

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 Curtis Blyth

(Contaminated Land and Erosion & Sediment Control)

29 February 2024

Counsel acting:

Stephen Christensen

Project Barrister

421 Highgate, Dunedin 9010

p 027 448 2325

stephen@projectbarrister.nz

Qualifications and experience

- 1 My full name is Curtis Charles Blyth.
- 2 I hold a Bachelor of Science (Technology) from Waikato University, majoring in Environmental Sciences.
- 3 I am currently employed as an Associate Environmental Scientist at Beca Ltd and have held that position since 2014.
- 4 My work experience includes 10 years in the infrastructure consultancy field providing various environmental advisory services, specialising in contaminated land, erosion and sediment control, environmental compliance, and environmental management. Prior to that I was a research technician in the agricultural research field for two years, following university.
- 5 In the contaminated land field, I have been involved in numerous contaminated land investigations, consenting and management in various industries, including major roading infrastructure projects, food and beverage, agricultural industries, landfills, hydrocarbon industries, ports and horticulture.
- 6 In the erosion and sediment control field, I have provided technical erosion and sediment control advice and plans for numerous developments across the country. These developments include roading, three-waters infrastructure, land development and rail. I am currently contracted to Waikato Regional Council (WRC) as a Resource Compliance Officer. This role involves monitoring large scale earthworks management and compliance. I was previously the Environmental Manager of the Waikato Expressway Hamilton Section, a 22km project site involving large scale earthworks where I was responsible for the erosion and sediment control aspects of the project.
- 7 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 erosion and sediment control and contaminated land. I drafted, oversaw the preparation of, or reviewed the ***Preliminary Site Investigation (Contaminated Land) (PSI), Erosion and Sediment Control Plan (ESCP), Contamination Assessment, and Contaminated Site Management Plan (CSMP)*** reports to the Assessment of Environment Effects (**AEE**) accompanying the Application, which appear at Appendices

10 and 13 of the AEE and also at Appendix 6 of the Further Information Response.

- 8 My assessment is based upon the project description provided in the planning evidence of Mr Craig Batchelar.
- 9 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) section 87F (S87F) report.
- 10 I have visited the Application Site on two occasions during our technical assessments in 2022.

Code of Conduct for Expert Witnesses

- 11 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

- 12 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.
- 13 Note that I have separated my evidence under “Erosion and Sediment Control” and “Contaminated Land” subheadings for clarity.

The existing environment

- 14 The asphalt plant redevelopment site is in the Mount Maunganui industrial area at 54 Aerodrome Road (Lot 2 DPS 36408), occupying a rectangular area of approximately 70m by 100m. The proposed asphalt plant is intended to replace the existing asphalt plant when completed.
- 15 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.

Assessment of effects

- 16 Erosion and Sediment Control
 - (a) Earthworks have the potential to generate sediment runoff via erosion of exposed soils from rainfall. Sediment (in stormwater runoff) meets the definition of a contaminant under the RMA (S15) and has the potential to affect any receiving ecosystem via clogging fish gills, preventing sunlight, and smothering benthic environments. Sediment can also generate issues in public stormwater infrastructure via restricting flow capacity or become a public nuisance.
 - (b) Sediment runoff can be exacerbated on earthwork sites where there is a large open earthworks area, highly erodible soils, steep slopes, and poor earthworks management.
 - (c) The proposed earthworks for this project involve less than 2000 m³ of disturbance over the entire 7,500 m² site. These earthworks are limited to shallow earthworks to re-grade the site, trenching for services installation and foundation works for the new plant. These earthworks present a low risk of resulting in sediment discharges due to:
 - (i) The small, staged earthworks areas resulting in only a small area of exposed soils being potentially exposed to rainfall and subsequent erosion at one time.
 - (ii) The flat nature of the site limiting the erosion potential.
 - (iii) The existing hardfill surfaces providing a low erosion potential.

- (iv) The linear trenching works and foundation earthworks presenting a low risk of erosion and sediment runoff due to their small size and retention capacity.
 - (v) The staged construction methodology allowing controllable sections to be completed and stabilised at one given time, thus limiting the overall erosion potential of the project.
- (d) Whilst the potential for adverse sediment discharges remains relatively low due the above factors, the project will adopt best practice erosion and sediment control methodology as outlined in the Erosion and Sediment Control Plan (ESCP). This ESCP references the Bay of Plenty Regional Council's Erosion and Sediment Control Guidelines for Land Disturbing Activities (the 'ESC Guidelines', 2010) which will be adopted by the appointed Contractors undertaking the construction works. Erosion and sediment control (ESC) measures outlined in the ESCP emphasize erosion controls, such as progressive stabilisation with engineered materials (aggregates) and use of geofabrics.
- (e) As with most land disturbance consents, the conditions of consent will require the consent holder (usually delegated to the appointed lead Contractor) to prepare an updated ESCP that will be based on the original ESCP provided in the Application. This updated ESCP allows the Contractor to take ownership of ESC methodology and implementation onsite, aligned with their specific construction methodology and finalised detailed design of the project. As outlined in paragraph 23(a)(i) and paragraph 24(a)(i), a proposed ESCP condition is in place, which will allow the project earthworks to be managed effectively via implementing best practice ESC methodologies thus minimizing the potential for sediment discharge effects on receiving environments.

17 Contaminated Land

- (a) Resource consent triggers relating to contaminated land exist for the project under the Regional Natural Resources Plan (RNRP), the City Plan and the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS). Collectively, the RNRP, City Plan and NESCS seek to ensure that contaminated soil disturbance is undertaken in a manner which ensures that any unacceptable adverse effects on the environment, and human health, are avoided.

- (b) The Preliminary Site Investigation report (Appendix 10 to the application) (PSI) identified three Hazardous Activity and Industry List (HAIL) activities to have occurred on the site on a more likely than not basis, including: storage of chemicals and fuel (HAIL A17), timber treatment and storage (HAIL A18) and the operational asphalt plant activity (HAIL E2). The entire site is identified as a 'piece of land' as defined by the NESCS.
- (c) The NESCS soil disturbance volume permitted activity threshold (Regulation 8(3) of the NESCS) was exceeded for the project, and with no Detailed Site Investigation (DSI) having been undertaken, consent as a discretionary activity under the NESCS was recommended. This consent process was considered the most appropriate due to the challenges in sampling soil onsite, considering the majority of materials to be disturbed will be existing hardfill, and that the disturbed materials will be reused to form the compacted surface of the new site, or used as recycled aggregate product for roading infrastructure.
- (d) The PSI concluded there was a potential contaminated soil exposure risk to construction workers during the upgrade works via dermal contact, ingestion or inhalation of dust or vapor. The PSI also identified a potential risk to surface water receptors from potential contaminated sediment runoff during works if not managed.
- (e) The PSI recommended a Contaminated Soils Management Plan (CSMP) was prepared to outline safe handling procedures during the project, including the management of spoil, soil movements and accidental discovery protocol.
- (f) To inform the CSMP, a contamination investigation was undertaken involving the collection and analysis of soil and groundwater samples. This investigation is detailed in the Contamination Assessment report (Appendix 6 of the Further Information Response). A summary of the results of the assessment includes:
 - (i) Analysis of four soil samples found detectable concentrations of heavy metals at concentrations below published regional background criteria. Two soil samples were found to contain low concentrations of total petroleum hydrocarbons (TPH) below the adopted human health and environmental assessment criteria. All other contaminants (Benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons

(PAH) and poly- and perfluorinated alkyl substances (PFAS)) were below laboratory detection limits in all four soil samples.

- (ii) Analysis of groundwater samples from two sampling events found concentrations of heavy metals below the adopted human health and environmental assessment criteria. One of the two samples from BH02 contained a low concentration of perfluorooctanoic acid (PFOA), however this result was below the adopted assessment criteria. All other contaminants (BTEX, PAH and TPH) were below laboratory detection limits in all four groundwater samples.
 - (iii) No contaminants assessed in this investigation have been identified in soil and groundwater at concentrations that would present a risk to human health or the environment during the construction of the project.
- (g) Subsequently the draft CSMP was prepared and outlines procedures for Allied and the appointed Contractor to follow. Implementation of this CSMP during works will minimize or mitigate contaminated soil exposure to construction workers undertaking earthworks and minimize potential contaminated soil discharges to the receiving environment. The implementation of the ESCP procedures will also minimize potential contaminated soil discharges via minimizing sediment runoff and retaining sediment onsite.

Matters raised by submitters

18 Erosion and Sediment Control

- (a) No submissions specifically relating to erosion and sediment control were identified. Aspects of general earthworks management and the potential loss of contaminated sediments have been addressed in paragraph 19 below as they are more relevant to contaminated land management.

19 Contaminated Land

- (a) Submission 3 (Dr Jim Miller (on behalf of Te Whatu Ora – Health New Zealand)) – Neutral Stance - in support of CSMP being prepared, with approval by TCC and BOPRC.
 - (i) My response: Acknowledged and agreed this is appropriate. This process is provided for in the draft conditions.

- (b) Submissions 44, 78 and 80 (Vicki Semmens, Dr Mark Lawrence, and Karylene O'Neill) – Opposes – All similarly concerned with earthworks on a contaminated site resulting in contaminated run-off to waterways (or similar wording).
 - (i) My response: I consider the earthworks volumes, areas and methodology more akin to minor earthworks and not “major earthworks” as stated in these submissions. With the implementation of the ESCP and CSMP the potential effects to the receiving environment from potential contaminated soil disturbance and subsequent stormwater discharges during construction will be adequately mitigated. Accidental discovery protocol is also detailed in the CSMP in the event that contamination is discovered in soils that requires additional containment and management.

Matters raised by s87F report

20 Erosion and Sediment Control

- (a) No matters of concern were raised in the S87F report in relation to ESC.

21 Contaminated Land

- (a) No matters of concern were raised in the S87F report in relation to contaminated land. In summary:
 - (i) The S87F reports accepts the NESCS assessment provided in Section 11.1.6 of the Application and the conclusion that resource consent is required under Regulation 11 of NESCS.
 - (ii) The S87F report notes that the Application, and further information provided, has been peer-reviewed by Ms Emma Joss (contaminated land consultant for BOPRC), who also agrees with the Assessment.
 - (iii) The S87F report states that *“Based on the review by Ms Joss, I am satisfied that, provided soil disturbing activities are undertaken in accordance with the CSMP, any unacceptable adverse effects arising from the disturbance of contaminated soils on human health, or the environment will be avoided.”*

- 22 Section 7.12 – Construction Effects – of the S87F report stated (relating to both ESC and contaminated land disturbance as ‘construction effects’): *“Overall, I am satisfied that, subject to compliance with the recommended*

consent conditions, any adverse effects associated with the construction process will be either avoided, or appropriately mitigated to an acceptable level.”

Proposed consent conditions

23 Tauranga City Council – District Plan – Consent RC29596

(a) Erosion and Sediment Control

- (i) Conditions 15 – 18 are in relation to the submission of an ESCP to TCC for certification, working in accordance with this approved ESCP, and implementing ESC onsite in accordance with the Bay of Plenty Regional Council Guideline 2020/01 – ‘Erosion and Sediment Control Guidelines for Land Disturbing Activities’ (the ‘ESC Guidelines’).

I consider these conditions appropriate in minimizing or mitigating the potential loss of sediments to the receiving environment and support them being adopted in the consent.

(b) Contaminated Land

- (i) Conditions 24 – 28 are in relation to the CSMP (or an updated version) being adhered to during construction, accidental discovery protocol in the event unidentified contaminants are discovered, landfill disposal requirements and the requirement of a Works Completion Report (WCR) for certification by TCC once earthworks are complete.

I consider these conditions appropriate in minimizing or mitigating the potential effects to human health and the receiving environment arising from the disturbance of a potentially contaminated site during construction and support them being adopted in the consent.

24 Bay of Plenty Regional Council – Regional Plan - Earthworks and Contaminated Soils (Consent number TBC)

(a) Erosion and Sediment Control

- (i) Conditions 7 – 13 are in relation to the submission of an ESCP to BOPRC for certification, working in accordance with this approved ESCP, and implementing ESC onsite in accordance with the Bay of Plenty Regional Council Guideline 2020/01 –

'Erosion and Sediment Control Guidelines for Land Disturbing Activities' (the 'ESC Guidelines').

I consider these conditions appropriate in minimizing or mitigating the potential loss of sediments to the receiving environment and support them being adopted in the consent.

(b) Contaminated Land

- (i) Conditions 13 – 19 are in relation to the CSMP (or an updated version) being adhered to during construction, accidental discovery protocol in the event unidentified contaminants are discovered, landfill disposal requirements, imported material cleanfill classifications and the requirement of a Works Completion Report (WCR) for certification by BOPRC once earthworks are complete.

I consider these conditions appropriate in minimizing or mitigating the potential effects to human health and the receiving environment arising from the disturbance of a potentially contaminated site during construction and support them being adopted in the consent.

Conclusions

25 Erosion and Sediment Control

- (a) The proposed redevelopment activity presents a low sediment discharge risk due to the flat nature of the site, existing hard fill surfaces, small volume of earthworks and proposed stabilised surfaces through construction.
- (b) Implementing erosion and sediment control methodology outlined in the ESCP, and constructed in accordance with the ESC Guidelines, will adequately minimize any potential sediment discharge effects to the receiving environment during construction.
- (c) The proposed conditions of consent are considered appropriate for Allied and their appointed Contractor to adequately manage ESC onsite and minimize this low sediment discharge risk.
- (d) No submissions were made, and no matters of concern were raised in the S87F Report in relation to erosion and sediment control.

26 Contaminated Land

- (a) The PSI concluded a potential contaminated soil exposure risk to construction workers during the proposed redevelopment and potential contaminated soil discharge risk to receiving environments if unmanaged.
- (b) The Contamination Assessment did not identify any contaminants assessed in soil and groundwater at concentrations that would present a risk to human health or the environment during the construction of the project.
- (c) Implementing the CSMP and practices within will adequately minimize any potential human health exposure or environmental discharge risk associated with the disturbance of potentially contaminated soils.
- (d) Accidental discovery protocol detailed in the CSMP will allow a Suitably Qualified and Experienced Practitioner (SQEP) to inform onsite management of contaminated soils in the event of discovery of unexpected contaminated soils onsite during works.
- (e) The proposed conditions of consent regarding contaminated soil disturbance and management are considered appropriate in minimizing any potential human health or environment discharge risk during construction.
- (f) Several submissions made in relation to contaminated soil disturbance and the subsequent exposure and discharge risks will be adequately addressed via the implementation of the CSMP and ESCP.
- (g) No matters of concern were raised in the S87F Report in relation to contaminated land.



Curtis Blyth

Dated this day, 29 February 2024