

**LYTTELTON PORT COAL STOCKYARD – AIR DISCHARGE CONSENT RENEWAL
ASSESSMENT OF ECONOMIC EFFECTS**

**Prepared for
Lyttelton Port Company Limited**

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INTRODUCTION

Background

1. Lyttelton Port Company Limited (LPC) owns and operates a coal stockyard at Lyttelton Port, Christchurch. The coal stockyard in the last five years has processed between 1.0 and 1.5 million tonnes of coal per year on behalf of Bathurst Resources Limited (Bathurst) and New Zealand Coal and Carbon Limited (NZCC) from their West Coast coal mines. At its peak in 2010 annual throughput was 2.5 million tonnes but has since reduced. Future volumes may peak at 2.0 million tonnes per annum. A variety of coal types are received by train from the West Coast and aggregated in the stockyard ready for export. Up to seven trains a day of up to 30 bottom dump rail wagons deliver the coal to Lyttelton Port.
2. LPC currently holds an air discharge permit (CRC940431) for dust emissions from their coal stockyard. The air discharge permit is due to expire on 19 February, 2022. LPC wishes to seek to renew the air discharge permit for a 20-year duration. At present LPC does not plan to change the stockyard layout or infrastructure and therefore the future scale and extent of activities at LPC will be generally maintained as is currently consented.

Report Purpose

3. The purpose of this report is to undertake an assessment of the economic effects for Christchurch City, the Canterbury region and the West Coast region from renewal of LPC's air discharge permit. The report is to form one of the technical appendices to the Assessment of Environmental Effects accompanying the Air Discharge Permit Renewal Application.

Report Format

4. The remainder of this report is in six parts and covers:
 - a. The relevance of economic concepts under the Resource Management Act 1991 (RMA);
 - b. The importance of merchandise trade to the New Zealand economy;
 - c. Background to the Christchurch City, Canterbury and West Coast economies;
 - d. The economic benefits of LPC's air discharge permit's renewal;
 - e. Potential economic costs of LPC's air discharge permit's renewal; and
 - f. The report's conclusions.

RELEVANCE OF ECONOMIC CONCEPTS UNDER THE RMA

Community Economic Wellbeing

5. Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the RMA. In particular, Part 2 section 5(2) refers to enabling "*people and communities to provide for their social, economic and cultural well-being and for their health and safety*" as

part of the meaning of “*sustainable management*”, the promotion of which is the purpose of the RMA.

6. As well as indicating the relevance of economic effects in considerations under the RMA, section 5 also refers to “*people and communities*” (emphasis added), which highlights that, in assessing the economic impacts of the proposed renewal of LPC’s air discharge permit, it is the impacts on communities and not just LPC or particular individuals or organisations, that must be taken into account. This is underpinned by the definition of “*environment*” which also extends to include people and communities.
7. LPC’s air discharge permit’s renewal will enable the ongoing operation of the LPC coal stockyard, resulting in the continuation of benefits to the residents and businesses of Christchurch City, the Canterbury region and the West Coast region, providing for their economic and social well-being. This is discussed later in this report.

Economic Efficiency

8. Part 2 section 7(b) of the RMA directs that, in achieving the purpose of the Act, all persons “*shall have particular regard to ... the efficient use and development of natural and physical resources*” which includes the concept of economic efficiency.¹ Economic efficiency can be defined as:

*“The effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs”.*²

9. More generally, economic efficiency can be considered in terms of:
 - a. Maximising the value of outputs divided by the cost of inputs;
 - b. Maximising the value of outputs for a given cost of inputs;
 - c. Minimising the cost of inputs for a given value of outputs; and
 - d. Minimising waste.
10. The proposed renewal of LPC’s air discharge permit will bring economic efficiency benefits to Christchurch City, the Canterbury region and the West Coast region and therefore is consistent with this part of the RMA. These efficiency benefits are discussed later in this report.

Economic Growth and Employment

11. Section 32(2)(a) of the RMA requires reports prepared under the Act to:

¹See, for example, in *Marlborough Ridge Ltd v Marlborough District Council* [1998] NZRMA 73 at [86], the Court noted that all aspects of efficiency are “*economic*” by definition because economics is about the use of resources generally.

²Pass, Christopher and Lowes, Bryan, 1993, *Collins Dictionary of Economics* (2nd edition), Harper Collins, page 148.

“Identify and assess the benefits and costs of the environmental, economic, social and cultural effects that are anticipated from the implementation of the provision, including the opportunities for:

Economic growth that are anticipated to be provided or reduced; and

Employment that are anticipated to be provided or reduced.”

12. Although this section of the RMA relates to plan change requests rather than air discharge permit renewals and is therefore not directly relevant here, it again highlights that economic costs and benefits and economic growth and employment effects are relevant under the RMA. As explained later in this report the renewal of LPC's air discharge permit will help maintain current levels of economic growth and employment in Christchurch City, the Canterbury region and the West Coast region.

Viewpoint for Economic Assessment

13. An essential first step in carrying out an assessment of the economic effects associated with the renewal of LPC's air discharge permit is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically a district (city) or wider regional viewpoint is adopted and sometimes a nationwide viewpoint might be considered appropriate.
14. In the case of the air discharge permit renewal application there are economic effects for Christchurch City, the Canterbury region and the West Coast region to be assessed. Therefore, all three of these viewpoints are relevant.

Intangible Effects

15. In economics, 'intangible' costs and benefits are defined as those which cannot be quantified in monetary terms. For any project, such effects may include amenity effects, landscape effects, ecological effects, Māori cultural and relationship effects and recreational effects. Such effects may be positive or negative – i.e. a benefit or a cost for a particular community of interest.
16. Sometimes attempts can be made to estimate monetary values for so called 'intangibles' using techniques such as willingness to pay surveys or inferring values on the basis of differences in property values. However, these techniques are frequently subject to uncertainty and criticism.
17. It is generally better to not attempt to estimate monetary values for these effects but to leave them to be part of the consideration under section 5 of the RMA. This also avoids the danger of 'double-counting' – i.e. including them within a quantified measure of efficiency and treating them as a separate matter in the overall judgement under section 5. The air quality, marine ecology, coastal avifauna, terrestrial ecology and dust management effects of LPC's air discharge permit's renewal are covered in other technical reports appended to the Application.

Value of Investment to the Existing Consent Holder

18. Part 6, section 104 (2A) of the RMA requires the consent authority when considering a renewal of an existing consent to *“have regard to the value of the investment of the existing consent holder.”* The value to LPC of its investment in its coal stockyard can be considered in terms of either its investment in the facilities to date (estimated by

LPC to be \$109.0 million³) or the foregone future earnings of the coal stockyard if it was forced to close (estimated to be \$1.6 million per annum – see later in this report). By both of these measures, the value of investment to the existing consent holder is significant.

THE IMPORTANCE OF MERCHANDISE TRADE TO THE NEW ZEALAND ECONOMY

19. Merchandise trade (also known as commodity trade)⁴ is extremely important to the economic wellbeing of New Zealanders because the relatively small size of its population, labour force and economy limits the range of commodities that can be efficiently produced in New Zealand. In addition we are reliant on imports of commodities which can only be produced overseas or can be produced more efficiently overseas. Lower cost imports help maintain the competitiveness of New Zealand producers as well as providing cost savings to consumers.
20. Merchandise trade enables New Zealand to specialise in the production of certain products in which New Zealand has a comparative advantage enabling production surplus to domestic consumption to be exported. These exports in turn provide the foreign exchange to enable New Zealand to finance the purchase of competitively priced imported goods and services.
21. The alternative model of “fortress New Zealand”⁵ would see higher priced goods and services, reduced choice in the range of goods and services available in New Zealand and a less efficient use of the physical and natural resources available. This would result in lower incomes and a lower standard of living for New Zealanders.
22. New Zealand’s reliance on overseas merchandise trade, sea ports and sea transport has been highlighted by the Covid-19 pandemic, which has had a dramatic effect on international air travel and international tourism, which is the primary alternative source of foreign exchange to fund New Zealand’s imports. LPC’s coal trade is part of international merchandise trade upon which New Zealand remains heavily reliant.

CHRISTCHURCH CITY, CANTERBURY AND WEST COAST ECONOMIES

Christchurch City Economy

23. Statistics New Zealand’s June 2020 population estimate for Christchurch City is 394,700 or 61.1% of Canterbury’s population and 7.8% of New Zealand’s total population. In 2013 the population in Christchurch City was 356,700 persons, which represented 63.3% of Canterbury’s population. Christchurch City’s population over the period 2013 to 2020 has grown by 10.7%, as compared to growth of 14.7% for the Canterbury region and 14.5% for New Zealand as whole.
24. Statistics New Zealand’s ‘medium’ population projections⁶ have Christchurch City’s population increasing to 459,100 by 2043 at an average rate of 0.7% per annum over the period 2020-43, as compared to an average rate of growth for the Canterbury

³Made up of buildings, plant and equipment and site improvements, most of which could not be redeployed or sold if the coal stockyard was to cease operations.

⁴A distinction is made between “commodity trade” (or “merchandise trade”) and total trade. Commodity trade relates to the exporting and importing of goods only, whereas total trade includes the exporting and importing of both goods and services.

⁵i.e. where New Zealand does not engage in international trade.

⁶Statistics New Zealand prepares three sets of projections – high, medium and low – according to natural population change (i.e. the net effect of birth and death rate assumptions) and net migration assumptions. These projections do not explicitly incorporate assumptions about different rates of economic development.

region of 0.8%. For New Zealand as a whole population growth of 0.7% per annum is also forecast.

25. Employment data highlights the dependence of the Christchurch City economy on manufacturing and the services sector. In 2020, 22,400 jobs (10.3%) of the City's 218,200 jobs were in the manufacturing sector with the main sub-sectors being food product manufacturing (4,500 jobs), machinery and equipment manufacturing (3,900 jobs), fabricated metal products manufacturing (3,200) and transport equipment manufacturing (2,600 jobs). Other important sectors are health care and social assistance (28,400 jobs or 13.0% of total jobs), retail trade (22,700 jobs or 10.4% of total jobs), construction (20,100 jobs or 9.2% of total jobs), professional, scientific and technical services (20,000 jobs or 9.2% of total jobs) education and training (17,000 jobs or 7.8% of total jobs) and accommodation and food services (15,100 jobs or 6.9% of total jobs).
26. Apart from construction activities associated with the Christchurch rebuild, the key economic drivers for Christchurch City are manufacturing, tourism (which accounts for some but not all⁷ of the jobs created in the retail trade and accommodation and food services sectors) and services provided to the agriculture and agricultural product processing activity within the wider Canterbury region. Employment in other sectors within the City is to a large extent driven by the demand for goods and services by these industries and their employees with the so called "multiplier" effects⁸ creating additional jobs for the City's economy.

Canterbury Regional Economy

27. Statistics New Zealand's June 2020 population estimate for the Canterbury region is 645,900 or 12.7% of New Zealand's total population. It is the second largest region in New Zealand in terms of population.
28. Statistics New Zealand estimates total employment in the Canterbury region in February 2020 at 307,500 which represents 13.3% of the total persons employed in New Zealand. The agriculture, forestry and fishing industry group employed 16,200 persons (5.3% of total jobs) of which most (14,378) were engaged in agriculture⁹. Other significant sectors are manufacturing employing 36,300 or 11.8% of total jobs (of which the most significant subsectors are food products manufacturing (13,400 jobs), machinery and equipment manufacturing (5,300 jobs), fabricated metal products manufacturing (3,650 jobs) and transport equipment manufacturing (2,900 jobs)), health care and social assistance (34,900 jobs or 11.3% of total jobs), retail trade (31,300 jobs or 10.2% of total jobs), construction (28,300 jobs or 9.2% of total jobs), education and training (24,300 jobs or 7.9% of total jobs), professional, scientific and technical services (23,900 jobs or 7.8% of total jobs), and accommodation and food services (21,500 jobs or 7.0% of total jobs).
29. The key drivers of the Canterbury economy remain largely agriculture, manufacturing and tourism, the last of which includes parts of the retail trade, accommodation and food services and education and training sectors. Employment in other sectors is to a large extent driven by the demand for goods and services by these industries and

⁷Employment in tourism is difficult to identify from official statistics since the relevant sectors such as retail trade and accommodation and food services for which data is collected meet the needs of domestic and international visitors, business travellers and local residents and businesses.

⁸These are discussed in greater detail in the next section of this report.

⁹Including agriculture's proportionate share of agriculture, forestry and fishing support services.

their employees with the so called “multiplier” effects creating additional jobs for the region’s economy.

30. There are important linkages between the performance of the Canterbury regional economy (which is heavily dependent upon agriculture and agricultural product processing) and the Greater Christchurch economy. Apart from construction activities associated with the Christchurch rebuild, and tourism which accounts for some but not all¹⁰ of the jobs created in the retail trade and accommodation and food services sectors, the key economic drivers for Greater Christchurch are manufacturing and services provided to the agriculture and agricultural product processing activity within the wider Canterbury region.
31. Agriculture and manufacturing are highly dependent upon LPC’s facilities for exporting their finished products and importing goods required as inputs to their production activities.

West Coast Regional Economy

32. Statistics New Zealand’s June 2020 population estimate for the West Coast region is 32,400 or 0.6% of New Zealand’s total population. In 2013 the population in the West Coast region was 33,000 persons. The West Coast’s population over the period 2013 to 2020 has fallen by 1.8%.
33. Statistics New Zealand’s ‘medium’ population projections¹¹ have the West Coast region’s population decreasing to 30,600 by 2043 at an average rate of 0.25% per annum over the period 2020-43.
34. Employment data highlights the dependence of the West Coast economy on agriculture, tourism, manufacturing and mining. The agriculture, forestry and fishing industry group employed 1,250 persons (8.5% of total jobs) of which most (1,128) were engaged in agriculture. In 2020, 1,850 jobs (12.6%) of the region’s 14,700 jobs were in the manufacturing sector with the main sub-sectors being food product manufacturing (1,150 jobs) and wood and wood products manufacturing (280 jobs). Mining (which includes coal, gold and aggregate production) accounted for 550 jobs (3.7% of total jobs).¹² Other important sectors are accommodation and food services (2,050 jobs or 13.9% of total jobs), health care and social assistance (1,550 jobs or 10.5% of total jobs), retail trade (1,450 jobs or 9.9% of total jobs), construction (1,350 jobs or 9.2% of total jobs) and education and training (940 jobs or 6.4% of total jobs).

THE ECONOMIC BENEFITS OF LPC’S AIR DISCHARGE PERMIT’S RENEWAL

Retained Employment, Incomes and Expenditure – Christchurch City

35. LPC employ 8 full time equivalent (FTE) staff in its coal stockyard and these staff receive \$1.13 million per annum in wages and salaries (i.e. an average salary of

¹⁰Employment in tourism is difficult to identify from official statistics since the relevant sectors such as retail trade and accommodation and food services for which data is collected meet the needs of domestic and international visitors, business travellers and local residents and businesses. However, tourism is an important economic driver for the Canterbury regional economy as it is for the national economy.

¹¹Statistics New Zealand prepares three sets of projections – high, medium and low – according to natural population change (i.e. the net effect of birth and death rate assumptions) and net migration assumptions. These projections do not explicitly incorporate assumptions about different rates of economic development.

¹²It is generally considered that mining employees recorded in Statistics New Zealand data is significantly understated due to some mining employees of mining companies or mining company contractors being recorded under other industry categories – e.g. construction (source: Bathurst, personal communication).

\$141,350 per annum). In addition LPC bring in staff from its container terminal when loading a coal export vessel. For this there is an internal charge of \$0.6 million and assuming the same average salary implies an additional 4 additional employees – i.e. in total LPC's coal stockyard employs 12 FTE staff and pays \$1.73 million per annum in wages and salaries. LPC coal stockyard's operation and maintenance (O&M) expenditure on other goods and services (excluding internal labour) from Christchurch businesses totals \$1.02 million per annum.¹³

36. KiwiRail has 48 freight operations staff directly involved in running the coal service between the West Coast and Christchurch. This is split 19 in Christchurch and 29 on the West Coast. In addition KiwiRail has approximately 50 staff involved in the maintenance of infrastructure between the West Coast and Christchurch. It is assumed 25 of these staff are domiciled in or near Christchurch, implying a total of 44 Christchurch based staff. No allowance is made for rolling stock service staff or customer service staff based in Christchurch and whose jobs would cease if LPC was unable to continue exporting coal out of Lyttelton Port. The freight operations staff and infrastructure maintenance staff wages and salaries total \$10 million per annum (i.e. an average salary of \$100,000 per annum). Therefore Christchurch based staff are estimated to receive \$4.4 million per annum in wages and salaries. Maintenance costs (other than labour) for the Midland Line are \$5 million per annum and it is assumed the bulk of this (80% or \$4 million) is spent with Christchurch businesses.¹⁴
37. Both Bathurst and NZCC have Christchurch based offices which would need to lay off staff and reduce expenditure on other goods and services from Christchurch businesses should coal exports out of Lyttelton port cease. On the basis of data supplied by Bathurst and NZCC, should coal exports via Lyttelton Port cease, there would be a loss of 33 jobs, the loss of \$3.8 million per annum in wages and salaries for these staff and the loss of expenditure with local Christchurch based businesses of \$2.8 million per annum.
38. Therefore, combining the LPC, KiwiRail, Bathurst and NZCC data, conservative¹⁵ estimates for the retained economic activity within the Christchurch City economy from the continuation of coal exports via Lyttelton Port are:
- a. The retention of 89FTE jobs;
 - b. The retention of \$9.9 million per annum in wages and salaries;
 - c. The retention of \$7.8 million per annum in expenditure on other goods and services from local Christchurch businesses.
39. These are the direct economic impacts for the Christchurch economy from the retention of the coal export trade via Port Lyttelton. However in addition to these direct economic impacts, there are indirect impacts arising from:

¹³2020 Data provided by LPC.

¹⁴Data provided by KiwiRail.

¹⁵Since KiwiRail rolling stock service staff and customer service staff based in Christchurch, their wages and salaries and other expenditure with local Christchurch businesses associated with these activities have been excluded from the analysis. The analysis also excludes the retention of expenditure of West Coast mining operations with Christchurch businesses. This could amount to additional direct other expenditure of \$44.8 million per annum and total direct plus indirect other expenditure of \$56.4 million per annum – see next section of this report.

- a. The effects on suppliers of goods and services provided to LPC, KiwiRail, Bathurst and NZCC (i.e. the “forward and backward linkage” effects); and
 - b. The supply of goods and services to employees of LPC, KiwiRail, Bathurst and NZCC and to those engaged in supplying goods and services to companies (i.e. the “induced” effects). For example, there will be retained jobs and incomes for employees of supermarkets, restaurants and bars as a consequence of the continuation of the coal export trade via Lyttelton Port.
40. District and regional multipliers¹⁶ can be estimated to gauge the size of these indirect effects. The size of the multipliers is a function of the extent to which a district and region are self-sufficient in the provision of a full range of goods and services and the district or region’s proximity to alternative sources of supply. Typically multipliers fall in the range of 1.5 to 2.0 and taking the mid-point of this range implies total direct plus indirect economic impacts for Christchurch City and the Canterbury region of:
- a. The retention of 156 FTE jobs;
 - b. The retention of \$17.3 million per annum in wages and salaries;
 - c. The retention of \$13.7 million per annum in expenditure on other goods and services from local Christchurch businesses.

Retained Employment, Incomes and Expenditure – West Coast Region

41. Bathurst and NZCC have stated that without the export of coal via Lyttelton Port their coal export activities on the West Coast would cease. NZCC has stated that whilst the West Coast region has two river ports (at Greymouth and Westport), both of them have shallow drafts and require significant dredging for them to remain accessible. Even with dredging they are not accessible to larger vessels, such as the ones used in the export of coal. Trans shipping to another port would be required adding significantly to costs. Whilst small quantities of coal have been shipped by small conventional vessels and barges in the past, Bathurst and NZCC do not consider such options to be commercially viable.
42. LPC’s coal stockyard presently processes between 1.0 and 1.5 million tonnes of coal per year. Taking the mid-point of this range – 1.25 million tonnes per annum – and using data relating to the economic impacts of the proposed Te Kahu mine on the West Coast as being representative of the employment, incomes and other expenditure of existing West Coast coal mining operations,¹⁷ the direct economic effects of Bathurst and NZCC’s coal export operations on the West Coast being able to continue are:
- a. The retention of 290 FTE jobs;
 - b. The retention of \$29.0 million per annum in wages and salaries;

¹⁶i.e. factors that estimate the amount by which the total employment, incomes or output of a district or region is retained or increased as a consequence of the retention or increase of employment, incomes or output associated with a particular activity.

¹⁷The Te Kahu mine is expected to produce 250,000 tonnes of coal per annum and the direct economic impacts are 58 jobs, \$5.8 million per annum in wages and salaries and \$28 million per annum in other expenditure of which 68% is estimated to be with local West Coast businesses and 32% with business off the West Coast and which are assumed to be with principally Christchurch businesses – see the evidence of Michael Campbell Copeland for Stevensons Mining, 4 May, 2018 (ENV-2017-CHC-090). The Te Kahu employment, income and expenditure are increased by a factor of 5.0 (1,250,000/250,000) to estimate the economic effects of maintaining West Coast coal exports averaging 1.25 million tonnes per annum.

- c. The retention of \$95.2 million per annum in expenditure on other goods and services from local West Coast businesses and \$44.8 million per annum on other goods and services from Christchurch businesses.¹⁸
43. For the West Coast region, specific multipliers for the mining industry have been estimated - for employment 2.04, for wages and salaries 1.53, and for expenditure 1.26.¹⁹ It is assumed these multipliers incorporate KiwiRail's employees, wages and salaries and other expenditure with local businesses on the West Coast. The total direct and indirect economic impacts of retaining the LPC's coal export trade are therefore:
- a. The retention of 592 FTE jobs;
 - b. The retention of \$44.4 million per annum in wages and salaries;
 - c. The retention of \$120.0 million per annum in expenditure on other goods and services from local West Coast businesses and \$56.4 million per annum on other goods and services from Christchurch businesses.

Increased Employment, Incomes and Expenditure

44. The potential exists for additional coal production to occur on the West Coast. Two coal projects have been consented – the Liverpool coal project and the Island Block coal project. In addition there is the Te Kuha coal project, for which consents are being sought in 2021. These three projects could add a further 0.9 million tonnes of coal exports through Lyttelton Port with associated increases in employment, incomes and expenditure with local businesses in the Christchurch and West Coast economies.

Economic Benefits from Retained Economic Activity

45. As indicators of levels of economic activity, economic impacts in terms of increased or retained expenditure, employment and incomes within the Christchurch and West Coast economies are not in themselves measures of improvements in economic welfare, economic wellbeing or economic efficiency. However, there are economic welfare and economic efficiency enhancing benefits associated with increased (or retained) levels of economic activity. These relate to one or more of:
- a. Increased economies of scale: Businesses and public sector agencies are able to provide increased amounts of outputs with lower unit costs, hence increasing profitability or lowering prices;
 - b. Increased competition: Increases in the demand for goods and services allow a greater number of providers of goods and services to enter markets and there are efficiency benefits from increased levels of competition;

¹⁸Indicative of these types of expenditure economic impacts, Bathurst reports it spent \$13.5 million across 102 West Coast businesses averaged across 2017-2019 financial years. Of this \$5.6 million was spent with 79 Buller businesses. (Source: 2020 Bathurst New Zealand Annual Report)

¹⁹See the evidence of Michael Campbell Copeland for Stevensons Mining, 4 May, 2018 (ENV-2017-CHC-090). The multipliers were estimated in the evidence of Mr Geoffrey Butcher in relation to an application for resource consents to mine coal on the Denniston Plateau, June 2011.

- c. Reduced unemployment and underemployment²⁰ of resources: To the extent resources (including labour) would be otherwise unemployed or underemployed, increases in economic activity can bring efficiency benefits when there is a reduction in unemployment and underemployment. The extent of such gains is of course a function of the extent of underutilized resources within the local economy at the time and the match of resource requirements of a project and those resources unemployed or underemployed within the local economy; and
 - d. Increased quality of central government provided services: Sometimes the quality of services provided by central government, such as education and health care, are a function of population levels and the quality of such services in a community can be increased if increased economic activity maintains or enhances population levels.
46. The retention of economic activity especially within the West Coast economy could be expected to provide these sorts of economic benefits. For example, the retention of population will help underpin existing school rolls. Bathurst report that 160 children of its Buller District workforce attend local schools.²¹

Other Economic Benefits

47. Utilisation of Existing Assets. The granting of consents to enable the continued use of existing assets – LPC’s coal stockyard and KiwiRail’s Midland line coal transport facilities – represents an efficient use of existing assets which cannot be redeployed or sold for alternative uses. In other words the investment in these assets is “sunk” and the assets would be “stranded” in that they cannot be usefully redeployed.
48. Central Government Royalty Payments. On the basis of the Te Kuha coal mine project’s expected royalty payments to central government of around \$0.5 million per annum for 250,000 tonnes of coal produced per annum²², maintaining coal exports from the West Coast through Lyttelton Port will maintain a flow of royalties to the Crown estimated at \$2.5 million per annum.
49. LPC Dividends to Christchurch City Council. Because LPC is owned by the Christchurch City Council, its dividends provide benefits to the wider Christchurch community. LPC forecast net profit after tax (NPAT) for its coal business of \$1.6 million for the financial year ending 31 June, 2021. The annual profits from these operations would be lost if coal exports through Lyttelton Port ceased.²³
50. Funding of Community Projects and Activities. Bathurst, NZCC and LPC play significant roles in helping to fund community projects and activities. For example Bathurst is a significant funder of Life Education Trust West Coast, West Coast Search and Rescue and Westport Volunteer Fire Brigade. NZCC is a significant funder of the West Coast rescue helicopter, St Johns’ Ambulance service and West Coast branches of the RSPCA; and LPC’s funding of community projects and

²⁰Underemployment differs from unemployment in that resources are employed but not at their maximum worth; e.g. in the case of labour, it can be employed at a higher skill and/or productivity level, reflected in higher wage rates.

²¹Source: 2020 Bathurst New Zealand Annual Report.

²² See evidence of Michael Campbell Copeland for Stevensons Mining, 4 May, 2018 (ENV-2017-CHC-090).

²³ LPC has a dividend policy to pay out 50% of NPAT in dividends. However because of Covid-19’s impacts on other Council owned businesses, over the next three years LPC has committed to pay a higher proportion. Also, profits retained may result in higher future profitability and higher subsequent dividends.

activities include the Canterbury West Coast Rescue Helicopter, the Maia Health Foundation, Ronald McDonald House, Coastguard Canterbury, the Lyttelton Seafarers' Centre, the Lyttelton Museum, Maui Koopu, the Whakaraupō Carving Centre, Rolleston Scouts, West Rolleston Primary School, Diamond Harbour Primary School, the Banks Peninsula Conservation Trust, Quail Island Ecological Restoration Trust, Living Springs/Diamond Harbour School Enviro Camp and various sports clubs. A cessation in the export coal trade through the Port of Lyttelton would reduce this corporate philanthropy, especially on the West Coast, where there are a limited number of major companies which could step in to replace Bathurst and NZCC in these roles. Their combined contributions to West Coast community projects and activities currently average around \$650,000 per annum.

51. Contribution to Critical Mass of Community Organisations. Bathurst and NZCC contribute to the “social fabric” of the West Coast through their staff and their families belonging to service clubs, sports clubs and other voluntary organisations. As well as fulfilling leadership roles and making other contributions within the community, these companies’ staff and their families help provide the critical mass to underpin these organisations’ ongoing sustainability.
52. Maintaining the Midland Line Viability. By contributing to its fixed costs, coal exports from the West Coast help sustain the financial viability of KiwiRail’s Midland Line for freight and passenger services (including the Tranz Alpine service) to and from the West Coast. Continuation of coal exports from the West Coast via Lyttelton Port will therefore help sustain tourism and other industries on the West Coast.

POTENTIAL ECONOMIC COSTS OF LPC’S AIR DISCHARGE PERMIT’S RENEWAL

Alternative Land Uses

53. It is LPC’s responsibility to assess the financial returns from alternative uses of the land occupied by the coal stockyard. Such alternative uses would most likely involve alternative port uses (e.g. container or car storage) or sale to a port related company. However, the “opportunity cost” of the land required for the continued operation of the coal stockyard is not an economic externality cost as it is not a cost borne by the wider community and therefore does not need to be considered under the RMA.

Property Value Effects

54. Any potential negative effects on nearby property values from the continued operation of LPC’s coal stockyard, if they do occur, are a reflection of, not in addition to, any potential adverse effects identified by other technical experts and addressed in their technical reports appended to the Air Discharge Permit Renewal Application. I understand the Environment Court has accepted that to include both property value effects and any such adverse effects in the assessment of effects would involve double-counting.²⁴

²⁴See for example, *Foot v Wellington City Council* EnvCWellington W73/98, 2 September 1998 at [249] – [256] which dealt with the impact of height restrictions on properties in Oriental Parade; and *Tram Lease Ltd v Auckland Transport* [2015] NZEnvC 137 at [57] – [60].

CONCLUSIONS

55. Social and economic wellbeing, the efficient use and development of natural and physical resources and opportunities for economic growth and employment are relevant considerations under the RMA.
56. Merchandise trade, international cargo shipping and seaports are extremely important to the economic wellbeing of New Zealanders because the relatively small size of the population, labour force and economy limits the range of commodities that can be efficiently produced in New Zealand. In addition New Zealanders are reliant on imports of commodities which cannot be produced in New Zealand or can be produced more efficiently overseas. LPC's export coal trade is part of the merchandise trade, upon which New Zealand is heavily reliant.
57. Agriculture and manufacturing are significant industries for the Christchurch City and Canterbury regional economies. The West Coast key economic drivers are agriculture, tourism and mining. Without the continued operation of LPC's coal stockyard, the export of coal from West Coast mines would cease.
58. Renewal of LPC's air discharge permit will bring a range of economic benefits including:
 - a. The retention of employment incomes and expenditure for the Christchurch City, Canterbury region and West Coast economies;
 - b. Potential increases in employment, incomes and expenditure for the Christchurch, Canterbury and West Coast economies;
 - c. The continued use of existing assets which would otherwise be stranded since they cannot be usefully redeployed for other uses;
 - d. The continuation of royalty payments to central government from West Coast coal mining operations;
 - e. The continuation of significant dividend flows from LPC to its owner, the Christchurch City Council, benefitting the Christchurch community generally;
 - f. The continuation of funding of community projects and activities by Bathurst, NZCC and LPC benefitting the wider West Coast and Christchurch communities;
 - g. The continuation of Bathurst and NZCC staff and their families contributing to the critical mass of community organisations on the West Coast; and
 - h. The continuation of coal exports from the West Coast helping to sustain the financial viability of KiwiRail's Midland Line for freight and passenger services (including the Tranz Alpine service) to and from the West Coast.
59. Renewal of LPC's air discharge permit will not give rise to economic externality costs.
60. Renewal of LPC's air discharge permit:
 - a. Will enable the residents and businesses of Christchurch and the West Coast *"to provide for their ... economic ... well being"*;

- b. Is consistent with *“the efficient use and development of natural and physical resources”*; and
 - c. Will provide opportunities for economic growth and employment.
- 61. The value to LPC of its investment in its coal stockyard can be considered in terms of either LPC’s investment in the coal stockyard facilities (\$109.0 million) or the foregone future earnings of the coal stockyard if it was forced to close (\$1.6 million per annum on the basis of the forecast financial returns in the year ending 30 June, 2021). By both of these measures, the value of investment to the existing consent holder is significant.