

In the Environment Court of New Zealand
Auckland Registry

I Mua I Te Kōti Taiao O Aotearoa
Ki Tāmaki Makaurau

ENV-2023-AKL-160

Under The Resource Management Act 1991 (RMA)

In the matter of An application for a direct referral to the Environment Court under section 87G of the Act for an order granting the applicant's resource consent applications to construct and operate a new asphalt plant at 54 Aerodrome Road, Mt Maunganui, together with an application for consent to authorise the continued operation of the existing asphalt plant on the site pending construction of the new plant

Between **ALLIED ASPHALT LIMITED**
Applicant

And **BAY OF PLENTY REGIONAL COUNCIL and TAURANGA CITY COUNCIL**
Consent Authorities

REPLY EVIDENCE OF BRIAN PALMER

ON BEHALF OF ALLIED ASPHALT LTD

26 April 2024

Counsel acting:

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Introduction

- 1 My full name is Brian Edmund Palmer. I am the Operations Manager for Allied Asphalt Ltd (AAL). In my role I am responsible for all Allied Asphalt 's operations in the Bay of Plenty. I have had this role for 18 years.
- 2 I have previously provided evidence in relation to this application.

Scope

- 3 In my reply evidence I address the evidence of the following witnesses:
 - a) Lou Wickham – Toi Te Ora
 - b) Mike Scott – Ngāti Kuku and Clear the Air
 - c) Danielle Petricevich – BoPRC
 - d) Robert Murray - BoPRC
 - e) Heidi Hughes – Clear the Air
 - f) Philip Shoemack – Toi Te Ora

Plant Investment

- 4 Both Lou Wickham (para.86) and Philip Shoemack (para.55) in their evidence suggest only a 10 year consent should be granted for the new plant. This would be wholly unacceptable due to the considerable investment being made. A Best Practicable Option approach has been adopted for this project which inevitably has a cost attached. The investment in new plant, site improvements and all ancillary works will be close \$20,000,000. A time limit of 10 years would make the investment unviable financially, particularly at the forecast volumes for the period. During the period of the consent AAL have proposed that we periodically review available technology to ensure we maintain our operation in line with current technology. I consider that this approach addresses the concern of making sure the plant keeps up with technology, while also giving AAL confidence it will be able to operate in the environment for an extended period in order to make the required investment decision. That said, the plant AAL is proposing is very much at the top end of technology available, and I am not expecting that there will be revolutionary technological changes available in the market in the short to medium term.

Future Production Forecast

- 5 Lou Wickham (para.32), Heidi Hughes (para.15), and Mike Scott (para. 32 and 68) all reference the capacity of the new plant and production increases. The new plant will have the ability to produce asphalt significantly faster than the existing plant. However, the intention of the increase in production we have allowed for, is to have the ability to respond for increase in the needs of the Bay of Plenty region over the term of the consent. The current levels of production are solely controlled by the Bay of Plenty market. AAL only supplies relatively small volumes (less than 10%) of its production to areas outside the Bay of Plenty region¹.
- 6 As the region's population continues to grow there will inevitably be some increase in the market over time, but this is limited to the Bay of Plenty region, and mainly within the Tauranga area. The current market has been volatile for some years and is quite capable of dropping during periods of recession or reduced commercial activity. It must be remembered however, that the vast majority of AAL's supply is for the repair and maintenance of the current roading network. The number of new, large capital projects is generally small when looked at over a period of time.
- 7 Table 1 below sets out what the size of the Bay of Plenty market might be over the next 30 years, assuming 2% annual growth in the market. I estimate the current market is around 115,000 tonnes, based on the volumes produced by AAL and my estimate of the volumes produced by Higgins. 2% annual growth per annum over 30 years is an estimate, but based on historical demand patterns I would not expect the average growth rate to be more than that.
- 8 A further provision of 15% is included in the estimate to account for product that is transported outside the local BOP market (External Market Estimation).
- 9 Table 1 shows that with these assumptions the Bay of Plenty market does not reach 300,000 tonnes per annum within a 30 year period. However, the ability to have additional capacity in our Resource Consent allows for any future major capital project (these usually have supply requirements over 2 to 3 years) and could have volumes of 30,000 to 100,000 tonnes. The additional capacity also allows us to respond to a major natural disaster².

¹ Supplying asphalt outside the region can occur for a number of reasons, mostly due to supply constraints elsewhere (e.g., plant maintenance outages or scheduling conflicts) but is something that all manufacturers and customers try to avoid because of the cost implications

² For example, a cyclone or extreme weather event could necessitate increased supply of asphalt for urgent repair work – as we have seen in Hawkes Bay and Gisborne

Table 1: Estimated volume forecast for BoP region

		Tonnes		Tonnes	Tonnes
Years	Year	BoP Market Estimation	2% Annual Growth	Annual Growth	With External Market Estimation (plus 15%)
1	2025	115,000	0.02	2300	132,250
2	2026	117,300	0.02	2346	134,895
3	2027	119,646	0.02	2393	137,593
4	2028	122,039	0.02	2441	140,345
5	2029	124,480	0.02	2490	143,152
6	2030	126,969	0.02	2539	146,015
7	2031	129,509	0.02	2590	148,935
8	2032	132,099	0.02	2642	151,914
9	2033	134,741	0.02	2695	154,952
10	2034	137,436	0.02	2749	158,051
11	2035	140,184	0.02	2804	161,212
12	2036	142,988	0.02	2860	164,436
13	2037	145,848	0.02	2917	167,725
14	2038	148,765	0.02	2975	171,079
15	2039	151,740	0.02	3035	174,501
16	2040	154,775	0.02	3095	177,991
17	2041	157,870	0.02	3157	181,551
18	2042	161,028	0.02	3221	185,182
19	2043	164,248	0.02	3285	188,886
20	2044	167,533	0.02	3351	192,663
21	2045	170,884	0.02	3418	196,517
22	2046	174,302	0.02	3486	200,447
23	2047	177,788	0.02	3556	204,456
24	2048	181,343	0.02	3627	208,545
25	2049	184,970	0.02	3699	212,716
26	2050	188,670	0.02	3773	216,970
27	2051	192,443	0.02	3849	221,310
28	2052	196,292	0.02	3926	225,736
29	2053	200,218	0.02	4004	230,250
30	2054	204,222	0.02	4084	234,855

10 By volunteering a condition requiring no more than 15% of our production to go beyond the Bay of Plenty region the intention is to provide an assurance that AAL will remain focussed on supplying the current market and will not be able to use Mount Maunganui as a base from which to supply large volumes of asphalt across a wider area.

11 Also in relation to future production forecasts it is important to note that at present the local market is supplied by both AAL and Higgins. Higgins is operating an older plant under a short term (3 years) consent that was granted earlier this year.

Whether or not Higgins will apply for another consent (for the existing plant or for a new plant) is not something AAL controls. AAL is aware that one possible outcome might be that Higgins will elect to leave the market. This would mean that the local market supply that Higgins currently provides would need to be absorbed into AAL's production. Our new resource consent needs to be able to accommodate this.

- 12 The operating times of the new plant will be significantly reduced due to the increase in output per hour. We expect the plant to be producing for less than 50% of the time the current plant is operating to produce the same amount of asphalt.

Production Cap for Existing Plant

- 13 Danielle Petricevich (para. 60) and Mike Scott (para. 163) comment on a restriction of current production for the existing plant. The levels they have put forward may well be sufficient, but this may not be the case. In the past year there has been a significant decrease in Higgins output. This will undoubtedly have an effect on our potential requirements to service the market. There is already a significant volume of asphalt that is being imported into the Bay of Plenty region, and particularly Tauranga, from sources in Hamilton. AAL do not have any control of the requirements of the market. It should be pointed out, that the material being brought in to the region will be mainly for Waka Kotahi (New Zealand Transport Agency) and Tauranga City Council contracts. The cost of this importation will be borne by the rate and tax payers of the region. The quality of supply and asphalt can also be affected by the distances and time that the material needs to be moved. Due to these considerations, we consider a cap of 80,000 tonnes per year to be reasonable.

Assessment of Alternative Locations

- 14 The supplementary evidence of Ms Makinson includes the development of a Gravity Model used to assess the transport costs for alternative locations. I provided information on production volumes and the various product and geographic markets that are used for the modelling.
- 15 It is important that asphalt can be supplied in a cost- effective manner, with transport making up a large proportion of costs of asphalt manufacture and supply.
- 16 There are a lot of variables and uncertainties that come into play and the model is a simplification. However, the results of the modelling are generally what I would have expected. It confirms my view that the Mount Maunganui site is very suitable and provides a sound platform for servicing the current and future market, whatever form that takes.

Commitment to Natural Gas Usage

- 17 Mike Scott (para.91/92) refers to the conflict between gas and diesel use for the new plant. Although the costs of the natural gas installation have still to be finalised, they are very significant, running in to several hundreds of thousand dollars for the connection and supply equipment. There will also be a daily charge for the gas connection, whether it is used or not. AAL is also not intending to have any diesel fuel storage on the site for the new plant. AAL is making provision for a bunded pad for a small temporary diesel storage tank if the case arises. The capacity of this tank will be less than 4 days fuel supply.
- 18 The cost of fuel is a significant cost consideration. Allied Asphalt would only change fuel types after informing the council, and if the cost of gas becomes 50% higher than the cost of diesel. At present, natural gas is 50% less than the cost of diesel. This should be a high bar to reach and should give everyone confidence that AAL has no intention of switching fuel sources unless necessary.
- 19 The detail of the conditions on switching from natural gas to diesel is included in Mr Batchelar's reply statement.

Epoxy Resin Usage

- 20 Rob Murray (para.34) comments on the use of epoxy resins in some asphalt production. There has been some work carried out in and around New Zealand using resins added to bitumen. This is primarily done to increase the life of asphalt significantly, therefore reducing production requirements and reducing traffic disruption on significant highways. The proportion of resin used in this product is around 25% of the total bitumen content (6%), therefore only 1.5% of the total product. Production is also carried out at very low temperatures (less than 120 degrees celsius). The bitumen with the resin added is not stored on site and is only brought in for production where the small quantities of the reactive agent are added.
- 21 The proposed new plant will not have the ability to produce this product, but it is envisaged that at some stage in the future we will need this ability. The expectation is that the Tauranga Northern Link project will require this ability.
- 22 The air emissions issues relating to Epoxy Resin are addressed in Ms Simpsons reply statement.

Aggregate Storage

- 23 Mr Murray (para.49. (a)) recommends that controls should include all products to be stored in covered bays. It is in AAL's interest to keep all aggregates as dry as

possible to reduce fuel usage and therefore we will continue to keep aggregates undercover wherever possible. However there will be occasions when circumstances will occur when there may be some aggregates stored outside. This will be primarily when work is cancelled or delayed and deliveries are still arriving.

24 Allied Asphalt will always attempt to ensure all materials that contain fines will be covered. There will be a small area that will not be covered where larger aggregates are stored outside and sprinklers are included in our plans to mitigate dust from this area if it arises.

25 The stocking area will have access to sprinklers to ensure that when these circumstances occur fugitive emissions can be mitigated.