

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

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

Statement of Evidence of Sarah Shepherd

(Hazardous Substances)

29 February 2024

Counsel acting:

Stephen Christensen

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Qualifications and experience

- 1 My full name is Sarah Jane Shepherd.
- 2 I have a Bachelor of Technology (with honours) majoring in Environmental Engineering from Massey University, Palmerston North.
- 3 I am currently employed as a Technical Director - Environment at Beca Ltd and have held that position since January 2021.
- 4 I am a Certified Environmental Practitioner.
- 5 I have 19 years of experience in the environmental regulatory profession working for consultancy firms. I have provided consultancy services for a range of clients around New Zealand including local authorities and industry. I have been based in New Plymouth for the past 14 years and in this time have undertaken technical review of resource consents relating to hazardous facilities for the New Plymouth District Council and acted as subject matter expert where applications have proceeded to hearing. I provided technical advice with respect to hazardous facilities for the South Taranaki District Council District Plan and the New Plymouth District Plan, attending hearings as subject matter expert at the New Plymouth district plan hearings in 2022 and 2023.
- 6 My role in relation to Allied Asphalt Limited's (**Allied**) application for resource consents for a new asphalt plant and the continued operation of an existing plant pending construction of the new plant at 54 Aerodrome Road, Mt Maunganui (**Application**) has been to provide advice in relation to hazardous substances. I oversaw preparation and reviewed the Hazardous Substance Assessment (**HSA**) report accompanying the Application, which appears at Appendix 9 of the Assessment of Environment Effects (**AEE**).
- 7 My assessment is based upon the project description provided in the planning evidence of Mr Craig Batchelar. It is the same as the project description in the AEE with the exception that waste oil will no longer be used in the new plant (natural gas will be used instead with diesel as backup) and limits are being placed on daily and annual asphalt production. The change of fuel for the new plant improves the outcome of the HSA which is outlined in this evidence.
- 8 In preparing this statement of evidence I have considered the following documents:
 - (a) the AEE accompanying the Application;

- (b) submissions relevant to my area of expertise;
 - (c) planning provisions relevant to my area of expertise;
 - (d) section 87F report;
- 9 I have not visited the Application Site but observations made by my colleague Curtis Blyth when he visited the site in 2022 were referred to in the HSA.

Code of Conduct for Expert Witnesses

- 10 I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope of evidence

- 11 I have prepared evidence in relation to:
- (a) the existing environment of the Application Site as it is relevant to my area of expertise;
 - (b) the key findings of my assessment of effects;
 - (c) matters raised by submitters on the Application;
 - (d) matters raised in the Bay of Plenty Regional Council and Tauranga City Council s87F report; and
 - (e) Proposed conditions of consent.

The existing environment

- 12 The existing and proposed asphalt plant site is located in the Mount Maunganui Industrial Area at 54 Aerodrome Road (Lot 2 DPS 36408, “the site”), occupying a rectangular area of approximately 70m by 100m. The proposed asphalt plant is intended to replace the existing asphalt plant when completed.
- 13 The site is flat and covered in either sealed (asphalt or concrete) or compacted hardfill (compacted aggregate) surfaces. Current surface stormwater runoff discharges to the stormwater network at two points within the site; via a stormwater interceptor near the centre of the site, and via a

swale from the site's northeastern corner. Both discharge points connect to public infrastructure running down Aerodrome Road to the east. This stormwater infrastructure ultimately discharges to a drain located at the end of Seawind Lane approximately 730m west of the site.

- 14 The site is zoned industrial. The nearest residential property is approximately 650m to the north-east/east, beyond State Highway 2 at Omanu. There are some ancillary residential uses within hangar buildings at the Tauranga Airport approximately 400m to the south. The nearest early education centre in the industrial zone (Little Einsteins) is located in MacDonald Street, 550m to the east.
- 15 Hazardous substances are stored and used on site for the existing asphalt plant and in the surrounding area such as at HR Cement south of the site.

Assessment of effects

- 16 In assessing effects it is important to acknowledge that the Resource Legislation Amendment Act 2017 (**RLAA**) removed the explicit function of regional and territorial authorities under Sections 30 and 31 to control the adverse effects of the storage, use, disposal and transportation of hazardous substances to ensure Resource Management Act 1991 (RMA) controls do not duplicate controls in Hazardous Substances and New Organisms Act 1996 (**HSNO**) and Health and Safety at Work (Hazardous Substances) Regulations 2017 (**HS Regulations**). RLAA also introduced a procedural principle to ensure that council plans and policy statements include only matters relevant to the purpose of the RMA (ss18A).
- 17 While councils do retain a broad power under the RMA to manage hazardous substances through their plans and policy statements to achieve the purpose of the RMA and to carry out the function of integrated management of natural and physical resources in their region/district, this should only be exercised where the potential environmental effects are not adequately addressed by other legislation.
- 18 The Tauranga City Plan (here after referred to as **City Plan**) uses the Hazardous Facility Screening Procedure (**HFSP**) and the consent status matrix to assess whether a proposed hazardous substance facility or activity using hazardous substances requires a resource consent. The outcome from the HSFP undertaken in the HSA is provided in Table 1 below and determined that the proposed facility is a Discretionary Activity as the environment and human health quantity ratios are greater than 1.5.
- 19 The existing facility already has land use consent (granted in 1970) with no specified limits or conditions on hazardous substances storage and use.

Table 1. Quantity ratios based on HFSP results.

Activity	Fire/ Explosion Quantity Ratio	Human Health Quantity Ratio	Environment Quantity Ratio
Existing Plant	0.51	2.09	1.80
Proposed Plant	0.51	2.09	1.80

- 20 Bitumen is not classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020 and is not included in the HFSP.
- 21 Based on the change of fuel for the plant outlined in paragraph 7, the HSFP has been updated replacing the waste oil with 15,000 litres (L) of diesel (for back-up use only) and is provided in **Appendix A**. The HFSP outcome is provided in Table 2 below and determined that the proposed operations, are a Restricted Discretionary Activity as the human health quantity ratio is greater than 1.0. The fire/ explosion quantity ratio and the environment quantity ratio has reduced to now be below the permitted activity effects ratio of 1.

Table 2. Quantity ratios based on updated HFSP results.

Activity	Fire/ Explosion Quantity Ratio	Human Health Quantity Ratio	Environment Quantity Ratio
Proposed Plant	0.2	1.06	0.78

- 22 The City Plan outlines in 9A.5.1.1 the specific information requirements for hazardous facilities These requirements are addressed below specifically for human health with a focus on high calcium lime (a solid) and diesel (a liquid), the two most significant substances contributing to the human health quantity ratio.
- 23 The human health effects based on HSNO classifications for high calcium lime (a solid) and diesel and provided in Table 3 below.

Table 3. Human Health HSNO Classifications.

Substance	Quantity	Human Health Hazardous Substance Classifications
Diesel	1250 L in double skinned storage tank under the mixing drum 15,000 L in new back-up double skinned storage tank	6.3B - skin irritation 6.7B - carcinogenicity 6.1E - acute toxicity (aspiration) (oral)
High Calcium Lime (Mineral Filler)	50 tonnes in silo	6.7A - carcinogenicity (inhalation) 6.9B - specific target organ toxicity (single or repeated exposure)

- 24 The potential for cumulative effects and risks with other hazardous substance facilities nearby are considered to be very low. The potential risks to human health are predominantly related to those handling the substances, who will be the workers on site. Worker exposure is managed via the HS Regulations. Noting that operational air discharges is outside the scope of this evidence and are addressed in the Air Quality and Health evidence by Jenny Simpson and Lyn Denison, respectively.
- 25 Isolation distances between the hazardous substance storage areas and public places are more than 100m in all directions with Aerodrome Road being the closest.
- 26 Tank design, secondary containment, signage, certification and the requirement for an emergency response plan is regulated under the HS Regulations.
- 27 Detailed design plans of the facility are not yet available but can be provided by way of resource consent conditions prior to commissioning of the facility.
- 28 Written confirmation from the Fire and Emergency New Zealand stating they have received the hazardous substances information and commented on it has not been provided in accordance with 9A.5.1.1 (b) (xxvii) of the City Plan; however, is not considered necessary with the fire/ explosion quantity ratio within the permitted activity limits.

- 29 Based on the findings of the HSA and updated HFSP, I consider the potential environmental effects are adequately addressed by the requirements of the HSNO and the HS Regulations.

Matters raised by submitters

- 30 Hazardous substances were raised in the submission by Dr Jim Miller (on behalf of Te Whatu Ora/Toi Te ora - Health New Zealand) who agreed that the current site and corporate procedures must be confirmed before the new plant is commissioned to ensure the release of contaminants can be avoided by the range of management tools the applicant describes.
- 31 Per Bojsen-Moller and Ms Perkins opposed storage and use of hazardous substances (and the other aspects of the proposal) due to health and safety risk to public and communities from contaminants being discharged; specifically for schools, kindergartens, residential homes, sports fields, marae located several hundred metres from the plant. These issues have been addressed in the assessment of effects above.

Matters raised by s87F report

- 32 The s87F report referred to Mr Batchelar's summary of the assessment and conclusions contained in the HSA in Section 8.7 of the AEE. Given the very specialist nature of this topic, Ms Bougen was heavily guided by the content of the HSA, and on this basis accepted the conclusion of Mr Batchelar that the effects arising from the storage of hazardous substances on the site proposal will be negligible.
- 33 For completeness, Ms Bougen noted that Chapter 9 of the City Plan contains several other provisions relating to the storage of hazardous substances, including a requirement that every application in respect of a Discretionary Activity shall contain the information specified in Rule 9A.5.1.1 – Specific Information Requirements on Hazardous Facilities (9A.6 of the City Plan). It was unclear to Ms Bougen whether these information requirements were met and clarification was sought.
- 34 The requirements of 9A.5.1.1 that are not specifically covered in the HSA have been addressed in paragraphs 20 to 26 of this evidence and with the exception of built plans of the facility, the requirements are met. The built plans can be addressed by way of resource consent condition.

Proposed consent conditions

35 The following conditions have been proposed which I generally support with some recommended amendments (shown by deletions in strikethrough and additions underlined):

(a) The volume of hazardous substances stored shall not exceed the following maximum quantities:

Substance	Maximum Quantity
Diesel	<u>16</u> ,250 litres
Bitumen Release	400 litres
LPG	210 kg
Soda Ash	1,000 kg
Fatty Amine Derivative	1,000 litres
High Calcium Lime	50 tonnes
Used Lubricating Oil	50,000 litres
Other: cleaners, lubricants, coatings	20 litres or less per product

(b) Within one month of consent being granted, and again prior to the commissioning of the new asphalt manufacturing plant, the consent holder shall provide the following documents to the Tauranga City Council:

a. Copies of all certificates required by the consent holder under the Health and Safety and Work (Hazardous Substances) Regulations 2017 (HSW-HS Regulations); and

b. A copy of the Emergency ~~Management~~ Response Plan required by the HSW-HS Regulations which shall include built plans of the facility;

c. Evidence that a copy of this resource consent, along with the plans listed in Condition 1, has been provided to the New Zealand Fire Service; and

~~d. A copy of the Emergency Response Plan approved by the New Zealand Fire Service.~~

36 The proposed amendments to the first condition (35 (a) above) reflect the increase in diesel and removal of used oil from the proposal, that the volume of LPG is below the permitted activity effects ratio and the small volumes of cleaners, lubricants and coatings are incidental and commensurate with the Appendix 9C: Domestic Scale Quantity Based Hazardous Substances Table in the City Plan.

- 37 The proposed amendments to condition 35 (b) above reflects that the Fire/ Explosion Quantity Ratio for the proposed facility is below the permitted activity ratio and that FENZ will review the Emergency Response Plan and provide comment but generally will not “Approve” a plan.

Conclusion

- 38 Based on the removal of used oil, the HFSP has been updated and the proposed operations are considered a Restricted Discretionary Activity as the human health quantity ratio is greater than 1.0, primarily due to diesel and high calcium lime.
- 39 Based on the findings of the HSA and updated HFSP, I consider the potential environmental effects are adequately addressed by the requirements of the HSNO and the HS Regulations.
- 40 With some consequential amendments I agree with the proposed conditions.



Sarah Shepherd

Dated this 29th day of February 2024