Before the Waikato Regional and Hauraki District Councils

Under the Resource Management Act 1991 (RMA)

In the matter of An application for resource consents to extend the Waihi Gold

Mine via underground and open pit mining methods known as

Project Martha

By Oceana Gold (New Zealand) Limited

Applicant

Statement of evidence of Shamubeel Eaqub for Oceana Gold (New Zealand) Limited

16 October 2018

Counsel:

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Qualifications and experience

- 1 My name is Shamubeel Eaqub.
- I am a partner at Sense Partners Limited. Sense Partners are experienced economists with backgrounds in modelling, public policy, regulatory affairs and economic assessments. An independent consultancy, their strengths are data analysis, logic and frameworks, and their experience includes modelling specific projects, statistical evaluation of policies and regulations, and forecasting of social, economic and demographic trends.
- I have worked as an economist since 2001 in various organisations advising banks, businesses and government on economic issues. Most relevant is my experience in economic impact analyses and regional economic development for councils, central government and interested businesses.
- 4 In preparing this evidence I have reviewed:
 - (a) The reports and statements of evidence of other experts giving evidence relevant to my area of expertise, including:
 - (i) Management estimates of capital investment and production costs and timelines of the project; as well as analysis of historical management data on employment, wages paid, and size and location of suppliers.
 - (ii) Phoenix Research survey of staff, business and community affected by the mine.
 - (iii) Official statistics on demographics, exports, mining activity and economic activity, supplemented with my own analysis and estimates.
 - (b) The parts of the section 42A report relevant to my area of expertise.
 - (c) Submissions relevant to my area of expertise.
- I have also engaged with local businesses and community members to better understand local economic conditions and in preparing my evidence drew on my experience in preparing a report for the 2016 Waihi Social Impact Management Plan.
- I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

- The evidence below is in my area of expertise. I have worked closely on matters of regional economic development for over a decade, including contributing to the renaissance of regional economic development thinking at MBIE, LGNZ and at the government level during the National-led government's term. Much of my work culminated in a book, summarising the need for greater efforts in regional development in Growing Apart: Regional Prosperity in New Zealand (BWB Texts, 2015). My wider experience as a macro-economist is also relevant in assessing the contribution of an industry or business to the local economy.
- I have relied on a wide range of data, public where available, supplemented with additional information from OGNZL on its hiring, wages paid, analysis of suppliers and plans which are the subject of this application. Official data on the local economy is incomplete or dated (for example from the 2013 Census), but I have made extensive efforts to ensure the data is cross checked across multiple sources, including interaction with local community and OGNZL internal data, and I have a high degree of confidence in the assumptions and interpretation. Acknowledging the incompleteness of the data, I have erred on the side of caution in these estimates of economic benefits. The results should be viewed as conservative, but defensible with a high degree of confidence.

Scope of evidence

- 9 I have been asked by Oceana Gold (New Zealand) Limited (OGNZL) to prepare evidence in relation to the economic impacts of Project Martha. This includes:
 - (a) Describing the current contribution mining in Waihi makes to employment and economic activity;
 - (b) Describing the underlying factors that mining cannot directly impact, such as social deprivation;
 - (c) Describing what is likely to happen in Waihi when mining ends; and
 - (d) Providing an analysis of the employment and economic impacts of extending the life of the mine under Project Martha.
- 10 I confirm that my evidence relates to the proposal known as Project Martha as described in Chapter 3 of the Assessment of Environmental Effects dated 25 May 2018 (AEE).
- 11 I confirm that I am the author of a report dated 24 May 2018 entitled Project Martha, Economic Impact attached as Appendix B to the AEE.

Executive summary

- 12 Project Martha will extend gold mining's contribution to the national economy for an additional 11 years. I summarise the economic effect in three parts: national, regional and local. My analysis shows that the mine currently generates significant economic activity across national, regional and local levels and extending the mine's life will also extend these economic benefits.
- 13 **National:** Project Martha will extend gold mining's contribution to the national economy for an additional 11 years:
 - (a) Mining activity at Waihi contributed \$98m (or 0.04%) to national GDP (\$270b) in 2017. This will continue, albeit at a slightly slower rate of \$73m a year due to lower rates of production.
 - (b) Gold exports are expected to average \$112m a year, or 0.2% of all goods exports. Mining is an export intensive sector, meaning that the economic activity results in relatively high exports compared to other types of economic activity.
 - (c) There are also payments for royalties averaging 1.7% of exports, or \$1.9m a year for the 11 years of mine extension, in addition to generating taxes on well-paid jobs and corporate profits.
 - (d) Some of the economic activity will be paid to international investors as dividends and interest on any loans, meaning not all of the profits of the mine will be recycled into the local economy. Although, with new projects, they are likely to be financed by a mix of retained earnings and borrowings.
 - (e) The project will retain existing 250 FTE jobs for an additional 11 years and add a further 80 FTE jobs in the peak capital investment period, compared to the alternative scenario of the mine closing down in 2020. It is estimated that there will be some 20 FTE of additional contractor work as well. The average wage of mine workers is \$120,000. Relative to employment, the sector creates very high levels of economic activity and exports. It is a high value industry.
 - (f) Traditional economic impact analysis also looks at indirect and induced effects - known as multiplier effects. It is estimated that these indirect effects would impact 470 jobs. In recent years, these estimates of indirect benefits have been treated with caution, as the benefits of this activity may not reverse entirely if mining activity stops. Rather, diverse and resilient economies may contain the effect on the wider economy if economic resources can be deployed to other uses.

- Regional: The economic activity that is generated by the Martha Mine, and its multiplier effects, are not all felt equally geographically. It is estimated that 30% of the total economic benefits are likely to be in the Hauraki District, around 45% in the wider region of Waikato and Bay of Plenty, around 15% in the rest of the country and around 10% outside the country. To this extent:
 - (a) I have been cautious in these estimates, as some of the input data is now old (based on industry connections in the input-output tables and travel to work data from the Census), but have sense checked it with up to date data on electronic card spending and qualitative analysis of the company's suppliers.
 - (b) I was also conscious that while the mine is in the Waihi township, the employees and suppliers live in a wider catchment, crossing territorial authority boundaries.
 - (c) As noted above, the multiplier effects would affect a total of 470 FTE jobs. A large proportion of these are in the wider regional area, through indirect and induced effects. While I am cautious in the interpretation of multiplier analysis, it illustrates that the mine's activity has a wide reach through the regional economy.
- Local: The local labour catchment area of the Waihi township encompasses a wider area, including as far as Hamilton. My comments on the local economic effects should be seen in that context. In this regard:
 - (a) Travel to work data from the 2013 Census shows that 55% of people with jobs in Waihi worked locally, another 16% worked within a 30-minute driving radius (Ohinemuri, Paeroa, Waihi Beach, Katikati Community and Aongatete) and the remaining further afield (including Hamilton). This broadly defines the labour market catchment.
 - (b) Analysis of the company data shows that the mine employs approximately 250 FTEs (types of jobs are summarised in Appendix A). Before the change of ownership to OGNZL, many of these jobs were contractors, which are now being brought on to the payroll as per the company's standard practice. This changes the way people are employed, but not the number of jobs.
 - (c) The jobs are well paid for the location. The average annual salary paid was around \$120,000 in 2017, compared to a median personal income of \$19,200 in Waihi in the 2013 Census (last available data) and national average wage of \$62,000 in 2017. The mine creates high value jobs for New Zealand, with particular benefit for the province, which otherwise has relatively low paid jobs.

- (d) There was a cumulative payment of \$27.5m in staff salaries and benefits (such as KiwiSaver) in the 2017 calendar year, and a further \$8.4m for contractors (which will include other payments on top of wages for contractors). These represent the dollar value of jobs currently supported by mining activity, which will be retained in the region.
- (e) There are additional local contributions through rates (\$0.7m in 2016) and community contributions to local events, schools and groups.
- (f) Past surveys of local businesses and community as part of the Social Impact Management Plan (SIMP), discussion with local businesses and community members show a good understanding of the economic contribution of the mine to the local economy, as well as risks. Some businesses noted their direct connections with the mine, others benefitted from the general availability of money spent in the local community, while others noted the access to well-trained workers from the mine not easily accessible in other regions. The presence of a large employer of well-paid jobs, which also invests in training has led to a well-qualified pool of labour and future employment prospects. These lend to local labour market and economic resilience.

Current economic contribution

- The mine is an important part of the local economy. The mine directly creates economic output and jobs in the local area in the mining sector and related sectors (suppliers and customers). The importance is well understood by the local business community: 98% of businesses surveyed by Phoenix Research in 2017 identified the impact of the mine as positive or very positive.
- 17 Mining activity at Waihi contributed \$98m (or 0.04%) to national GDP (\$270b) in 2017 and 250 FTE of jobs.
- The mining sector is highly productive. As a result, the mining sector's contribution of the Waihi Town economy at 45% is higher than the percentage of jobs mining contributes (15%). This reflects the mine's local expenditure on payrolls, suppliers, donations and AEP payments to residents.
- 19 There are additional flow-on benefits, through household incomes supporting local retail and other industries. I do not explicitly quantify these, as activity in these sectors is already captured in their relevant industries.
- Jobs encourage people to live in Waihi and surrounds, who may otherwise live elsewhere without the mine. The population of Waihi would therefore be different in composition and size (likely smaller) without the mine. The evidence from other provinces around New Zealand is that economic opportunities encourage inward

- migration from other regions and overseas and emigration when economic opportunities decline.
- The mine appears to support economic activity in the region and insulate it from wider swings in the national economy.

What the mine cannot affect

- 22 Economic activity can co-exist with high levels of deprivation. The underlying causes of poverty cannot be solved by local employment opportunities alone and are often difficult to solve. Social policies through central government are the main poverty alleviation channel in New Zealand, supported by activities of numerous charities.
- Decades of research on economic inequality has shown that economic growth alone is not enough to reduce poverty. There are often other barriers that prevent some people from accessing economic opportunities. They may be related to health, education, qualifications, criminal record, addiction or other factors. These require significant social investment.

Mine closure scenario

- The Waihi Gold mine is a large contributor to jobs (15%) and economic activity (45%) to Waihi Town. If the mine closes abruptly, it would have a significant negative economic impact.
- I estimate that mining directly contributed \$98 million in value added to the Waihi Town economy in 2017 (total economy \$229 million). Adding in the indirect and induced effects, I estimate the total economic contribution of the mine to be \$133 million in 2017. The direct employment is around 250 FTEs, wider effects on employment of mining is around 490 FTEs. In a multiplier analysis, the quantified reduction in economic activity of mine closure would be \$133 million (if the static analysis is for the 2017 year) and 740 jobs.
- In reality, these estimates need to be taken with care. While the initial impact may appear large, multiplier analysis does not take into the account the potential flexibility of the economy. A key element in that flexibility is readiness of the local community, particularly the business community, to deal with closure of the mine.
- 27 If the closure was known in advance, then workers, local businesses and local government can plan to minimise the disruption.
- A mine closure will obviously lead to mining job losses and many workers will emigrate from the region. 43% of staff indicated they would leave the region, according to a Staff Survey conducted by Phoenix Research in 2017. Many will stay because they have family and other local ties. Their skills and human capital

could be redeployed to other businesses and industries. So, job matching and supporting business creation and expansion will be key policy levers. People from other regions may be attracted to the region's availability of housing and amenities, which would be available in greater numbers following the departures of mine workers. So, promoting the region to would be migrants from other parts of New Zealand as a great place to live and do business will be a key strategy.

Economic contribution of mine extension

- 29 Project Martha would extend mining in the area by 11 years and maintain employment levels and economic contribution near the highs over the past decade.
- 30 Compared to a mine closure scenario, Project Martha will:
 - (a) Increase New Zealand exports by around \$112m a year
 - (b) Create employment opportunities averaging around 300 FTEs over the next decade. The average wage is nearly \$120,000 per employee and closure of the mine would equate to around \$36m of wages pa foregone.
 - (c) Inject around \$326m (in 2017 prices) of cumulative new investment into New Zealand that would otherwise not occur.
 - (d) Result in economic activity that is likely to average \$73m per year, with around 30% of the wider benefits likely to be in the local district, around 45% in the wider region, around 15% in the rest of the country and around 10% outside the country.

Conclusion

- Project Martha will extend the mine's life by 11 years. This will help to sustain a local economy that is already growing. The mine helps to also attract and train a pool of skilled and employable people. This lifts the capability of the local workforce and thus its economic potential. Around two thirds of the mine's jobs are in mining and processing, with skills that are easily transferrable to other industries (for example civil and heavy construction) and locations.
- Extending the mine's operation for another 11 years gives the local area more time to seriously consider and invest in a transition plan for a post-mining economy. The current government is ambitious about provincial economic growth (through the \$1b a year Provincial Growth Fund) and its work on a zero-carbon economy (to carefully think about and invest in projects that will transition New Zealand to a low carbon economy). These provide opportunities that Waihi may be able to take advantage of.

33 The local economy is already diverse and resilient. Additional time, effort and resources directed to a post-mining transition strategy will ensure the local community continues to benefit from a well-functioning economy.

[Insert electronic signature if available]

Shamubeel Eaqub

15 August 2018

References

Appendix A

Summary of types of employment positions

Positions rather than FTEs, based on estimates for Stage 1, which is a good indicator of the makeup of the workforce

Category of job	Number of positions
Management/Administration	37
Open Pit operators	25
Underground Miners	110
Processing	56
Miscellaneous	50
Total	343
Estimated value of jobs, 2017\$m	\$28M

Memo item - highly skilled technical staff:	
Domain	Number of positions
Metallurgist	3
Engineer	8
Geologist	12
Surveyor	3

Source: Company data, Sense Partners