Before the Hearings Panel

In the Matter of the Resource Management Act 1991

And

In the Matter of the Proposed Waikato District Plan – Stage 1

And

In the Matter of Hearing 1 – Introduction, and Hearing 18 - Rural

Brief of Evidence of Craig John Pilcher for Bathurst Resources Limited and BT Mining Limited (submitter 771)

Dated: 16 September 2020

Lane Neave PO Box 701 Queenstown 9348 Solicitor Acting: Jo

Solicitor Acting: Joshua Leckie Email: joshua.leckie@laneneave.co.nz

Phone: 03 379 3720

lane neave.

Table of Contents

INTRODUCTION	3
Qualifications and Experience	3
SCOPE OF EVIDENCE	3
EXECUTIVE SUMMARY	4
COAL MINING IN THE WAIKATO DISTRICT	4
BATHURST AND BT	6
BT WAIKATO MINES	7
Rotowaro	7
Maramarua	8
Economic Contribution	8
LIFECYCLE OF A MINE	9
FUTURE NEED FOR COAL IN THE WAIKATO REGION	10
FUTURE MINING AREAS: RUAWARO/ROTOWARO NORTH MARAMARUA	
Ruawaro	12
Maramarua	13
PROPOSED WAIKATO DISTRICT PLAN - KEY ISSUES	13
CONCLUSION	14

INTRODUCTION

Qualifications and Experience

- 1. My full name is Craig John Pilcher.
- I am the General Manager Domestic Operations of the Bathurst Resources Limited (Bathurst) group of companies. Bathurst is the parent company and is the 65% owner of BT Mining Limited (BT).
- 3. I report directly to the Chief Executive Officer and am a member of the Senior Leadership Team of Bathurst. I am responsible for the oversight of Bathurst's coal mining operations within New Zealand. In the North Island that means the Rotowaro and Maramarua mines both located within the Waikato District.
- 4. I have a long history in the coal mining industry, starting in 1997 when I established my own coal supply business. That business was sold to Eastern Corporation in 2006 (and I stayed on reaching the position NZ General Manager) and, bar one year, I have been with Bathurst since it acquired the Eastern Corporation in 2011 holding a number of management positions.

SCOPE OF EVIDENCE

- 5. I provide evidence on behalf of Bathurst and BT on the Proposed Waikato District Plan Stage 1 (**Plan**).
- The following evidence covers Bathurst and BT's submission, and further submission points, that relate to Chapter 1 Introduction (adjourned from Hearing 1), Chapter 5 Rural Environment, Chapter 22 Rural Zone and the planning maps.
- 7. The evidence is provided in the following parts:
 - (a) Executive Summary;
 - (b) Coal Mining in the Waikato District;
 - (c) Bathurst and BT;
 - (d) BT Waikato Mines;
 - (e) Lifecycle of a Mine:
 - (f) Future need for Coal Mining in the Waikato Region;
 - (g) Future Mining Areas: Ruawaro/Rotowaro North and Maramarua;
 - (h) Proposed Waikato District Plan Key Issues; and
 - (i) Conclusion.

EXECUTIVE SUMMARY

- 8. There is a strong history of coal mining in the Waikato District, dating back as far as 1876. The Waikato District is particularly blessed to have coal deposits of the size and quality that it does; these coal deposits are rare when considered against New Zealand as a whole making them nationally significant.
- 9. The critical role that coal mining has played, and continues to play, in the Waikato District (as well as the Waikato Region) is significant and requires recognition.
- The Rotowaro and Maramarua mines owned by BT (and operated by Bathurst), are particularly critical given their supply to nationally significant customers, which include Genesis Energy (Huntly Power Station), New Zealand Steel Limited (Glenbrook Steel Mill), Open Country Dairy and Fonterra (Waikato dairy factories). These customers will continue to require coal supply through the just and sustainable transition to a, as yet unknown, reliable and economic alternative energy source. The transition period is likely to be longer for steel making as coal is an integral part of the process of making steel. Even after a successful energy transition coal may still be called on during power shortages, for instance in times of drought.
- 11. It is Bathurst and BT's intention to supply their customers as long as the demand necessitates this, and the transition period is likely to take decades rather than years. Bathurst and BT therefore need to be able to continue to coal mine throughout (and beyond) the lifetime of the Plan, which will necessitate the expansion into adjacent coal deposits. Bathurst and BT intend to expand into areas adjacent to Rotowaro (Ruawaro) and Maramarua, and the Plan needs to provide for this expansion, failure to do so is likely to have significant economic and social impacts on the Waikato District.
- 12. Bathurst and BT have therefore proposed various amendments to the Plan, including the enablement of prospecting and exploration and the correct mapping of the notified Coal Mining Area and the Section 42A Report proposed Extractive Resource Area.

COAL MINING IN THE WAIKATO DISTRICT

- 13. There has been a long history of coal mining in the Waikato and there is good knowledge of the significant coal deposits. A map produced by New Zealand Petroleum and Minerals details the coal deposits across New Zealand, this map is attached at Annexure A.
- 14. Commercial mining commenced in Huntly in 1876 with the Taupiri Coal Mining Company (founded by Captain Ralph). The town rapidly expanded as miners came from around the world to work the coal. Local Māori also entered the industry in large numbers. The Ralph companies dominated the industry until the

- 1940's. There are still significant areas of coal in the Waikato owned by the Ralph Estate.
- 15. Coal was mined underground at first but in 1915 a bridge across the Waikato River gave access to coal on the west bank and mining settlements such as Pukemiro, Glen Afton, Rotowaro, Waikokowhai and Renown were established. Open cast mining began west of Huntly during the Second World War, and also at Kimihia.
- 16. Rotowaro, 11km south west of Huntly was a coal settlement from 1915. It was significantly expanded in 1979 when the township was relocated and a large opencast mine established.¹
- 17. Coal was used initially for steam engines and heating and then to support the local dairy industry. Coal continues to be used at various dairy factories across the Waikato District as a fuel for process heat. Process heat is required to pasteurise the dairy products we consume to ensure they are safe and to extend their shelf life. Process heat is also used for evaporation and the process of 'spray drying' which creates milk powder.
- 18. Coal was also used in the generation of electricity at the Meremere Power Station (now closed) and the Huntly Power Station, where it is still used.
- 19. The Huntly Power Station, commissioned in 1983, is New Zealand's largest thermal power station. It has four operational generating units two 250MW coal and gas fired steam turbine units (with a further unit in storage), a 50.8 MW gas peaking plant and a 403MW combined cycle gas turbine plant. The Huntly Power Station plays an important role in voltage support for Northland, Auckland and the Waikato regions. In particular, coal is a reliable power source which will continue to be drawn upon when hydro-levels are insufficient (i.e. during droughts) or when there is a disruption to other energy sources such as geothermal gas.
- 20. Coal is also used for steelmaking at Glenbrook which commenced in 1968. New Zealand Steel Ltd pioneered the direct reduction process for reducing iron oxide (ironsands) into metallic iron. This means that it is able to use the heavy dark ironsands present locally. Coal is used in this process to dry the ironsands which are an essential ingredient in ironmaking and therefore steelmaking.
- 21. Rotowaro and Maramarua, and Waikato's coal deposits more generally, are located in convenient proximity to the Huntly Power Station, the Glenbrook Steel Mill and the dairy factories that they supply. A map prepared for Alan Sherwood's monograph on New Zealand's coalfields demonstrates this proximity, and is attached at Annexure B.
- 22. The monograph *The Geology and Resources of New Zealand Coalfields* by Alan Sherwood (New Zealand Petroleum & Minerals), referred to above and published

¹ Source Te Ara The Encyclopaedia of New Zealand teara.govt.nz/en/waikato-places

by the Australasian Institute of Mining and Metallurgy in 2019, presents a comprehensive coverage of the coalfields of New Zealand and in particular of the Waikato. The author was part of the New Zealand Geological Survey commissioned by the government that took place in the 1970's and he headed an intensive programme of coal exploration of the Waikato from 1974 to 1979. The information collected from this study (and others) has been in the public domain for a considerable period of time. I make reference to this work in my evidence.

BATHURST AND BT

- 23. State Coal Mines became Coal Corporation of New Zealand Ltd in 1987 and a state-owned enterprise. It changed its name to Solid Energy New Zealand Ltd (Solid Energy) in 1997. In 2015 (and following) it ran into financial difficulties and was placed into administration through a Deed of Company Arrangement and eventually liquidated. As part of this process its assets were put up for sale.
- 24. BT purchased the Stockton, Rotowaro, Maramarua and Huntly West mines (and associated assets) from Solid Energy on 31 August 2017.
- 25. BT is a joint venture between Bathurst (65%) and Talleys Energy Ltd (35%).
- 26. Bathurst owns and operates coal mines in Southland, Canterbury and the West Coast and also holds significant areas under exploration permits on the West Coast. Prior to the acquisition of the Solid Energy assets its customers were primarily the dairy industry, meat processors, the seafood industry, hospitals and schools. It was also looking to enter the export market with its Escarpment mine on the West Coast.
- 27. Accordingly, it was seen as a good fit to acquire assets in the South Island adjacent to its existing mines and permits (i.e. Stockton and Upper Waimangaroa, which are export mines) and to expand into the North Island through the purchase of the Rotowaro and Maramarua mines.
- 28. BT is the permit holder and permit operator of mines purchased from Solid Energy and has appointed Bathurst as the mine operator for its mines.
- 29. As part of the acquisition of the Solid Energy assets, BT ensured that the expertise of employees was not lost by offering employment to most of the Solid Energy staff working at the mines it purchased (and the majority accepted new employment with BT).
- 30. As part of the sale of the Solid Energy assets to BT, the Crown provided an indemnity fund to cover the rehabilitation liabilities of Solid Energy, and BT has access to this fund. In addition BT has voluntarily entered into an arrangement with the Waikato Regional and Waikato District Councils to bond for the difference between the coverage provided by the indemnity fund and the full costs of rehabilitation of the mine sites (including the Huntly West site). The latest

- quantum of this additional bond is \$4.34m (and a replacement bond is in the process of being put in place for this sum).
- 31. Bathurst is now the major coal producer in New Zealand both domestically and for export.

BT WAIKATO MINES

- 32. Rotowaro and Maramarua are the mines currently operated by Bathurst and owned by BT. These two mines, and the nationally significant coal deposits in their vicinity, are the focus of the submissions we have made on the Plan.
- 33. As previously indicated, BT also purchased the Huntly West mine (West Mine) but this is not an operational mine. The West Mine is almost completely rehabilitated and is used as a coal storage facility for coal mined at Rotowaro and destined to the Huntly Power Station.
- 34. Despite the West Mine not undertaking 'mining' activities, the activities undertaken at the site fall within the definition of an 'Extractive Activity' and therefore the notified mapping as a Coal Mining Area is accurate and supported.
- 35. While the West Mine has operational significance and falls within the classification of an 'Extractive Activity', it is the contribution that the Rotowaro and Maramarua mines make to the Waikato District that is the focus of my evidence.

Rotowaro

- 36. The Rotowaro mine is located at 732 Rotowaro Road, Rotowaro and is approximately 10kms west of the Huntly Township.
- 37. Mining of Rotowaro was opened in 1915 by the Taupiri Coal Company after a branch railway and bridge were established over the Waikato River. The current opencast mine was opened in 1958 and produces low ash, low sulphur thermal coal. Current production is around 550,000 tonnes of coal per annum and is supplied to the Huntly Power Station and to the Glenbrook Steel Mill as well as to other customers, including Open Country Dairy and Fonterra.
- 38. The Rotowaro mine is primarily operated under a coal mining licence (**CML**) granted for a 40 year period on 1 April 1987, which is held by BT. This gives BT the legal rights to access the coal owned by the Crown within the licence area, and to mine for that coal (the CML being the equivalent of a land use consent granted by the district council). BT must however hold all necessary regional resource consents, and does so.
- 39. Within the Rotowaro CML there are also areas of coal that are not owned by the Crown but which are owned privately. In respect of this coal BT holds rights from the coal owners to mine their coal.

40. There is a small part of the Rotowaro mine (Awaroa West) which lies outside the CML and for this area a mining permit is held along with an access arrangement to mine the land and all required district and regional land use consents.

Maramarua

- 41. The Maramarua mine is located at 580 Coalfields Road, Maramarua, which is 45km north of Huntly.
- 42. The Maramarua mine also has a long history with an opencast mine having been developed in 1948 and with supply to the Meremere Power Station at one time. The mine was of modest scale until the Solid Energy invested in infrastructure and increased production in the period 2010-2015. Current production is now around 220,000 250,000 tonnes per annum with supply to Genesis Energy Ltd, New Zealand Steel Ltd, Open Country Dairy and Fonterra.
- 43. The Maramarua mine operates under a mining permit and a coal mining licence which permits it to mine all Crown coal within the permit and licence areas, with leases from the landowners allowing the mining of the land and with all required district and regional consents.

Economic Contribution

- 44. The Rotowaro and Maramarua mines contribute directly to the economic wellbeing of the Waikato District through wages, procurement and operational costs. The mines also have indirect contribution to the Waikato District economy, through their employees spending in the District and the employment (and consequent spending) of employees of the key customers that they supply. As a general rule of thumb, we estimate the multiplier for downstream jobs is 3.2 jobs for each mine job.
- 45. As a snapshot, BT employs 167 staff at its Rotowaro mine and 60 at its Maramarua mine. There are approximately 10 additional staff that support both the Rotowaro and the Maramarua mines. The staff are highly technically, skilled staff who have significant experience in coal mining. Skills range from large equipment operators to surveyors, mechanical engineers, geotechnical planners and mine managers. Many of our staff hold tertiary qualifications and all have the necessary unit standards and certificates of competency to undertake their roles. Miners earn well above average wages and our annual payroll for our Rotowaro and Maramarua staff is around \$22m.
- 46. In addition we have contractors working on our mine sites. Our estimated annual spend on these contractors is around \$5.9m.
- 47. During the 2019 financial year, the Maramarua and Rotowaro mines spent over \$50m with suppliers, goods and services, with \$39m being spent with companies

- in the Waikato. The largest proportion of spend (approximately \$29m) was with companies based in Huntly.
- 48. Over the 2020 financial year, the Maramarua and Rotowaro mines paid an additional:
 - (a) \$252k on Crown Royalties;
 - (b) \$0.9m on Private Royalties; and
 - (c) \$1.5m on the Energy Resource Levy (paid to the Crown).
- 49. The Rotowaro and Maramarua mines are an essential economic contributor to the Waikato District. The operations at the Rotowaro and Maramarua mines are also essential to our key customers, Genesis, New Zealand Steel, Open Country Dairy and Fonterra, whose operations are all regionally significant industries.
- 50. The Rotowaro and Maramarua mines were therefore classified as an essential service in the recent Covid-19 lockdown (level 4 and level 3 in Auckland) in order to ensure a continuous supply of coal to the Huntly Power Station and to the Open Country Dairy and Fonterra dairy factories.

LIFECYCLE OF A MINE

- 51. Coal is in a fixed location and therefore a mine must operate where the coal is. As said above, the Waikato has nationally significant coal deposits which have been known about for a considerable time.
- We have identified the areas that should be covered by an Extractive Resource Area overlay² to ensure that they are not sterilised by allowing other activities to locate within these areas, which may prevent any possibility of the coal being mined. This is discussed later in my evidence.
- 53. The life of a proposed mine starts with prospecting and exploration. The purpose of prospecting and exploration is to gather the necessary information on the quality and quantity of the proposed coal in order to make an economic case for opening a mine.
- Prospecting and exploration are not 'mining'. Often prospecting activities can be done offsite by literature reviews, reviews of previous core samples and desktop studies. Exploration may involve anything from a walk over a site to trenching and drilling. These activities are minor in nature, very temporary and able to be quickly rehabilitated.
- 55. We do not understand to why the proposed Plan makes no separate provision for these activities which are typically provided for in other parts of the country, e.g.

-

² We note that Bathurst and BT sought in their submission a 'Coal Mining Resource Area' overlay, but Bathurst and BT accept the terminology proposed by the Section 42A Report on Hearing 18 – being the Extractive Resource Area.

- South Island West Coast, Canterbury and Southland (where we operate our other mines), as permitted, restricted discretionary and discretionary activities.
- 56. When sufficient data has been collected the next step is to develop a feasibility study which will lead to a bankable proposition. The bankable proposition not only requires a suitable coal reserve in the ground, but also a mine plan confirming that the coal can be physically (i.e. safely) and economically mined, that access rights to the coal and all the necessary consents can be obtained, and that there is a market for the coal. It is only once all of those elements are confirmed, and any access rights and consents granted, that mining on the ground will commence.
- 57. This is a process that can take 5-10 years from exploration to commencement of mining, so to invest in a future mine requires a level of certainty that a mine will be able to be developed at the end of the process. This is why we are seeking recognition in the plan of the areas we wish to expand into.
- 58. A mine is only a (relatively) temporary activity, as once the coal is extracted the mine will come to a natural conclusion. Typically a mine may have an active (extracting) life of 5-10 years, followed by a post closure rehabilitation period of anything up to 5 years. Mines are rehabilitated so that the land will return to its former use as rural land suitable for pasture or forestry. There are many examples around New Zealand of successfully rehabilitated coal mine sites (and indeed areas at Rotowaro can be pointed to). I note that we also bond for rehabilitation.

FUTURE NEED FOR COAL IN THE WAIKATO REGION

- 59. Currently BT sells around 800,000 tonnes of coal per annum to customers in the Waikato Region. As indicated above, the major customers for our coal are Genesis Energy Ltd for the Huntly Power Station, New Zealand Steel Ltd for the Glenbrook Steel Mill and Open Country Dairy and Fonterra Ltd for their dairy factories in the Waikato. During the Level 4 and recent Level 3 (Auckland only) 'lockdown' periods resulting from Covid-19, our mines were deemed to be essential services as energy providers to the Huntly Power Station and to Open Country Dairy and Fonterra for milk production.
- 60. We consider there is strong demand from local customers and, until such time as there is able to be a just and sustainable transition from coal to another reliable and economic energy source, this demand will either be met from local coal or from imported coal. Coal has been, and from time to time continues to be, imported into New Zealand for use in the Waikato Region.
- 61. Coal mined overseas is not subject to New Zealand's high environmental standards, likely emits more carbon dioxide emissions in the mining process, and certainly emits more carbon dioxide emissions in its transportation to New Zealand. Emissions during the mining of imported coal and its transportation are not subject to the New Zealand Emissions Trading Scheme. All coal mined by us

- is subject to the New Zealand Emissions Trading Scheme and we remit emission units to the government on all coal mined and sold.
- 62. Ceasing coal mining in New Zealand, simply to replace New Zealand coal with imported coal is not an answer to climate change. It will also have significant adverse effects on employment, and consequently the economy more generally, in the Waikato District.
- 63. Bathurst's position is that we will continue to mine and sell coal to our New Zealand customers for so long as they need the coal. We accept that thermal coal is a transitional fuel. But a sensible transition needs to take place over the next 20-30 years to prevent stranded assets, i.e. coal boilers (costing millions), and to allow the development of cost-effective alternatives, or there will be abrupt adverse economic effects.
- 64. As New Zealand transitions away from the use of thermal coal for industrial heat processes, we see our business becoming almost entirely the extraction of coal for steel-making, for which there is no realistic alternative as a metallurgical input, commercially and at scale.
- We will manage our investments in line with changing industrial customer needs, recognising that coal mines take decades to discover, develop and put into production. A just and sustainable transition from fossil fuels to non-fossil alternatives is something that is going to take decades not years, unless New Zealand is prepared to accept a sharp contraction in economic output. New Zealand is not going to have the luxury to take on an additional economic burden in the wake of Covid-19, of which we are yet to fully comprehend the economic impacts.
- 66. Accordingly we see our coal mines in the Waikato and their expansion as continuing both within the timeframe of the proposed Waikato District Plan and well beyond. We do not therefore agree that coal mining is in decline in the Waikato District.

FUTURE MINING AREAS: RUAWARO/ROTOWARO NORTH AND MARAMARUA

- 67. The economically recoverable coal resource within the Rotowaro CML is expected to be depleted within a 5-10 year horizon. Accordingly BT is looking to adjacent areas to develop new pits while utilising the efficiencies of existing infrastructure (coal handling plant, rail receival facility etc), and thus avoiding the need to duplicate these facilities.
- 68. The logical area of progression for the Rotowaro mine is into the adjacent Ruawaro coalfield, technically a sub-area of Rotowaro and which we call Rotowaro North. The coal deposits in Rotowaro North have been well known for some time

and were mapped in 1988 by P.A. Kirk. The coal deposits within the Waikato, as mapped by Kirk, are delineated (in yellow) on the map **attached** at **Annexure C**. Bathurst and BT seek the mapping of these as Extractive Resource Areas. The map at Annexure C also demonstrates, in red outline, the extent of the coal mining permissions held by Bathurst and BT.

- 69. With respect to Maramarua, again, it is logical for mining to progress into adjacent coalfields generally as indicated on the map at Annexure C.
- 70. It is important that planning documents provide the opportunity for applications to be made for new coal mines when BT (or indeed any other miner) is in a position to make those applications, rather than foreclosing the opportunity now through inappropriate provisions in plans.

Ruawaro

- 71. The Rotowaro coalfield is divided into five sectors: Ruawaro, Macdonalds, Pukemiro, Callaghans and Paerangi.³ The current BT mining operations at Rotowaro are within the Callaghans section, and there are also ongoing operations (not by Bathurst or BT) in the Pukemiro sector.
- 72. The Ruawaro/Rotowaro North sector is the next logical area for the expansion of the Rotowaro operation. The deposit is in close proximity to the existing infrastructure at the Rotowaro mine, and the storage facilities at the West Mine. Given the proximity to Rotowaro, and the use of Rotowaro's existing infrastructure, development of the Ruawaro mine will have the same transportation routes to BT's major customers.
- 73. The Ruawaro sector has coal from both the Renown and Kupakupa seams, which run through a number of the sectors. It is estimated that the Renown and Kupakupa seams within the Ruawaro sector equate to a coal resource of 8.44 million tonnes, with a thickness of up to 5m and depths of between 90 to 310m.⁴
- 74. Like the majority of the Rotowaro coalfield, the Ruawaro sector contains coals of sub-bituminous B rank suitable for BT's existing customers.
- 75. Coal in this area is owned both by the Crown and by private mineral owners. The surface land is owned by third parties, again the Crown (through LINZ) and private owners. As far as we are aware there is no current or planned development, or Māori sites of significance, at Ruawaro/Rotowaro North that would currently constrain development of coal mining. It is noted however that the purpose of identifying the Ruawaro coal deposit is to alert potential developers to its existence.

⁴ Above.

.

³ The Geology and Resources of New Zealand Coalfields by Alan Sherwood (New Zealand Petroleum & Minerals), published by the Australasian Institute of Mining and Metallurgy in 2019, at pg 101.

Maramarua

- 76. Like Rotowaro, Maramarua is split into sectors - being Puketoka, Kopuku, Clifton and Maby. The current BT Mining operations at Maramarua are within the Kopuku sector.
- 77. Maramarua contains coals of sub-bituminous C coal, which is also suitable for our customers' purposes.⁵ The coalfield is estimated to contain about 230 million tonnes of coal.⁶ The most easily accessible, and largest (67 million tonnes), resource is within the Kopuku sector.7
- 78. The logical area for expansion of the existing Maramarua mine is the M1 and K4 sectors. These sectors extend eastward from the existing KCQ1 pit. The M1 and K4 sectors will be capable of utilising existing infrastructure at Maramarua mine, and will also utilise the same transportation routes already used at Maramarua.
- 79. The coal within the proposed expansion areas is owned both by the Crown and privately. Again, the surface land is predominantly owned by third parties, with BT Mining owning a small block of land on the north edge of the KCQ1 pit. With the exception of existing roads and power infrastructure, as far as we are aware there is no current or planned development, or Māori sites of significance, at Maramarua that would constrain development of coal mining. It is again noted however that the purpose of identifying the Maramarua coal deposit in full is to alert potential developers to its existence.

PROPOSED WAIKATO DISTRICT PLAN - KEY ISSUES

- 80. We are concerned that the Plan does not recognise our direct contribution to the Waikato district and regional economy, nor the knock-on economic contribution we make by providing coal to major users such as New Zealand Steel for steelmaking, Genesis Energy for the production of electricity and Open Country Dairy and Fonterra for milk processing - who in turn make a significant contribution to the local and regional economy.
- 81. The Covid-19 pandemic has clearly shown that New Zealand is reliant on its primary production and that will become increasingly important as New Zealand deals with the economic fallout of the pandemic. It is clear that international tourism is not going to be back anytime soon.
- 82. The Plan fails to provide for the enablement of current mining or the necessary expansion of our existing mines. Further it states that coal mining is on the decline. In fact Maramarua has ramped up production during this period and Rotowaro has remained at steady state to meet local demand for coal, and the

⁵ Above, at pg 85.

⁶ Above.

Above.

- demand is such that both Genesis and New Zealand Steel augment local supplies with imported coal.
- 83. The notified 'Coal Mining Area' does not cover existing mining operations, particularly at Maramarua. This is demonstrated by the map at **Annexure D**, which demonstrates the coal mining licences and mining permits utilised by Bathurst and BT in red, the operative district plan (**ODP**) Coal Mining Area in white horizontal lines and the notified Coal Mining Area under the Plan in blue hatch. The map at Annexure D also demonstrates that the full extent of the planning permissions for the Rotowaro mine are also not captured by the ODP Coal Mining Area or the Plan's notified Coal Mining Area. The mapping needs to be corrected so as to continue to enable existing operations and already consented and licenced areas.
- A mine is not static and before one pit is exhausted (and rehabilitated) we need to be able to move to the next pit to ensure a consistent supply of coal to our customers. BT already knows the areas into which it will wish to expand to access significant coal deposits and they are within the coalfields we have identified at Extractive Resource Areas in the map at Annexure C. The maps at Annexure C and D are combined in the map at Annexure E to demonstrate the ODP Coal Mining Area, the Plan's notified Coal Mining Area, the existing coal mining planning permissions (which should be delineated as Coal Mining Areas within the Plan) and the coalfields (which should be delineated as Extractive Resource Areas within the Plan).
- 85. Making such an identification in the Plan would both recognise a significant resource within the Waikato and also recognise and provide for reverse sensitivity issues. Further, we consider that identifying areas of coal that the government has already mapped as significant, and which we intend to partially mine, is appropriate.
- 86. The lack of provision for prospecting and exploration is odd, and the loophole should be closed by giving specific activity status to those activities based on their effects.

CONCLUSION

87. Bathurst/BT own and operate existing coal mines, having invested in the associated infrastructure including coal handling plants and rail loadouts. For so long as coal is required by customers in the Waikato it is sensible for that coal to be mined locally. This not only avoids unnecessary CO₂ emissions from importing international coal, but also provides for the social and economic wellbeing of the people of the Waikato. This should be recognised in the text of the Plan, and on the basis of that recognition there should be provisions enabling existing coal mining and its expansion.

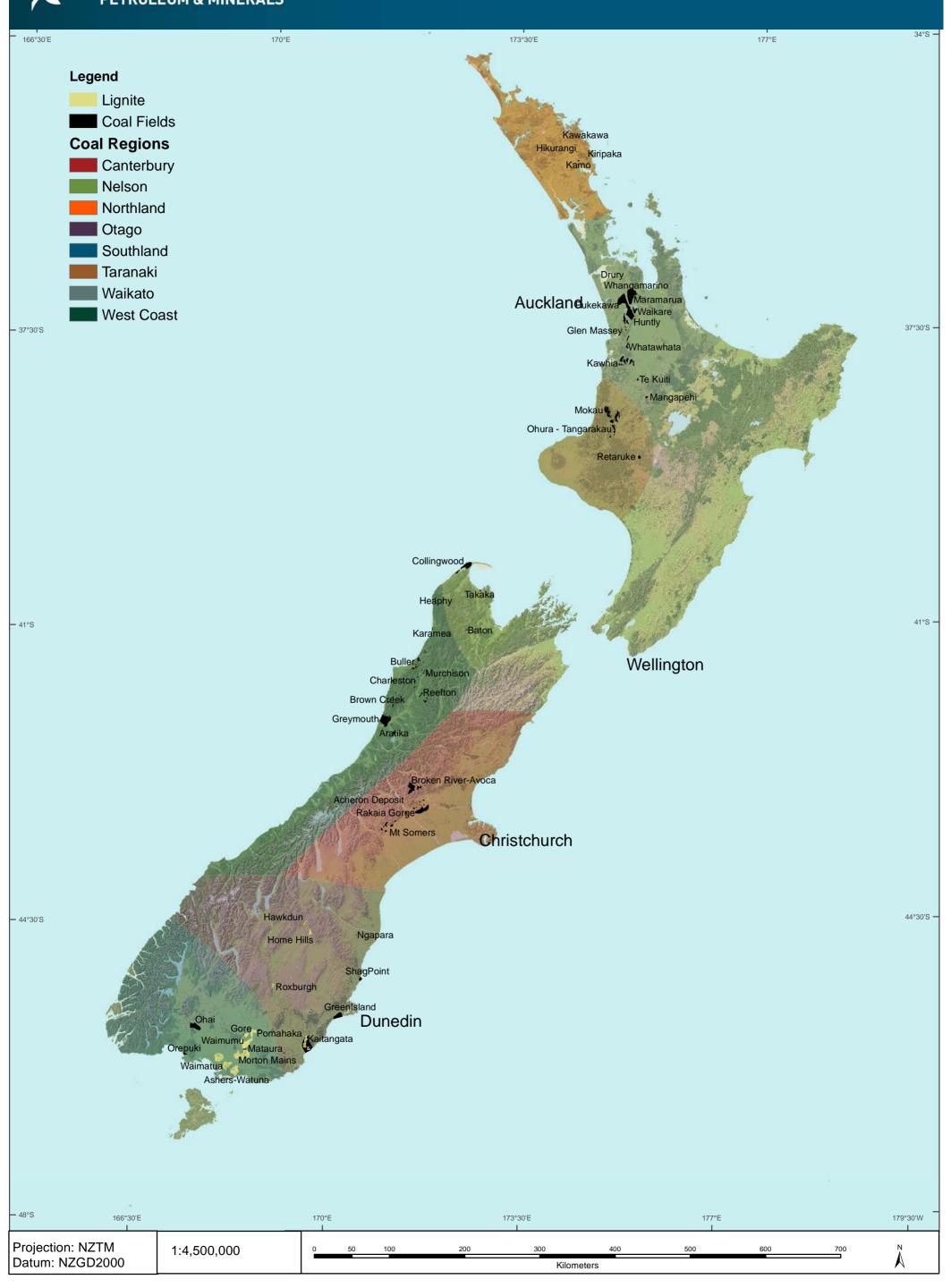
88. Further it makes sense to recognise in the Plan known regionally significant coal deposits, to protect them from reverse sensitivity and to make provision for their extraction in the Plan.

<u>Craig Pilcher</u>
Craig John Pilcher

16 September 2020



New Zealand Coal Fields



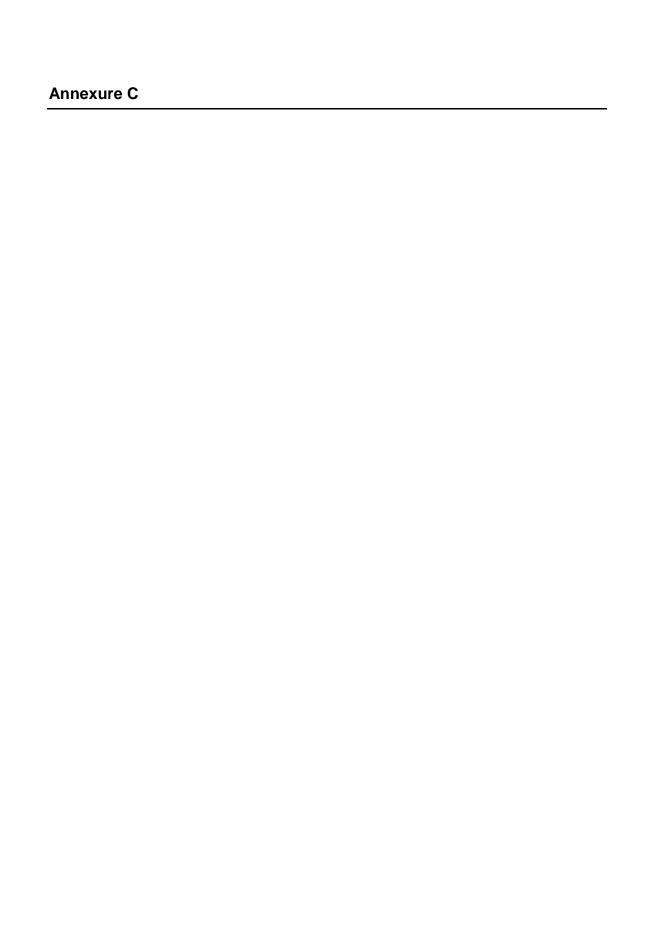
exure B		

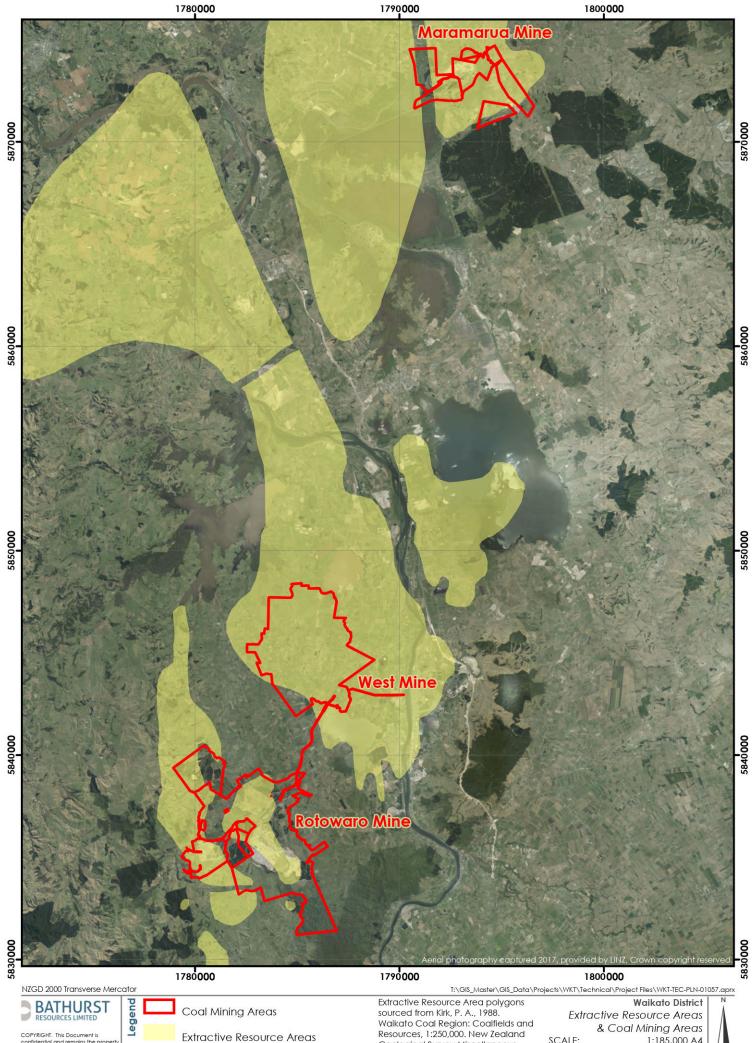


FIG 1 - Distribution of coalfields and coal-related infrastructure, North Island.

The geology of New Zealand coalfields has been influenced by five main geological episodes, which were not strictly sequential but overlapped in time and place:

- 1. extensional rifting, forming fault-bounded basins in places from mid- to Late Cretaceous
- 2. widespread peneplanation from Late Cretaceous to Late Eocene, extending at least into the Early Oligocene
- 3. differential tectonism and the development of sedimentary basins throughout the Tertiary
- 4. regional marine transgression from Late Cretaceous to Oligocene
- 5. the tectonic movements of the Kaikoura Orogeny, from Late Miocene to present.





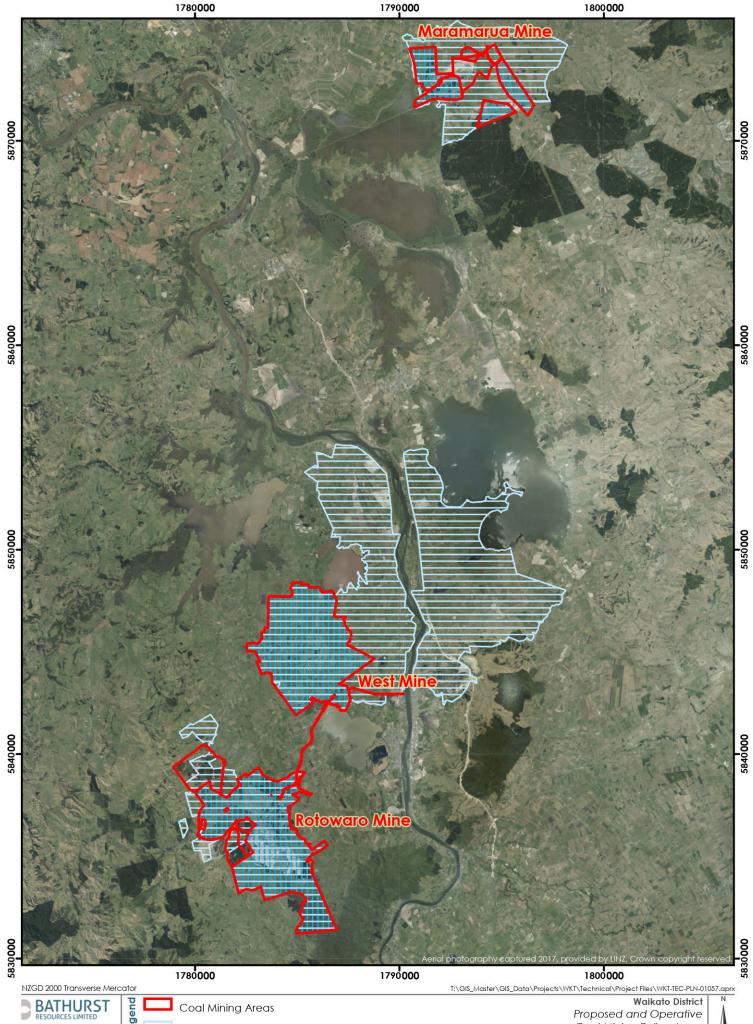
COPYRIGHT. This Document is confidential and remains the prop of Bathurst Resources Ltd. It must not be disclosed or copied by any member or used for any other pro without the written approval of Bathurst Resources Ltd.

Extractive Resource Area polygons sourced from Kirk, P. A., 1988. Walkato Coal Region: Coalfields and Resources, 1:250,000. New Zealand Geological Survey Miscellaneous Series Map 17. Wellington, New Zealand, Department of Scientific and Industrial Research.

SCALE: 1:185,000 A4 DATE: DRAWN BY: 14 September 2020 CanardR 01057-6 DRAWING NUMBER:



nnexure D			



RESOURCES LIMITED

COPYRIGHT. This Document is confidential and remains the property of Bathurst Resources Ltd.. It must not be disclosed or copied by any member or used for any other project without the written approval

Coal Mining Areas

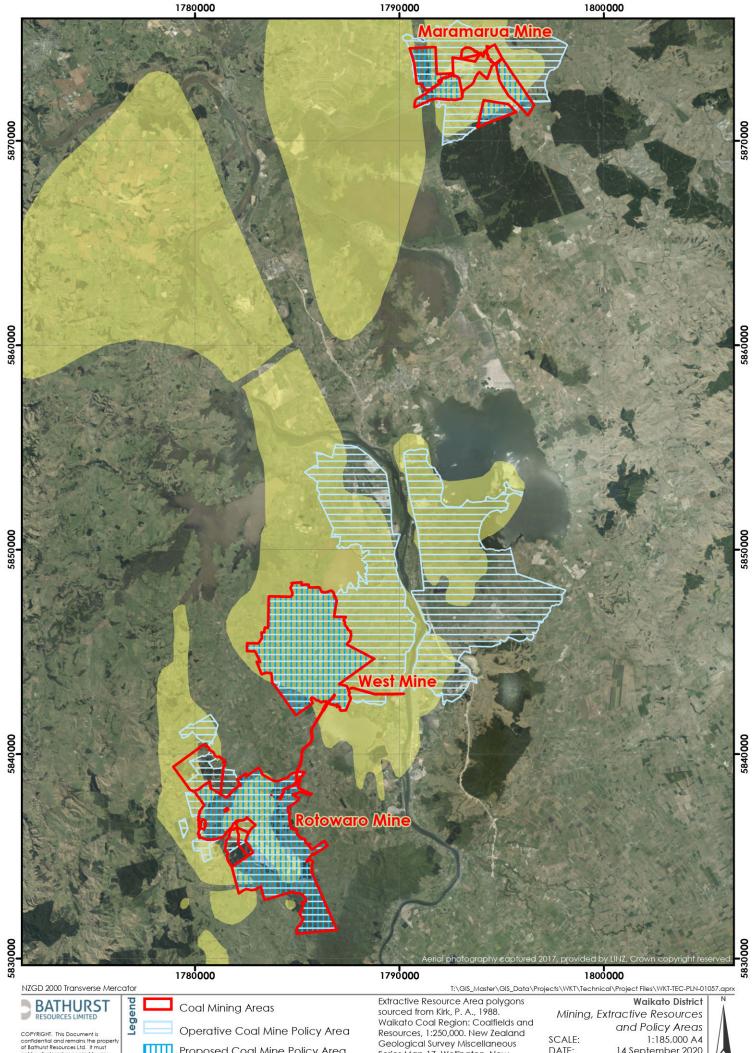
Operative Coal Mine Policy Area

Proposed Coal Mine Policy Area

Waikato District
Proposed and Operative
Coal Mining Policy Areas
SCALE: 1:185,000 A4
DATE: 14 September 2020
DRAWN BY: CanardR
DRAWING NUMBER: 01057-5



nexure E			



COPYRIGHT. This Document is confidential and remains the pro of Bathurst Resources Ltd... It must not be disclosed or copied by ar member or used for any other pro without the written approval of Bathurst Resources Ltd.

Proposed Coal Mine Policy Area

Extractive Resource Areas

Series Map 17. Wellington, New Zealand, Department of Scientific and Industrial Research.

DATE: DRAWN BY: 14 September 2020 CanardR 01057-7 DRAWING NUMBER:

