolgoi Technical Report.*

* * *

Despite significant progress in the development of the project, Rio Tinto has notified Turquoise Hill, based on preliminary results, of a delay to achievement of sustainable first production, which is now expected to occur by the end of Q3’21 instead of Q1’21. *This is a result of certain delays including, but not limited to, the completion of Shaft 2, which includes over four months of schedule contingency, and challenging ground conditions. First draw bell remains on track for mid-2020, partly due to a change in the draw bell sequencing strategy.*

Shaft 2 production capability is a key enabler of increased underground development as well as further construction of critical underground infrastructure such as Primary Crusher One and the material handling systems, that support the start of production ramp-up. *While the full effect of some critical path impacts, including the Shaft 2 delay, has been partly mitigated, the net effect is sustainable first production has been forecast by Rio Tinto to be delayed by up to nine months, and is now anticipated to occur in late Q3’21.*

295. Turquoise Hill provided a table on completed lateral development at Oyu Tolgoi for the third quarter of 2018 as follows:

<u>Year</u>	<u>Total Equivalent Kilometres</u>	<u>Lateral Development (kilometres)</u>	<u>Mass Excavation (’000 metres³)</u>
2016	1.6	1.5	3.0
Q1’17	1.0	0.8	5.2
Q2’17	1.4	0.9	9.2
Q3’17	1.4	1.2	8.3
Q4’17	2.2	1.9	8.9
2017	6.1	4.8	31.6
Q1’18	2.6	2.1	11.6
Q2’18	2.4	2.1	8.6
Q3’18	3.0	2.3	17.9
Total	15.7	12.8	72.7

296. For its part, Rio Tinto echoed Turquoise Hill’s comments on the Oyu Tolgoi underground development on October 16, 2018 in a press release, which it filed with the SEC as an exhibit to Form 6-K:

Following an annual re-forecast of the Oyu Tolgoi underground development schedule and costs, capital costs remain in line with the overall \$5.3 billion budget and construction of the first draw bell is still expected in mid-2020. The preliminary re-forecast assessment indicates ground conditions and shaft sinking challenges that are ultimately expected to result in a revised ramp-up schedule to sustainable first production.

297. The statements in ¶¶292-96 that the \$5.3 billion budget for the underground project was on track and the first drawbell remained on track for “mid-2020” were false and misleading because, in reality, the OT expansion was hundreds of millions of dollars over budget and at least a year behind schedule, as Bowley had documented and reported to Soirat. In fact, rather than achieve 2.3 kilometers in lateral development during the quarter as set forth in the chart above at ¶295, only approximately 1.8 to 2.1 kilometers had been completed, as lateral expansion was at least 100-200 meters behind schedule (under a schedule requiring construction of 800 meters) per month as set forth above at ¶¶94, 242. Turquoise Hill would later admit that the lateral expansion

figure it reported for the third quarter of 2018 was false, overstated and had to be revised.

298. These statements were also materially false and misleading because they omitted highly material facts concerning the true state of the progress made at OT as detailed in ¶¶75-130, including that the lead manager responsible for Shaft 2 had recently been terminated and scapegoated after raising concerns about the delays and trying to address them, that up to 95% of the steel on the headframe of Shaft 2 had to be replaced because it was defective, that the initial headframe construction was described as “criminal” and required fixing, and that “everyone” at OT knew the schedule was at least a year behind where it should have been.

299. The statement in ¶292 attributing the delays to “challenging ground conditions” was materially false and misleading because, as alleged in detail in ¶¶91-96, 129-30, and 136-38, Bowley and multiple other former employees have stated that the delays were caused by the engineering, procurement, and construction problems in Shaft 2, not by ground conditions. Bowley reported internally and Defendants knew these statements were false and misleading because the undisclosed true 12- to 18-month delay and associated cost overruns were not driven by geotechnical issues (“ground conditions”) but by undisclosed construction and project mismanagement. Moreover, as alleged in detail in ¶¶228-32, multiple former employees have stated that to the extent any part of the delay was caused by ground conditions, Rio Tinto was aware of these ground conditions and deliberately covered them up in order to avoid reporting additional costs and delays in light of the problems with Shaft 2.

300. Further, the statements in ¶¶292-94, and 296 concerning the re-forecast of the underground project were false and misleading because the re-forecast was a deliberate attempt to obscure the true costs and delays to the underground project. For example, Fagen called the re-forecast a “clever” way to address the 12-month delay and cost overruns that existed in August

2018, and FE 3 said that Defendants' statements in October 2018 that the project was behind schedule but still on budget were not "accurate at all" because Rio and TRQ were only shifting costs to later periods and in a manner that would only increase them.

301. In addition, as Bowley told Sayed in an October 29, 2018 email, representing that there would be a "limited impact on first drawbell" was a "suicidal statement" and misleading because, in fact, there was no reasonable expectation that this timeline could be achieved. Last, Defendants' statements concerning the schedule and drawbell timeline were false and misleading because they failed to disclose that Bowley—the expert Defendants hired to investigate and fix the schedule delays and cost overruns—called Defendants' statements about those topics "suicidal," misleading and untrue.

D. Defendants Continue To Reassure Investors That The Project Is On Schedule And On Budget After The False "Re-Forecast"

302. Following the announcement on October 15, 2018 of the OT "re-forecast," Defendants made numerous reassuring statements that the slight adjustment to the substantial-completion schedule did not impact any other major deadlines and that the overall budget for OT remained intact. For example, on November 1, 2018, Turquoise Hill issued a press release, which it filed with the SEC as an exhibit to Form 6-K, announcing the Company's financial results for the third quarter of fiscal year 2018.

303. In the press release, TRQ again reported on Rio Tinto's second annual reforecast of underground-development schedule and costs: "construction completion schedule remains on track for 2022 and the project is expected to be completed at the \$5.3 billion budget estimate." TRQ also again noted that "sustainable first production . . . is now expected to occur by the end of Q3'21 instead of Q1'21. This is a result of certain delays including, but not limited to, the completion of Shaft 2, which includes over four months of schedule contingency, and challenging

ground conditions.” TRQ stated that “[f]irst draw bell remains on track for mid-2020.”

304. The statements in ¶303 that the underground project was “expected to be completed at the \$5.3 billion budget estimate” and that the completion of Shaft 2 “include[d] over four months of schedule contingency” were false and misleading because, as Bowley had told Soirat, the project at the time was 12 to 18 months behind schedule, not 9 months, and \$750 million over budget. Thus, there was no “four month” contingency, which had already been exceeded. Defendants’ statements were also materially false and misleading because they omitted highly material facts concerning the true state of the progress made at OT as detailed in ¶¶75-160, including that the lead manager responsible for Shaft 2 had been terminated as a scapegoat, that up to 95% of the steel on the headframe of Shaft 2 had to be replaced because it was defective, and that “everyone” at OT knew the schedule was at least a year behind where it should have been.

305. During an investor conference call regarding Turquoise Hill’s third quarter fiscal year 2018 financial results on November 2, 2018, Defendants addressed the October 2018 “re-forecast” in detail. As set forth below, in prepared remarks and in response to analyst questions, Defendants reassured investors that there was nothing out of the ordinary about the “re-forecast,” which was purportedly entirely typical in mining projects like this one, and that the budget remained the same.

306. For example, Defendant Quellmann stated that the delay was “not atypical in the mining industry”:

If we turn to the underground and how that is progressing, OT is in the midst of a transformation into a true Tier 1 asset. We have a strong and uniquely-experienced operating partner in Rio Tinto. We did announce on October 15 that Rio Tinto now projects a 9-month delay for the start of sustainable production from the underground development. The work delays are of course not desirable, ***developing the OT underground blockade is a very large undertaking and these types of delays are certainly not atypical in the mining industry for projects of this scale and complexity.*** Meanwhile, we’re in the midst of a review of the project progress

and status[.]

307. Following these remarks, analysts pushed Defendants for certainty about the delay and its implications. For example, an analyst from Eight Capital asked about the “nine-month delay in the context of the \$5.3 billion budget” and why Defendants were not reporting a larger financial impact given that the extended timeline presumably increased certain costs, like “increased contractor costs and a longer time to keep an elevated workforce.” In fact, Eight Capital asked directly whether “accrual to contingency [is] the reason why we’re not seeing more CapEx or is it largely because these sums are largely immaterial in your view?”

308. In response, Defendant Quellmann reassured investors that the primary underground expansion milestones remained the same and had actually been “confirmed,” so that there would not be associated cost increases for labor (for example) for those tasks. As Defendant Quellman put it, “part of the re-forecast and the preliminary conclusions actually confirmed the existing assumptions so costs, as you just referred to, stay the same,” including the final completion date, or first drawbell, and that it was only “really the first sustainable production [deadline] which has been pushed out.” Further, Defendant Quellmann noted that any changes in the capital expenditures would depend on future events, as there was a “degree of contingency” in the revised schedule that could be impacted by various “mitigation options” and that “[f]or now, where we are with the information that we’ve provided, we confirm the \$5.3 billion total budget.”

309. Analysts also asked numerous questions seeking clarity on the exact causes behind the delay in order to assess its impact. For example, a Scotiabank analyst asked for additional color on “exactly sort of what caused the delay in terms of the underground ramp-up” and whether “we should think of this as like a nine-month knock-on delay on the whole plan” or as something that could be recovered “relatively quickly” to get back to the previously disclosed schedule. Again, Defendant Quellmann provided assurances concerning the work being done to analyze the

key drivers of the delay and pointed to the cushion in the new schedule and the future potential “mitigation impacts” that “still can be affected.”

310. Likewise, an analyst from Rossport Investments asked why investors should not be concerned about the delay becoming “something bigger and longer-lasting,” where “production is delayed for a long period of time.” In response, Quellmann reassured investors that Turquoise had “one of the best operators in the industry with Rio Tinto as the project manager,” that it was undertaking a review to come up with mitigation options that would “minimize any potential delay from a timing perspective, from a cash flow perspective” and that “[g]iven the size, the complexity of these projects, these things have happened in other projects and that’s maybe why you’re asking the question and that’s why we’re putting these safeguards in place to make sure that the concerns that you have is absolutely minimized and doesn’t happen.”

311. The statements in ¶¶305-10 that the delays with the underground project were “not atypical” and “happened in other projects,” Defendants’ statements confirming the \$5.3 billion budget, and their assurances that capital expenditures were not materially impacted were materially false and misleading. In truth, the delays at Oyu Tolgoi were atypical and material because, as described by former OT managers, they resulted from abysmal construction and procurement work, and were like nothing they had ever experienced in their long careers in mining.

312. Further, rather than being cushioned by any “degree of contingency,” in reality, the Oyu Tolgoi expansion project was 12 to 18 months behind schedule, not 9 months, and at least \$750 million (and as much as \$2 billion) over budget—and thus there was no “contingency” left in the false timeline Defendants provided to investors. In addition, the statements in ¶¶308-10 concerning available “mitigation options” were materially misleading because they failed to disclose that Bowley, in February 2018, proposed a mitigation option to address the cost overruns

and delays—but Defendants rejected it and sidelined him to prevent the truth concerning the OT project delays and cost overruns from becoming public.

313. Analysts also specifically asked about the status of Shaft 2. For example, a Sefton Life analyst asked about “how Shaft 2 fit-out is going,” asked for some “sense of the magnitude” of the delay (e.g., whether it was due to something that was meant to take a month but took 6 weeks), and asked whether it resulted from the “fit-out” itself or a delay to “sinking the shaft” that had been carried over. The Sefton Life analyst also asked “how much contingency” was “still left in the \$5.3 billion CapEx estimate versus the amount of contingency initially provided for.”

314. Defendants refused to provide specifics. On Shaft 2, Defendant Quellmann instead told investors that the “key takeaway of the delay” is that Defendants’ new estimate of nine months had been provided “before we’ve actually undertaken some of these mitigations” and while part of the re-forecast period is “still ahead of us.” And rather than provide specifics about the budget contingency, Quellmann simply said that “it’s in there” and that it was “up to us to look and review whether it’s aggressive, whether it’s conservative, or whether it’s appropriate.”

315. Defendant Quellmann’s statements in ¶¶313-14 concerning Shaft 2 and the budget were materially false and misleading because they omitted the highly material facts concerning the actual progress of Shaft 2 as detailed in ¶¶75-160, and rather than having some contingency “in there” in the \$5.3 billion budget, in truth, the project was at least \$750 million dollars (and as much as \$2 billion) over budget at the time.

316. In a corresponding investor presentation on Turquoise Hill’s Third Quarter 2018 Financial Results dated November 2, 2018, the Company made further reassuring statements about the status of underground development. Among other things, the presentation represented that the “UG development project budget [was] unchanged,” that “key risks” were “well understood &

managed,” and that “Turquoise is Well Positioned to Address Key Challenges,” including having sufficient funding to develop the mine.

317. The statements quoted in ¶316 that the underground project remained on budget, that the key risks were “well understood and managed,” and that Turquoise had sufficient funding to deal with “key challenges” were false and misleading because, in truth, the OT expansion project was at least \$750 million dollars (and as much as \$2 billion) over budget, the key risks were not “well managed” but out of control, and Turquoise Hill lacked the funding needed to deal with them. These statements were also false and misleading because they failed to disclose that the “re-forecast” disclosed by Turquoise Hill simply transferred costs and projects related to the major infrastructure of Shaft 2 to secondary phases and thus, it was not “true at all” that the budget was not impacted.

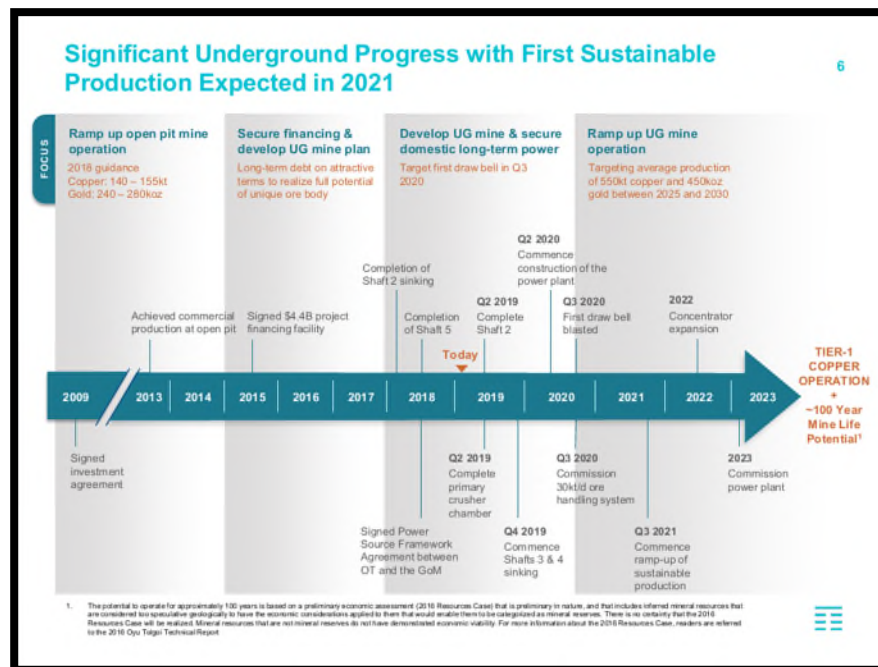
318. In fact, rather than “manage” OT’s schedule risks, Defendants refused to manage the risks posed to the OT schedule and instead sought to bury the truth about the cost overruns and delays. For example, as reported by FE 3, after the lead manager for Shaft 2, Brinkmann, was scapegoated and terminated in May 2018, OT managers set up weekly integration meetings to address the delays and cost overruns and identified at least 60 critical actions that needed addressing—but those meetings were ultimately canceled and nothing had been done to address the critical actions by the time Defendants made their statements in October 2018. Further, Defendants failed to “manage” key risks at Oyu Tolgoi by rejecting the efforts by Bowley to do just that in February 2018.

E. Throughout The End Of 2018 And The Beginning Of 2019, Defendants Continued To Falsely Claim The Underground Project Was On Budget And On Schedule

319. Following the October 2018 re-forecast, Defendants provided investors with repeated assurances that OT was on budget and on schedule, as that schedule had been purportedly

modified in October. For example, on November 12, 2018, at the UBS Australasia Conference in Sydney, Australia, Defendant Jacques presented slides that highlighted Oyu Tolgoi as “the largest and highest quality copper development” in the world, with “\$5.3 billion Oyu Tolgoi underground first drawbell production in 2020.”

320. And on January 117, 2019, Turquoise Hill gave an investor presentation at the TD Securities Mining Conference. A slide deck accompanying that presentation, which noted that it included “information received from Rio Tinto,” again represented that Turquoise Hill was “Well Positioned to Address Key Challenges,” that OT’s “UG development project [was] unchanged,” that the “Key risks” to the project were “well understood and managed,” and that development was proceeding in accordance with the revised schedule:



321. On January 18, 2019, Rio Tinto issued a press release disclosing its third quarter production results, which it also filed as an exhibit on Form 6-K, and which conveyed the same message as Jacques’ and Turquoise Hill’s two prior investor presentations that the project was meeting the revised schedule:

Work continues on the critical Shaft Two equipping activities, central heating plant, mine infrastructure, underground materials handling systems and on priority underground development. *Overall progress continues to track in-line with the re-forecast undertaken in the third quarter of 2018.*

322. The statements quoted in ¶¶319-21 that the underground project remained on budget, that the key risks were “well understood and managed,” that Turquoise Hill had sufficient funding to deal with “key challenges,” and that “overall progress” was tracking “in-line with the re-forecast” were false and misleading because, in truth, the OT expansion project was at least \$750 million (and as much as \$2 billion) over budget, key risks were not “well managed” but had trended out of control and the project was “massively underperforming,” Turquoise Hill lacked the funding needed to deal with them, and the “re-forecast” was, in truth, a deliberate effort undertaken to conceal those facts. The statement that progress was continuing “in-line with the re-forecast” was also misleading for the reasons identified in ¶¶97-149 and ¶¶156-60 because the concrete examples referenced by the statement—e.g., Shaft 2 equipping, central heating plant, and mine infrastructure work—were by then already at least a year behind schedule and falling further behind.

F. Defendants Falsely Attribute Delays To Later Stage “Understanding” Of “Challenging Ground Conditions,” While Continuing To Conceal Cost Overruns And Reassuring Investors Concerning Budget And Schedule

323. Beginning on February 27, 2019, Defendants began to disclose facts about the delays at OT but continued misleading investors concerning the implications for the project budget, and falsely blamed delays on unexpected and recently discovered “challenging ground conditions.” Specifically, on February 27, 2019, Turquoise Hill issued a press release, which it filed as an exhibit on Form 6-K, entitled “Turquoise Hill Announces 2019 Financial Guidance and Provides Underground Development Update.”

324. In its comments on the underground expansion, Turquoise Hill cited “unexpected”

“challenging ground conditions” at OT, which it claimed had resulted in “some potentially significant changes to the design of some future elements of the development, and the development schedule” that would result in an overall schedule delay to sustainable first production beyond the end of Q3’21. Nevertheless, Turquoise Hill continued to mislead investors, stating that “total lateral development or equivalent development metres have remained on budget.” Further, Turquoise Hill represented that the delays were primarily the result of a review of “more detailed geotechnical data than what was previously available” showing more variability of the rock mass than previously anticipated, which Turquoise Hill claimed could “require some potentially significant changes” to the mine design and development schedule.

325. Similarly, that same day, Rio Tinto disclosed a delay in the OT schedule, attributing it to “challenging ground conditions,” while reassuring investors OT development was “mostly on track.” Specifically, on February 27, 2019, Rio Tinto issued its 2018 full year results (the “Year-End Results”), which it also filed as an exhibit on Form 6-K. The Year-End Results made the following statements about the Oyu Tolgoi project:

The Oyu Tolgoi underground project continued to progress through 2018 with the construction of critical above and below ground infrastructure to develop Oyu Tolgoi into one of the largest copper mines in the world.

Detailed engineering design work and overall construction progress is mostly on track. The main focus in 2018 has been underground lateral development, the fit out of shaft 2 (our main production shaft), support infrastructure and the convey-to-surface decline. Recent achievements include the completion of the overland conveyor connecting shaft 2 to the coarse ore stockpile, significant progress on the second underground crusher and the expansion of the central heating plant.

Overall the underground lateral development has been proceeding well, with a total of 19.0km achieved at the end of January 2019 against our second annual reforecast target of 19.8km. With the structural, mechanical and electrical fitout of shaft 2, it is now clear that the completion of this technically complex installation and commissioning work will be delayed by several months. ***Delayed completion of the shaft, which provides additional hoist capacity to accelerate lateral development, will further delay the date we reach sustainable production beyond the 9 month delay indicated in October 2018.***

As announced at that time, difficult ground conditions encountered had slowed progress in some areas of the underground development. As the lateral development continues, we learn more about the rock mass around and under the orebody and have access to more detailed geotechnical data than was available from surface drilling. This data reveals there are areas of the mine footprint where the strength of the rock mass is more variable than anticipated in the feasibility study. This will require some potentially significant changes to the design of some future elements of the development and the development schedule.

Detailed design work is under way as is the work necessary to estimate the impact on cost and schedule from these changes and the delay in commissioning shaft 2.

326. The same day, Rio Tinto issued a written presentation concerning its 2018 annual results, which it filed as an exhibit on Form 6-K, in which Rio Tinto represented that the Oyu Tolgoi underground project “Progressed well in 2018,” as well as its 2018 Annual Report, which it later filed with the SEC as an exhibit to its Form 20-F on March 4, 2019 (the “Annual Report”). The 2018 Annual Report made the same statements about the Oyu Tolgoi project (with immaterial variations) as the Year-End Results. It also stated that the “Total approved capital cost” of the Oyu Tolgoi project was \$5.3 billion and that “By 2027, we expect our Oyu Tolgoi mine in Mongolia to become one of the world’s top producers of copper.” The Annual Report included a letter by Defendant Jacques, in which he stated:

The world-class underground copper project at Oyu Tolgoi, in Mongolia, also progressed . . . *The detailed engineering design work and overall construction is mostly on track*, but more detailed geotechnical information and difficult ground conditions have required a review of the mine design. This, combined with fit-out and commissioning challenges with the main production shaft, is ultimately expected to result in a further revised ramp-up schedule to sustainable first production (beyond the nine-month delay indicated in October 2018). Detailed design work is underway to estimate the impact these issues will have on cost and schedule.

327. The statements in ¶¶324-26 that the underground project was “proceeding well,” “mostly on track,” and “on budget” were materially false and misleading because, in reality, the project was not remotely on track or proceeding well, and was at least \$750 million (and as much

as \$2 billion) over budget, as reported by multiple former employees and by Bowley. It was materially false and misleading for Defendants to state that OT was “proceeding well” and “mostly on track” while omitting highly material facts demonstrating the opposite, including those detailed in ¶¶75-160, 183-94.

328. Rio Tinto’s 2018 Form 20-F also disclosed that, while there was “a deterioration in some internal and external indicators of value for the Oyu Tolgoi CGU [cash-generating unit],” it had concluded that no impairment had taken place. With respect to recent events, the 2018 Form 20-F stated:

As set out in the Strategic report, in October 2018 we announced our annual reforecast of the development schedule which at that time suggested a nine-month delay in the schedule to sustainable production, primarily caused by delays in completing and equipping the primary production shaft and by some zones of variable rock strength that had been encountered. . . . These updates, together with an estimate of the financial impact of a potential further delay in the commissioning of the primary production shaft, have been reflected in the recoverable amount of the CGU [cash-generating unit] as set out above.

Since then, our mine design teams have continued to work with the more comprehensive geotechnical data that has become available as the underground development continues, and it is clear that potentially significant changes to the design of some future elements of the development, and to the development schedule, will be needed, to allow for zones of particularly variable rock strength which have been encountered in the footprint of the mine. The detailed design work is under way, as is the work necessary to estimate the impact on cost and schedule that these changes may have.

Given the very early status of this work, no adjustments have at this time been made to the recoverable amount. The Group will continue to review the CGU for further indicators of impairment as this work progresses.

Recognising the uncertainties noted above, as well as the time remaining through to ramp-up of commercial production, the Group highlights that it does not consider the current headroom to be indicative of an impairment reversal at this time.

329. The statement in ¶328 that Defendants did “not consider the current headroom to be indicative of an impairment reversal at this time” was materially false and misleading because the project was impaired and had been since before the Class Period. For the same reasons, the

Oyu Tolgoi CGU as represented in Rio's Forms 6-K throughout the Class Period were materially false and misleading.

330. Defendant Jacques fielded analyst questions concerning the OT disclosure in an investor conference call on February 27, 2019, in which he again highlighted the "good progress" made at Oyu Tolgoi:

During 2018, we made good progress on our underground project at Oyu Tolgoi ***As we learn more about the rock mass around and under the ore body, we continue to encounter geotech challenges.*** This is a complex project, and we have indicated a further delay to the main production shaft and we will continue to assess the mine plan and design. So in general, copper is not just well performing, it also has got exciting growth opportunities such as Oyu Tolgoi

331. Later, in response to an analyst asking "what exactly are you experiencing" that was causing the OT schedule delay, Jacques amplified his remarks:

So where we are in the project today. Remember, 5 years to build the infrastructure, 7 years to ramp it up. We are mining in the ore body as we speak. So the quantum of geotech data that we are accessing, we have access to is very significant. And we need to go through a process of updating the model to make sure that the infrastructure is the right location on the back of the geotech data that we have. ***This is, absolutely, a normal process.***

332. In response to an analyst who sought further clarification about the "chance that the \$5.3 billion CapEx really moved up significantly," Defendant Jacques again responded by highlighting the supposed geotech issues that he blamed as the driver of the delay:

So there will be—the final cost estimate will be prepared and most of the costs should be prepared this year, so we will have a better sense. So let's see what comes out of it. But the second element is really by building the mine, the infrastructure, the drill holes, the extraction drives and so on and so forth. And that's clearly on the back of the information we have in terms of geotech that we need to look at where do we put the infrastructure? So where do you put the extraction drives, depending on where the faults are? Where do you put the air ventilation? Where do you put the ore passes and so on and so forth in order to make sure that as and when you initiate the cave, then you have the right ground conditions and so on and so forth. So the work is underway. ***Anyone who's got any block cave technology or experience should know that it happens pretty often.*** So when you have the geotech issue, you have to upgrade the model, and that's what the team is doing. And what I said sometime during the year, we'll update the market accordingly.

333. A CLSA analyst similarly asked for more detailed information concerning the “concerns around ground conditions,” as well as how much “headroom” was available under the \$5.3 billion CapEx budget. In response, Defendant Jacques deflected the question about the budget and instead solely responded to the analyst’s question about the ground conditions:

So one of the key questions that people are looking at is where should we put the infrastructure, we know the extraction drive and where we should initiate the cave, and the pace at which we move in order to initiate the cave. So work is underway. By the way, the model will be updated on real-time basis, but we should have a pretty good view on where we are this year. I mean it is normal process. We are incorporating the geotech as we speak. And we have a better answer in the coming months, and we’ll come back to the market.

334. The statements in ¶¶330-33 attributing the announced schedule delays to the purportedly new “geotechnical” data Defendants obtained were materially misleading because they omitted the highly material fact that a 12- to 18-month delay and at least \$750 million (and as much as \$2 billion) in cost overruns had been internally documented and were known by Defendant Jacques and other senior Rio executives since the beginning of the Class Period, and these delays and cost overruns were not driven by any geotechnical issues.

G. Defendants Continue To Misrepresent Delays And Fail To Disclose Cost Overruns, Claiming Delays Are “Absolutely Normal” And Based On New Geotechnical Data

335. Following the February disclosure, Defendants continued to misrepresent the true cost overruns at OT and their cause. For example, Turquoise Hill continued to reaffirm the \$5.3 billion budget for the OT expansion. Specifically, on March 15, 2019, Turquoise Hill issued a press release, which it filed as an exhibit on Form 6-K, and filed an annual report on Form 40-F with the SEC (the “2018 Form 40-F”), announcing the Company’s financial and operating results for the fiscal year ended December 31, 2018. That press release stated the OT project was expected to remain within the \$5.3 billion budget, but added that there may be additional delays to sustainable first production, identifying three key risks:

Shaft 2 equipping delays were due to lower than expected productivity in steel and electrical installation as well as increased quality assurance measures. It was likely the completion date would move beyond Q1'19 and impact overall underground development rate increases.

There have been delays to development progress and productivities in key areas. Even though lateral development has experienced consistent overall progress, development of some critical areas, such as the footprint, Primary Crusher 1 (PC1) system, Shaft 2 and Shaft 5, have been impacted by delays and, with the exception of Shaft 5, are critical path items for the project schedule. Small delays in lateral development on the footprint have had a direct impact on the project schedule critical path, even though total lateral development or equivalent development metres have been on budget. Development in the PC1 system (which includes the PC1 chamber and transfers 3, 4 and 5) has, since the time of the Rio Tinto Review data cut-off, fallen significantly behind target rates.

The Company review indicated that in some areas there was a delay to the critical path from scope growth in mass excavation and additional ground support due to unexpectedly adverse geotechnical conditions. Although the ground support quantities and installation times are less, but not materially less than planned in the 2016 Oyu Tolgoi Feasibility Study and ground support quantities are reported as lower than planned, some types of ground support have had reduced installation times.

336. The press release also quoted Defendant Quellmann:

Underground development continued to progress during 2018 with more than 10 equivalent kilometres completed by year end. As can occur in a project of this size and complexity, mine manager Rio Tinto has identified challenges with the location of some ore passes on the footprint. ***We acknowledge Rio Tinto's proactive approach to maintaining the highest level of infrastructure stability by reviewing the location of these ore passes.*** The impact of these changes will be reflected in the definitive estimate review, which is expected to be complete towards the end of the year.

337. Turquoise Hill updated its table on lateral development advancement at Oyu Tolgoi for Q4'18, and revised results for Q3'18:

Year	Total Equivalent Kilometres	Lateral Development (kilometres)	Mass Excavation (’000 metres³)
2016	1.6	1.5	3.0
Q1’17	1.0	0.8	5.2
Q2’17	1.4	0.9	9.2
Q3’17	1.4	1.2	8.3
Q4’17	2.2	1.9	8.9
2017	6.1	4.8	31.6
Q1’18	2.6	2.1	11.6
Q2’18	2.4	2.1	8.6
Q3’18	3.0	2.1*	23.3*
Q4’18	2.3	1.6	16.0
2018	10.3	7.9	59.5
Total	18.0	14.2	94.1

*: Lateral development and mass excavation amounts for Q3’18 have been updated to reflect revised results.

338. Turquoise Hill further described as a “shortfall” the “2.3 equivalent kilometres of development against a target of 3.0 equivalent kilometres” for the fourth quarter of 2018, blaming the shortfall on challenges including “time constraints during hoist rope maintenance and the introduction of a new underground traffic management plan,” as well as a “shift in priorities of resources from lateral development to mass excavation.”

339. The statements in ¶¶335-38 that the OT expansion “continued to progress” and remained on budget were materially false and misleading because they omitted the facts that the project was in fact at least \$750 million (and as much as \$2 billion) over budget and 12 to 18 months behind schedule—and that these cost overruns and delays did not result from geotechnical issues but had been internally documented and reported to Defendants before the Class Period. In fact, while Turquoise Hill admitted that its prior representation that there was 2.3 kilometers in lateral development during the third quarter in 2018 was false—and provided a “revised” estimate of 2.1 kilometers—Turquoise Hill continued to misrepresent the actual lateral development

expansion progress. Specifically, it was false and misleading for Turquoise Hill to represent that the underground development progress had only experienced a minor “shortfall” in one quarter by “hoist rope maintenance and the introduction of a new underground traffic management plan” when, in reality, lateral expansion was consistently 100-200 meters behind schedule under a schedule requiring construction of 800 meters per month since late 2017, as set forth above at ¶¶94, 242.

340. Further, Defendants’ representations concerning the key risks to the schedule were materially misleading in that they failed to disclose the highly material facts about the construction and engineering of Shaft 2 and Shaft 5 as alleged in ¶¶75-160, Defendants’ knowledge of those issues since the beginning of the Class Period, and their efforts to conceal them from investors.

341. In addition, the 2018 Form 40-F added that, based on the then-“best available information,” the \$5.3 billion project cost remained unchanged and no impairment was required:

Since the completion of its independent review and as announced on February 27, 2019, the Company has become aware that Rio Tinto, as manager of the project, has advised that as the lateral development continues, there is more detailed data than what was previously available. As a consequence, Rio Tinto is studying the impact of some potentially significant changes to some future elements of the underground design including relocating the ore passes. This, together with the delay to Shaft 2 also announced by the Company on February 27, 2019, is ultimately expected to result in an overall schedule delay to sustainable first production beyond the end of the third quarter of 2021.

Recognizing the uncertainties noted above, the Company acknowledges that a further delay to first sustainable production would have an adverse impact upon the recoverable amount. The Company has estimated that, based on its best available information, any possible additional delay to sustainable first production, whilst maintaining a total project cost of \$5.3 billion, would reduce the recoverable amount by approximately \$0.1 billion per each incremental month of delay. ***As such, the Company believes that any reasonably possible movement in the development schedule would not reduce the recoverable amount to below the carrying value of the Oyu Tolgoi cash-generating unit.***

342. The statements in ¶341 that the underground project was “maintaining a total project cost of \$5.3 billion” and that delays “would not reduce the recoverable amount to below

the carrying value of the Oyu Tolgoi cash-generating unit” were materially false and misleading because the project was in fact impaired—and OT had been at least \$750 million (and as much as \$2 billion) over budget since the beginning of the Class Period. For the same reasons, the Oyu Tolgoi cash-generating as represented in TRQ’s Forms 6-K throughout the Class Period were materially false and misleading.

343. In discussing these disclosures with investors on a conference call that day, Defendant Quellmann again attributed the schedule delays to a purportedly new “understanding” of the ore body based on additional geotechnical data:

As announced on February 27, we were recently advised by Rio Tinto as our project manager that as the lateral development continues, *there is more data than was previously available. And as a consequence, the understanding of the ore body has improved. As such, the location of some of the underground infrastructure may need to change.* Essentially, what that means is that we need to revisit the location of some of the ore passes on the footprint contemplated in the 2016 technical report with the benefit of this later stage and understanding.

344. In addition, Defendant Quellmann responded to a number of analyst questions seeking further information concerning the extent of the delays and ability to mitigate them, including one asking how Defendants were “seeing the trade-off between delaying the sustainable first production versus the ability to ramp-up the underground faster.” In response, Quellmann suggested that the possibility of a delay in completing Shaft 2 only recently became apparent:

October last year, Rio had conducted its cost and schedule review last year, we advised the markets of that. That was an announcement at the time of a 9-month delay to sustainable—first sustainable production whilst confirming costs. We then conducted our own independent review, which we—the results of which are included in our disclosure to the market, which effectively said that we confirmed the cost at the time, *but had identified some higher level of risks to the schedule, but not enough to warrant to change the indication to the market.* Since then, if we fast forward to February of this year, it became obvious that Shaft 2 was delayed more than expected.

345. Defendant Quellmann also suggested that Defendants’ new understanding of the ore body contributed significantly to the revised schedule, noting it was not “uncommon, not

unusual” for new geotechnical data concerning ore-body stability to result in a reexamination of the mine plan in projects like OT.

346. The statements in ¶¶343-45 concerning the timeline for Shaft 2 and the purported impact of the geotechnical data were materially false and misleading because, in truth, the problems with Shaft 2 were known by Defendants from the beginning of the Class Period, were responsible for at least \$750 million (and as much as \$2 billion) in cost overruns and up to 18 months in delay—and were not the result of the ground conditions referenced by Defendant Quellmann. Defendants’ statements were also materially misleading because they omitted the true facts about Shaft 2 as noted above in ¶¶75-130.

347. Just like Turquoise Hill, Defendants Rio Tinto and Jacques continued to reassure investors about the progress at OT and dismissed or minimized concerns about that progress as an “absolutely normal” part of mine development. On April 10, 2019, Rio Tinto held its annual shareholders meeting. During the meeting, Jacques responded to a shareholder’s question about rock stability at the Oyu Tolgoi mine by explaining that the geotechnical issues Rio Tinto purportedly encountered were “absolutely normal in the context of a block cave.”

348. The statements in ¶347 that the delays associated with OT were associated with geotechnical issues and that those issues were “absolutely normal” were materially false and misleading because, in truth, the delays at Oyu Tolgoi were abnormal and unusual and were actually the result of having to address the disastrous and dangerous initial engineering and construction work on Shaft 2, had contributed to at least \$750 million (and as much as \$2 billion) in cost overruns, and were not driven by the geotechnical issues highlighted by Defendant Jacques.

349. Turquoise Hill likewise downplayed concerns about the delays by attributing them to geotechnical issues, and told investors that Shaft 2 would be completed by the end of October

2019. On April 15, 2019, in a press release filed simultaneously with the SEC as an exhibit to a Form 6-K, Turquoise Hill echoed Defendant Jacques' April 10, 2019 statements in announcing first-quarter 2019 production for the Oyu Tolgoi mine and providing an update on underground development. Specifically, Defendant Quellmann stated that "Rio Tinto, as project manager, has advised that it has completed a review of the fit-out and commissioning issues at Shaft 2 and it now expects Shaft 2 to be completed by the end of October 2019." Turquoise Hill further stated in its report that "more detailed geotechnical information and different ground conditions have required a review of the mine design and the development schedule."

350. On April 16, 2019, Rio Tinto issued a press release entitled "Rio Tinto releases first quarter production results," which it also filed as an exhibit on Form 6-K. The press release stated the following about development of the Oyu Tolgoi underground project:

At the Oyu Tolgoi Underground Project the review of the mine design and the development schedule is continuing. ***The commissioning of the main production shaft (Shaft 2) is now expected to complete in October 2019.***

* * *

Work is underway at the Oyu Tolgoi Underground Project to understand the overall cost and schedule impacts resulting from the review of the mine design and delays with the fit-out and commissioning work on Shaft 2, as announced in February 2019.

Work continues on critical Shaft 2 equipping activities, central heating plant, mine infrastructure, underground materials handling systems and on priority underground development....

The mine design work, announced in February, to adjust to more detailed geotechnical information and difficult ground conditions continues. Also as announced in February, there have been further delays in the technically complex fit-out and commissioning work on the main production and services shaft (Shaft 2). It is now anticipated that the commissioning of Shaft 2 will be completed by the end of October 2019. This further delay in Shaft 2 will impact on the timeline for other activities in the underground development, and the impact of this and of the mine design work referred to above on the overall project schedule and costs will be announced once the necessary work has been completed.

351. The statements in ¶¶349-50 concerning the commissioning of Shaft 2 and the reasons for further delays were materially false and misleading because they failed to disclose the highly material facts that the underground project was behind because of significant engineering, construction, and procurement issues, as detailed in ¶¶75-130.

352. On May 15, 2019, Turquoise Hill issued a press release filed with the SEC on Form 6-K announcing the Company’s financial and operating results for the first quarter of fiscal year 2019, and reported that “more detailed geotechnical information and different ground conditions have required a review of the mine design and the development schedule” that would be incorporated into the definitive estimate review that Turquoise Hill was conducting.

353. Turquoise Hill also updated its table on lateral development for Oyu Tolgoi for Q1’19:

Year	Total Equivalent Kilometres	Lateral Development (kilometres)	Mass Excavation (’000 metres ¹)
2016	1.6	1.5	3.0
2017	6.1	4.8	31.7
2018	10.3	7.9	59.5
Q1’19	3.2	2.3	21.4
Total	21.2	16.6	115.5

354. During a conference call the next day, May 16, 2019, Defendant Quellmann claimed that the definitive estimate work “*may include some potentially significant changes to the design of some future elements of the mine design and the development schedule.*”

355. When Defendant Quellmann was asked by a Scotiabank analyst during the May 16, 2019 call whether he could provide any further information on the status of the underground project, Quellmann avoided providing any further information, claiming he could not do so because of ongoing necessary work to review new rock mass stability data.

356. The statements in ¶¶352-55 concerning Defendants claims that the underground project's schedule delay was due to a new understanding of ground conditions were false and misleading because, in truth, the project was by that time 16 to 30 months behind schedule, as previously reported by Bowley and multiple former employees. The figures of lateral development reflected in the chart above in ¶353 were false because, in reality, only approximately 1.8 to 2.1 kilometers had been completed, as lateral expansion was consistently behind schedule by 100-200 meters (under a schedule requiring construction of 800 meters) per month as set forth above at ¶¶94, 242. Last, Defendants statements concerning the reasons for the underground project schedule delay were false and misleading because Bowley and multiple former employees reported that the underground project was behind because of significant engineering, construction, and procurement issues since the beginning of the Class Period, which had nothing to do with rock stability, and which Defendants failed to disclose.

H. Defendants Disclose A 16-30 Month Delay In Sustainable First Production And A \$1.2-\$1.9 Billion Increase In Capital Expenditure

357. On July 16, 2019, Turquoise Hill finally disclosed that, as Defendants had known since the beginning of the Class Period, the OT expansion was massively over budget and behind schedule. Specifically, on that date, Turquoise Hill announced second quarter 2019 production for Oyu Tolgoi and provided an update on underground development, in which TRQ reported that “[i]mproved rock mass information and geotechnical data modelling has confirmed that there are stability risks associated with components of the existing mine design.” In addressing those stability issues, TRQ disclosed that “preliminary estimates indicate that sustainable first production could be delayed by 16 to 30 months compared to the original feasibility study guidance in 2016,” that the “capital spend for the project may increase by \$1.2 to \$1.9 billion over the \$5.3 billion previously disclosed,” and that sustainable first production was “now expected between

May 2022 and June 2023.”

358. On July 16, 2019, Turquoise Hill held a conference call with investors in which Defendant Quellmann discussed the \$1.2 billion to \$1.9 billion cost increases and the 9- to 21-month delay until sustainable first production from the extended schedule disclosed in February (i.e., a 16- to 30-month delay from the original plan). As an explanation for this delay and increased cost, Quellmann stated, “what we found is looking at the geotech conditions, they have been slightly worse than anticipated, requiring heavier ground support in some areas than were anticipated in the original feasibility study.”

359. On the same day, Rio Tinto similarly announced these massive cost overruns and schedule delays in a press release (which was later filed with the SEC on Form 6-K):

Preliminary information now suggests that, depending on which mine design options are adopted, first sustainable production could be achieved between May 2022 and June 2023, a delay of 16 to 30 months compared to the original feasibility study guidance in 2016. This range includes contingency of up to eight months reflecting the unexpected and challenging geotechnical issues, complexities in the construction of shaft 2 and the detailed work still required to reach a more precise estimate. Preliminary estimates for development capital spend for the Project, depending on the outcome of the work described above, is now \$6.5 billion to \$7.2 billion, an increase of \$1.2 billion to \$1.9 billion from the \$5.3 billion previously disclosed.

360. Further, McIntosh, who had been repeatedly briefed on the problems with Shaft 2 throughout the Class Period, stated:

We have made significant progress on a number of key elements in the construction of the underground project during 2019. However, the ground conditions are more challenging than expected and we are having to review our mine plan and consider a number of options. Delays are not unusual for such a large and complex project but we are very focused as a team on finding the right pathway to deliver this high value project.

361. Following this news, on July 16, 2019, Turquoise Hill’s common stock price closed at \$0.60 per share, down 43.93% from the prior day’s closing price of \$1.07 per share, with over

50.2 million shares traded.

362. Although Defendants had finally begun to disclose critical information about the true scope of the delays and cost overruns at Oyu Tolgoi, the statements in ¶¶357-61 were materially false and misleading because Defendants failed to disclose the true drivers of those costs and delays—*i.e.*, the disastrous engineering, procurement, and construction issues at OT—or that these material issues required Turquoise Hill to record a \$600 million impairment. Further, McIntosh’s statement that the delays experienced at OT were “not unusual” was materially misleading because, in truth, they had resulted from the fact that OT had to address abysmal initial engineering and construction work on Shaft 2 that was nothing like the veteran miners responsible for the project had witnessed in their careers.

363. Last, on July 31, 2019, Turquoise Hill issued a press release and Management’s Discussion and Analysis that were also filed with the SEC on Form 6-K. Turquoise Hill disclosed that the cost overruns and schedule delays at OT required Turquoise Hill to record a \$600 million impairment of the “Oyu Tolgoi cash-generating unit and deferred tax asset de-recognition adjustments in the period.”

364. Following this news, on August 1, 2019, Turquoise Hill’s common stock price closed at \$0.53 per share, down 8.62% from the prior day’s closing price of \$0.58 per share, with over 16.6 million shares traded.

I. Defendants Signed False And Misleading SOX Certifications

365. Turquoise Hill filed the 2018 Form 40-F that contained Sarbanes-Oxley certifications signed by Defendants Quellmann and Colton, stating that the information contained in the 2018 40-F “does not contain any untrue statements of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which they were made, not misleading” and that “the financial information included in this report[] fairly

present in all material respects, the financial condition, results of operations and cash flows of the issuer.”

366. The Rio Tinto 2018 Form 20-F included Sarbanes-Oxley certifications signed by Defendant Jacques certifying that the Form 20-F “does not contain any untrue statements of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which they were made, not misleading.”

367. The statements quoted in ¶¶365-66 were materially false and misleading because Defendants made untrue statements of material facts and omitted to state material facts necessary to make their statements not misleading throughout the Class Period, including for the reasons stated in ¶¶75-160 above. Defendants failed to disclose to investors the “catastrophic” undisclosed engineering, construction, and procurement problems at Oyu Tolgoi that caused over a year of delay and over a billion dollars in cost overruns in the construction of the underground project, while simultaneously touting that the project was on track and on budget. Even when Defendants finally disclosed delays and cost overruns for the project, they continued to mislead investors on the reasons for the delays and cost overruns, failing to disclose that mismanagement of engineering, construction, and procurement were the primary drivers of the delays and cost overruns. The financial statements issued by Turquoise Hill during the Class Period did not fairly present its financial condition and results of operations because they should have but did not disclose the impairment of the Oyu Tolgoi cash-generating unit.

J. Defendants’ Risk Factor Disclosures Were False And Misleading

368. During the Class Period, Defendants issued risk factor disclosures that failed to adequately address risks regarding the development of the Oyu Tolgoi underground mine and were false and misleading.

369. In its 2017 Annual Report and 2017 Form 40-F (incorporated by reference in its

Consolidated Interim Financial Statements for March 31, 2018 and June 30, 2018, both filed during the Class Period on Form 6-K), Turquoise Hill included the following risk factor disclosure:

The actual cost of developing Oyu Tolgoi may differ materially from the Company's estimates, and development may involve unexpected problems or delays.

The Company's estimates regarding the cost of development and operation of Oyu Tolgoi are estimates only and are based on many 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 appropriate in the circumstances. These estimates and the assumptions upon which they are based are subject to a variety of risks and uncertainties and other factors that could cause actual expenditures to differ materially from those estimated. *If these estimates prove incorrect, the total capital expenditures required to complete development of the underground components of Oyu Tolgoi may increase, which may have a material adverse impact on the Corporation, its results of operations, financial condition and share price.*

In addition to the requirements of the Investment Agreement, there are also a number of uncertainties inherent in the development and construction of any new or existing mine, including Oyu Tolgoi. These uncertainties include the timing and cost, which can be considerable, of the construction of mining and processing facilities; the availability and cost of skilled labour, the impact of fluctuations in commodity prices, process water, power and transportation, including costs of transport for the supply chain for Oyu Tolgoi, which requires routing approaches which have not been fully tested; the annual usage fees payable to the local province for sand, aggregate and water; the availability and cost of appropriate smelting and refining arrangements; and the need to obtain necessary environmental and other government permits, such permits being on reasonable terms, and the timing of those permits. 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, construction or expansion of existing facilities to experience unexpected problems and delays during such activities, which may cause delays in the commencement or expansion of mineral production or sustainable production. Such delays could have unforeseen impacts on disclosed project economics.

370. In its 2018 Annual Report and March 14, 2019 Form 40-F, Turquoise Hill retained the same disclosures (with the change of "Company" to "Corporation" in the risk factor disclosure) but added the words, "*ground and rock mass conditions and stability*" to the laundry list of

“uncertainties” in the risk factor disclosure and added the following at the end:

Accordingly, there is no assurance that the current or future development, construction or expansion activities will be successfully completed within cost estimates, on schedule or at all and, if completed, there is no assurance that such activities will result in profitable mining operations.

371. The 2018 Annual Report and 2018 Form 40-F of Turquoise Hill also stated the following in a section concerning forward-looking statements:

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 to construct such a source) for Oyu Tolgoi; the ability to secure and draw down on the supplemental debt under the Oyu Tolgoi project financing facility and the availability of additional financing on terms reasonably acceptable to Oyu Tolgoi LLC, Rio Tinto and the Company to further develop Oyu Tolgoi; 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, in the development of the underground mine (which could significantly exceed the costs projected in the 2016 Oyu Tolgoi Feasibility Study and the 2016 Oyu Tolgoi Technical Report)***; 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.

372. These statements were repeated in the 2018 Form 40-F, except that Turquoise Hill added the words, “and projected gold, copper and silver grades,” to the first two paragraphs above.

373. Certain of these statements were repeated or incorporated by reference in various Turquoise Hill disclosures during the Class Period. Among other things: (a) Turquoise Hill’s press releases and presentations referred to the risk factors in the most recent Form 40-F; and (b) Turquoise Hill’s press releases also included the first two paragraphs quoted in ¶369 above, generally from the most recent Form 40-F; (c) Turquoise Hill’s interim Management Discussions and Analyses (MD&As) included the forward-looking statement disclosure (with small

modifications) from the most recent Form 40-F; and (d) speakers in Turquoise Hill's conference calls referred to the forward-looking statement disclosures in the accompanying presentation or to the most recent earnings press release and MD&A.

374. Rio Tinto's 2017 and 2018 annual reports and Forms 20-F included "Forward-looking statements" disclosures:

This announcement includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts included in this announcement, including, without limitation, those regarding Rio Tinto's financial position, business strategy, plans and objectives of management for future operations (*including development plans* and objectives relating to Rio Tinto's products, production forecasts and reserve and resource positions), are forward-looking statements. The words "intend", "aim", "project", "anticipate", "estimate", "plan", "believes", "expects", "may", "should", "will", "target", "set to" or similar expressions, commonly identify such forward-looking statements.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Rio Tinto, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding Rio Tinto's present and future business strategies and the environment in which Rio Tinto will operate in the future. Among the important factors that could cause Rio Tinto's actual results, performance or achievements to differ materially from those in the forward-looking statements are *levels of actual production during any period, levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation and such other risk factors identified in Rio Tinto's* most recent Annual report and accounts in Australia and the United Kingdom and the most recent Annual report on Form 20-F filed with the United States Securities and Exchange Commission (the "SEC") or Form 6-Ks furnished to, or filed with, the SEC.

375. In a separate "principal risks and uncertainties" section of the Annual Report, Rio Tinto described the following as a "Strategic Risk":

The Group's ability to deliver projects successfully may vary.	A delay or overrun in a project schedule could negatively impact the Group's profitability, cash flows, ability to repay project-specific indebtedness, asset carrying values, growth aspirations and relationships with key stakeholders.
--	--

376. A later section of the Annual Report disclosed that the 2017 trend for this risk was negative and that “An ability to develop projects on time and within budget enhances the Group’s license to operate and investor confidence,” and that the potential impacts were “Future performance”; “HSE&C”; “Group reputation” and “Solvency.” These disclosures were combined in a single table in the 2018 Annual Report.

377. Rio Tinto’s quarterly operations reviews, interim financial reports, and certain other disclosures incorporated by reference the risk factor disclosures in Rio Tinto’s most recent Form 20-F and Annual Report.

378. The statements quoted ¶¶369-77 were materially false and misleading because they failed to disclose to investors that there were catastrophic undisclosed engineering, construction, and procurement problems at Oyu Tolgoi that caused significant delays and cost overruns in the construction of the underground project at the time they were made.

IX. LOSS CAUSATION

379. During the Class Period, as detailed in this complaint, Defendants made materially false and misleading statements and omissions, including statements regarding the Oyu Tolgoi project’s schedule and budget and undisclosed delays and cost overruns, and engaged in a scheme to deceive the market. This artificially inflated or maintained the price of TRQ common stock and operated as a fraud or deceit on the Class. Later, when Defendants’ prior misrepresentations and risks concealed by the fraudulent conduct alleged in this complaint materialized and were disclosed to the market starting on February 27, 2019, the price of TRQ common stock fell precipitously, as

set forth above in ¶¶204-32. As a result of their acquisition of TRQ common stock during the Class Period and Defendants' material misstatements and omissions, Plaintiffs and other members of the Class (defined below) suffered economic loss, i.e., damages, under the federal securities laws.

380. Specifically, the artificial inflation in TRQ's stock price began to be removed when the conditions and risks misstated and omitted by Defendants began to be partially revealed to the market beginning on February 27, 2019. That day, TRQ and Rio reported that sustainable first production was likely to be delayed beyond the end of Q3'21, the date for sustainable first production that it had announced in October 2018 when it disclosed a delay from the previously indicated date of Q1'21. TRQ and Rio also disclosed that they were working to estimate the impact of this further delay on the project's schedule and cost but did not disclose any updated cost estimate.

381. In response to the February 27, 2019 disclosures, TRQ shares dropped nearly 13% on February 27, 2019, from \$2.10 per share to \$1.83 per share on heavy trading volume of more than 18 million shares traded. As the market continued to absorb these disclosures the next day, TRQ shares dropped again by nearly 7%, from \$1.83 per share to \$1.71 per share on heavy volume of almost 9 million shares.

382. While noting that the disclosed delay was negative, analysts focused on Defendants' reassurances that the budget remained on track. For example, Scotiabank wrote in a February 27, 2019 report that "[d]espite this latest delay, TRQ reaffirmed the \$5.3B total project budget."

383. Defendants' February 27, 2019 disclosures partially corrected Defendants' prior materially misleading statements and omissions concerning the Oyu Tolgoi project. However, the

full truth about the project's delays had not been disclosed, Defendants affirmatively denied its cost overruns, and TRQ's stock price remained artificially inflated.

384. On July 15, 2019, Defendants announced that Oyu Tolgoi's underground extension could be delayed by 16 to 30 months and capital costs could increase by nearly \$2 billion. Specifically, Defendants announced that sustainable first production could be delayed by 16 to 30 months to between May 2022 and June 2023 and that the development capital spend for the project could "increase by \$1.2 to \$1.9 billion over the \$5.3 billion previously disclosed."

385. In response to the July 15, 2019 disclosures, TRQ's stock price fell **43.9%** on July 16, 2019, from a close of \$1.07 per share on July 15 to a close of \$0.60 on July 16.

386. On July 31, 2019, Turquoise Hill publicly stated that improved rock mass information and geotechnical data modelling had confirmed that there were stability risks associated with components of the existing mine design; as a result, a number of mine design options were under consideration to complete the project; given the further required technical work, a definitive estimate review was not expected to be delivered until the second half of 2020; and preliminary estimates indicated that sustainable first production could be delayed by 16 to 30 months from the estimates in the 2016 Feasibility Study, and the development capital spend might increase by \$1.2 billion to \$1.9 billion over the \$5.3 billion previously disclosed in the 2016 Feasibility Study, additional financing would be needed to complete the project (diluting existing stockholders), and a definitive estimate review was not expected to be completed until the second half of 2020 (when TRQ's existing funds would run out, forcing it to take financing from Rio on unfavorable, non-market terms).

387. In response to the July 31, 2019 disclosures, TRQ's stock price fell **8.6%** on August 1, 2019, from a close of \$0.58 per share on July 31 to a close of \$0.53 on August 1.

388. The declines in TRQ's stock price were a direct and proximate result of Defendants' scheme being revealed to investors and to the market. The timing and magnitude of TRQ's stock-price declines negate any inference that the economic losses and damages suffered by Plaintiffs and the other members of the Class were caused by changed market conditions, macroeconomic factors, or TRQ-specific facts unrelated to Defendants' fraudulent conduct.

X. CLASS ACTION ALLEGATIONS

389. Plaintiffs bring this action as a class action under Rule 23 of the Federal Rules of Civil Procedure on behalf of all persons who purchased or otherwise acquired the securities of TRQ during the Class Period on an exchange located in the United States or through transactions in which irrevocable liability was incurred or title was transferred in the United States and were damaged thereby (the "Class"). Excluded from the Class are Defendants, directors and officers of TRQ and Rio Tinto, and their families and affiliates.

390. The members of the Class are so numerous that joinder of all members is impracticable. The disposition of their claims in a class action will provide substantial benefits to the parties and the Court. As of December 31, 2018, TRQ had more than 2 billion shares of stock outstanding and a public float (i.e., shares not owned by Rio) of more than 900 million shares owned by many thousands of investors.

391. There is a well-defined community of interest in the questions of law and fact involved in this case. Questions of law and fact common to the members of the Class which predominate over questions that may affect individual Class members include:

- (a) whether Defendants violated the Exchange Act;
- (b) whether Defendants omitted and misrepresented material facts;

- (c) whether Defendants' statements omitted material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading;
- (d) whether Defendants knew or recklessly disregarded that their statements and omissions were false and misleading;
- (e) whether the price of TRQ common stock was artificially inflated;
- (f) whether Defendants' conduct caused the members of the Class to sustain damages; and
- (g) the extent of damages sustained by Class members and the appropriate measure of damages.

392. Plaintiffs' claims are typical of those of the Class because Plaintiffs and the Class sustained damages from Defendants' wrongful conduct.

393. Plaintiffs will adequately protect the interests of the Class and have retained counsel experienced in class-action securities litigation. Plaintiffs have no interests that conflict with those of the Class.

394. A class action is superior to other available methods for the fair and efficient adjudication of this controversy.

XI. INAPPLICABILITY OF STATUTORY SAFE HARBOR

395. The statutory safe harbor provided for forward-looking statements under certain circumstances does not apply to any of the false statements described in this complaint. Many of the specific statements described in this complaint were not identified as "forward-looking" when made. To the extent that there were any forward-looking statements, there was no meaningful cautionary language identifying important factors that could cause actual results to differ materially from those in the purportedly forward-looking statements. Alternatively, to the extent

that the statutory safe harbor does apply to any forward-looking statements described in this complaint, Defendants are liable for those false forward-looking statements because at the time each was made, the particular speaker knew that the particular forward-looking statement was false or misleading, or the forward-looking statement was authorized or approved by an executive officer of Rio or TRQ who knew that the statement was false or misleading when made.

XII. PRESUMPTION OF RELIANCE

396. At all relevant times, the market for TRQ's securities was an efficient market for the following reasons, among others:

- (a) TRQ stock met the requirements for listing and was listed and actively traded on the New York Stock Exchange and Nasdaq, which are both highly efficient and automated markets;
- (b) TRQ filed periodic public reports with the SEC, the New York Stock Exchange, and Nasdaq;
- (c) TRQ regularly publicly communicated with investors via established market-communication mechanisms, including through regular dissemination of press releases on the national circuits of major newswire services and through other wide-ranging public disclosures, such as communications with the financial press and other similar reporting services; and
- (d) TRQ was followed by securities analysts employed by numerous major brokerage firms, who wrote reports that were distributed to the sales forces and certain customers of their respective brokerage firms. Each of these reports was publicly available and entered the public marketplace.

397. As a result of the foregoing, the market for TRQ securities promptly digested

current information regarding TRQ from all publicly available sources and reflected that information in the price of TRQ securities. Under these circumstances, all purchasers of TRQ securities during the Class Period suffered similar injury through their purchase of TRQ securities at artificially inflated prices, and the presumption of reliance applies.

398. A Class-wide presumption of reliance is also appropriate in this action under the Supreme Court's holding in *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972), because the Class' claims are grounded on Defendants' material omissions. Because this action involves Defendants' failure to disclose material adverse information regarding TRQ's business operations—information that Defendants were obligated to disclose—positive proof of reliance is not a prerequisite to recovery. All that is necessary is that the facts withheld be material in the sense that a reasonable investor might have considered them important in making investment decisions. Given the importance of the Oyu Tolgoi project's schedule and budget, as alleged above, that requirement is satisfied here.

XIII. CLAIMS FOR RELIEF

COUNT I

For Violations Of Section 10(b) Of The Exchange Act And SEC Rule 10b-5 (Against Defendants Turquoise Hill, Rio Tinto, RTIH, Jacques, Soirat, Quellmann, Colton, and Lane)

399. Plaintiffs repeat and reallege every allegation above as if fully stated in this count.

400. This count is asserted on behalf of all members of the Class against Defendants Turquoise Hill, Rio Tinto, RTIH, Jacques, Soirat, Quellmann, Colton, and Lane for violations of Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b), and SEC Rule 10b-5, 17 C.F.R. § 240.10b-5.

401. During the Class Period, these Defendants made, disseminated, or approved the false and misleading statements specified above, which Defendants knew or recklessly disregarded

were misleading in that they contained misrepresentations and failed to disclose material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading.

402. Defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 in that they (a) employed devices, schemes, and artifices to defraud; (b) made untrue statements of material facts or omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and (c) engaged in acts, practices, and a course of business that operated as a fraud or deceit upon Plaintiffs and others similarly situated in connection with their purchases or other acquisitions of Turquoise Hill securities during the Class Period.

403. Defendants, individually and in concert, directly and indirectly, by the use of means or instrumentalities of interstate commerce and of the mails, engaged and participated in a continuous course of conduct that operated as a fraud and deceit upon Plaintiffs and the Class; made untrue or misleading statements of material facts and omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; made the above materially false and misleading statements intentionally or with reckless disregard for the truth; employed devices and artifices to defraud in connection with the purchase and sale of Turquoise Hill securities; and engaged in acts, practices, and a course of business that operated as a fraud or deceit, which were intended to, and did, (a) deceive the investing public, including Plaintiffs and the Class, regarding, among other things, the progress of underground development at the Oyu Tolgoi project, the cause of delays to that underground development, the impact of delays on capital expenditures for underground development at Oyu Tolgoi, the schedule for completion of key components of the underground development, and

problems with the underground development that Rio Tinto was alerted to well in advance of disclosure of delays and cost overruns; (b) artificially inflate and maintain the market price of Turquoise Hill securities; and (c) cause Plaintiffs and other members of the Class to purchase Turquoise Hill securities at artificially inflated prices and to suffer losses when the true facts became known.

404. Defendants Rio Tinto, RTIH, Jacques, Soirat, Turquoise Hill, Quellmann, Colton, and Lane are liable for the materially false and misleading statements and omissions made during the Class Period, as alleged above in Section VIII. As alleged in detail in ¶51, Defendants Rio Tinto and RTIH controlled the contents of all public statements by Turquoise Hill and its executives about Oyu Tolgoi and are thus liable as the maker of the statements by Defendants Turquoise Hill, Quellmann, Colton, and Lane as set forth in ¶¶264-378. Further, Defendants Turquoise Hill, Quellmann, Colton, and Lane are liable under SEC Rule 10b-5(a) and SEC Rule 10b-5(c) for disseminating the false statements made by Rio and RTIH, as well as for making the statements set forth in ¶¶264-378.

405. As part of their scheme to defraud investors in violation of Rule 10b-5(a) and (c), the Defendants named in this Count not only made materially false and misleading statements and omissions to investors in their public statements but also retaliated against employees and consultants who tried to make Defendants acknowledge the truth about the cost overruns and schedule delays at Oyu Tolgoi, as alleged in ¶¶131-37, 195-203.

406. As described above, Defendants acted with scienter throughout the Class Period, in that they acted either with intent to deceive, manipulate, or defraud, or with recklessness. The misrepresentations and omissions of material facts alleged in this complaint, which presented a danger of misleading purchasers of Turquoise Hill securities, were either known to the Defendants

or were so obvious that the Defendants should have been aware of them.

407. Plaintiffs and the Class have suffered damages in that, in direct reliance on the integrity of the market, they paid artificially inflated prices for Turquoise Hill securities, and the inflation was removed from the prices of their securities when the true facts became known. Plaintiffs and the Class would not have purchased Turquoise Hill securities at the prices they paid, or at all, if they had been aware that the market price had been artificially and falsely inflated by these Defendants' materially false and misleading statements and misconduct.

408. As a direct and proximate result of these Defendants' wrongful conduct, Plaintiffs and the other members of the Class suffered damages attributable to the fraud alleged in this complaint in connection with their purchases of Turquoise Hill securities during the Class Period.

COUNT II

For Violations Of Section 20(a) Of The Exchange Act (Against Defendants Rio Tinto, RTIH, Jacques, Soirat, Quellmann, Colton, and Lane)

409. Plaintiffs repeat and reallege every allegation above as if fully stated in this count.

410. This Count is asserted on behalf of all members of the Class against Defendants Rio Tinto, RTIH, Jacques, Soirat, Quellmann, Colton, and Lane for violations of Section 20(a) of the Exchange Act, 15 U.S.C. § 78t(a).

411. ***Defendants Rio and RTIH:*** As the majority shareholder of Turquoise Hill and project manager of the Oyu Tolgoi development through its wholly owned subsidiary RTIH, and through its contractual rights to exercise control over Turquoise Hill's operations and public statements, Rio Tinto was a controlling person of TRQ within the meaning of Section 20(a) of the Exchange Act. By reason of its ownership and contractual rights, Rio Tinto had the power and authority to direct the management and activities of TRQ and its employees and to cause TRQ to engage in the wrongful conduct alleged in this complaint. Rio Tinto was able to and did control,

directly and indirectly, the content of the public statements made by Turquoise Hill during the Class Period, thereby causing the dissemination of the false and misleading statements and omissions of material facts as alleged in this complaint.

412. In its capacity as the majority owner of Turquoise Hill common stock and the project manager of Oyu Tolgoi, and as more fully described above, Rio Tinto had direct involvement in the day-to-day operations of TRQ, especially with regard to the Oyu Tolgoi project. All but one officer of TRQ were Rio Tinto employees who were seconded to TRQ with the expectation that after working at TRQ for several years, they would move on to work at other Rio Tinto projects elsewhere in the world. Thus, they remained dependent on Rio during their time at TRQ for their compensation (including Rio Tinto incentive compensation while seconded at TRQ), long-term employment, and pensions. Rio Tinto employees worked at and supervised Oyu Tolgoi's underground development, conducted unilateral periodic reviews of the development to assess whether the development was on schedule and on budget, and were directly involved in providing false information or certifying or approving the false statements disseminated by Turquoise Hill during the Class Period. As manager of the project, Rio Tinto had unlimited access to information about the project's status and expenses and exercised complete control over TRQ's access to information about its own sole significant asset. Since 2012, all TRQ employees other than Defendant Quellmann have been Rio Tinto employees and remained as such while seconded to TRQ; Quellmann is a former senior Rio employee and was Rio's lead negotiator for a 2013 short-term bridge loan from Rio to TRQ. All TRQ Board members are elected to the TRQ Board by Rio Tinto, which has the power to cause their election or to block any competing nominees without any votes from other TRQ stockholders.

413. As a result of the delays and cost overruns at the Oyu Tolgoi project, Turquoise

Hill requires billions of dollars of additional capital to complete the project and achieve commercial production of copper from the underground mine. A Financing Support Agreement between Turquoise Hill and Rio Tinto that was entered into in relation to the \$4.4 billion project financing facility obtained by TRQ in 2015 and that remains in effect gives Rio Tinto effective control over any additional capital raising by TRQ. Thus, Rio has an effective stranglehold over how funds are raised for TRQ to develop its only asset. This gave Rio yet another means of control over TRQ during the Class Period when Defendants became aware of the delays and cost overruns and resulting need for additional capital. Rio Tinto's effort in 2020 to use its control over TRQ to force TRQ to raise capital on unfavorable, non-market terms, to the detriment of TRQ's minority stockholders and advantage of Rio, has been so egregious that TRQ initiated an arbitration proceeding against Rio and obtained a Temporary Restraining Order to force Rio to agree to market-rate financing for TRQ that would be fair to TRQ's minority stockholders. Moreover, after Defendant Quellmann initiated this effort, Rio used its control over TRQ to force his resignation.

414. As a result of the foregoing, Rio Tinto and RTIH were controlling persons of Turquoise Hill within the meaning of Section 20(a) of the Exchange Act.

415. ***Rio Executive Defendants:*** By reasons of Defendants Jacques' and Soirat's high-level positions of control and authority as Rio's CEO and the CEO of Rio's copper division, respectively, and, in the case of Jacques, a director of Rio, and, in the case of Soirat, a director of OT, the Rio Executive Defendants had the power and authority to influence and control, and did influence and control, the decision-making and activities of Rio, RTIH, Turquoise Hill and their employees, and to cause them to engage in the wrongful conduct alleged in this complaint. The Rio Executive Defendants were able to and did influence and control, directly and indirectly, the content and dissemination of the public statements made by Rio, RTIH and Turquoise Hill during

the Class Period, thereby causing the dissemination of the false and misleading statements and omissions of material facts as alleged herein. The Rio Executive Defendants were provided with or had unlimited access to copies of Rio, RTIH and Turquoise Hill's press releases, public filings and other statements alleged by Lead Plaintiff to be misleading before or shortly after these statements were issued and had the ability to prevent the issuance of the statements or cause them to be corrected.

416. In their capacities as the most senior corporate officers of Rio and RTIH, and as more fully described above, the Rio Executive Defendants had direct and supervisory involvement in the day-to day operations of Rio, RTIH, and OT and therefore are presumed to have had the power to control or influence the particular transactions giving rise to the securities law violations as alleged herein. Defendant Jacques signed Rio's SEC filings and Sarbanes-Oxley certifications, and Defendants Jacques and Soirat were directly involved in providing false information and certifying or approving the false statements disseminated by Rio, RTIH and Turquoise Hill during the Class Period.

417. As a result of the foregoing, the Rio Executive Defendants were controlling persons of Rio, RTIH and Turquoise Hill within the meaning of Section 20(a) of the Exchange Act.

418. ***Turquoise Executive Defendants:*** By reason of Defendants Quellmann, Colton and Lane's high-level positions of control and authority as Turquoise Hill's CEO, CFO and COO, respectively, in their roles as members of the Board of OT, and, in the case of Quellmann, his role on the Turquoise Hill Board, the Turquoise Executive Defendants had the power and authority to influence and control, and did influence and control, the decision-making and activities of Turquoise Hill and its employees, and to cause them to engage in the wrongful conduct alleged in this complaint. The Turquoise Executive Defendants were able to and did influence and control,

directly and indirectly, the content and dissemination of the public statements made by Turquoise Hill during the Class Period, thereby causing the dissemination of the false and misleading statements and omissions of material facts as alleged herein. The Turquoise Executive Defendants were provided with or had unlimited access to copies of Turquoise Hill's press releases, public filings and other statements alleged by Lead Plaintiff to be misleading before or shortly after these statements were issued and had the ability to prevent the issuance of the statements or cause them to be corrected.

419. In their capacities as the most senior corporate officers of Turquoise Hill, and as more fully described above, the Turquoise Executive Defendants had direct and supervisory involvement in the day-to day operations of Turquoise Hill and served as members of the OT Board, therefore, are presumed to have had the power to control the particular transactions giving rise to the securities law violations as alleged herein. Defendants Quellmann and Colton signed Turquoise Hill's SEC filings and Sarbanes-Oxley certifications, and were directly involved in providing false information and certifying and/or approving the false statements disseminated by Turquoise Hill during the Class Period.

420. As a result of the foregoing, the Turquoise Executive Defendants were controlling persons of Turquoise Hill within the meaning of Section 20(a) of the Exchange Act.

421. As alleged above, Rio, RTIH, and Turquoise Hill violated Section 10(b) of the Exchange Act by their acts and omissions as alleged in this complaint. By virtue of their positions as controlling persons of Rio, RTIH and Turquoise Hill, and as a result of their own aforementioned conduct, Rio Tinto, RTIH and the Executive Defendants are liable under Section 20(a) of the Exchange Act, jointly and severally with, and to the same extent as, Rio, RTIH and/or Turquoise Hill is liable under Section 10(b) and Rule 10b-5, respectively, to Plaintiffs and the

other members of the Class who purchased or otherwise acquired Turquoise Hill securities.

422. As a direct and proximate result of Rio Tinto, RTIH, and the Executive Defendants' conduct, Plaintiffs and the other members of the Class suffered damages in connection with their purchases or acquisitions of Turquoise Hill securities.

XIV. PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for judgment as follows:

- A. determining that this action is a proper class action under Rule 23 of the Federal Rules of Civil Procedure;
- B. awarding compensatory damages in favor of Plaintiffs and other Class members against all Defendants, jointly and severally, for all damages sustained as a result of Defendants' wrongdoing, in an amount to be proven at trial, including interest;
- C. awarding Plaintiffs and the Class their reasonable costs and expenses incurred in this action, including attorneys' fees and expert fees; and
- D. awarding any equitable, injunctive, or other further relief that the Court may deem just and proper.

XV. JURY DEMAND

Plaintiffs demand a trial by jury.

Dated: March 17, 2021

/s/ Salvatore J. Graziano
Salvatore J. Graziano
**BERNSTEIN LITOWITZ BERGER
& GROSSMANN LLP**
Salvatore Graziano
Mark Lebovitch
Michael Blatchley
Jai Chandrasekhar
1251 Avenue of the Americas
New York, New York 10020
Tel: (212) 554-1400

Fax: (212) 554-1444
salvatore@blbglaw.com
markl@blbglaw.com
michaelb@blbglaw.com
jai@blbglaw.com

*Lead Counsel for Lead Plaintiff the Pentwater
Funds and the Class*