



Ref: 21018

10 August 2022

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RE: RM22.099 – S92 Response Technical Review

1 Introduction

Mobil Oil New Zealand Limited (Mobil) is applying for consent under the Regional Plan: Waste and Regional Plan: Water to passively discharge hazardous substances onto or into land in circumstances that may result in those substances entering water, at the former Mobil bulk oil terminal, 199 Fryatt Street, Dunedin.

Overall, this activity is discretionary and an application, including assessment of environmental effects (AEE), has been prepared by Golder Associates (NZ) Limited (Golder Associates - now WSP New Zealand Limited) dated 21 February 2022. Supporting documents, also prepared by Golder Associates, include:

- A Closure Report dated November 2019
- Two separate Environmental Management Plans (EMPs) dated March 2020, covering on-site and off-site areas.

In May 2022, e3Scientific Limited (e3s) were commissioned by Otago Regional Council (ORC) to provide a technical review of the consent application. This review found that, overall, the consent application and Closure Report provided a thorough summary of the environmental conditions at the site, and that past investigations at the site have been comprehensive and adequately characterise hydrocarbon contamination at the site.

The review noted that the scope of the Closure Report was limited to petroleum hydrocarbons and heavy metals. Per and Polyfluorinated Alkyl Substances (PFAS)

(contaminants associated with some firefighting foams) were not assessed as part of previous environmental assessments.

As a result, further information was requested from the applicant under section 92(1) of the Resource Management Act 1991. WSP New Zealand Limited (WSP) provided a response to this request on 1 August 2022. The s92 response is supported by a report titled 'Phase 1 Review of Per-and Polyfluoroalkyl Substances (PFAS) - Former Mobil Dunedin Terminal -199 Fryatt Street.' e3s has been engaged to provide a technical review of the s92 response.

2 S92 Request and Response from WSP

The tables below summarise the further information sought from the applicant, the applicant's response, and e3s comment on the response.

S92 Question 1

ORC:	What investigation has been undertaken on Per and Polyfluorinated Alkyl Substances (PFAS)? What PFAS chemicals have been used, stored or tested on the site? What is the potential for PFAS contamination of soil and groundwater on the site and/or off-site?
WSP:	<p>Mobil commissioned a desk top review to assess the potential for PFAS containing fire fighting foam to have been used, stored or tested on site (attached to s92) letter.</p> <p>The information reviewed indicates a low potential for soil and groundwater contamination to be present at levels likely to result in adverse environmental effects.</p>
e3s:	The Phase 1 Review included the s92 response provides a thorough desk-top review of firefighting infrastructure and PFAS use at the site and adjacent bulk fuel storage facilities. The report is effectively a contaminant-specific Preliminary Site Investigation (PSI) which includes a review and summary of all relevant sources of information outlined in Contaminated Land Management Guideline Nos 1: Reporting on Contaminated Sites in New Zealand. The conclusions in the report and summarised in the s92 response letter are reasonable and supported by the available information.

S92 Question 2

ORC:	Would the applicant consider further physical investigation and monitoring towards the end of the consent term (Year 8 or 9) as part of the consent renewal process?
WSP:	The Applicant is aligned that there is need to undertake further monitoring toward the end of the consent term. The Applicant suggests that the discharge permit include a condition that requires the consent holder to undertake an assessment of groundwater quality, in the form of an Environmental Site Assessment (ESA), in Year 8 or 9 of the consent term.
e3s:	I agree that a round of groundwater monitoring prior to the expiry of the consent would be warranted.

S92 Question 3

ORC:	Based on the additional information requested above, please update the Environmental Management Plans (EMPs) and re-submit.
WSP:	It is Mobil's intent to review the need for further update of the EMPs, as needed, based on consenting outcomes and provide updated versions to the relevant parties (including ORC).
e3s:	I agree with the s92 response that the existing EMPs provide adequate information to demonstrate that the proposed controls for the on-going management of the site are appropriate. It would be most appropriate to update the EMPs following consultation with affected parties and consenting outcomes.

3 Specific Questions

Responses to specific questions regarding the application are summarised the table below:

Table 1: Questions from ORC.

Q:	Is the technical information provided in support of the application robust, including being clear about uncertainties and any assumptions? Yes, or no. If not, what are the flaws?
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R:	Yes, the technical information provided in support of s92 response is robust, and limitations associated with the additional PFAS investigation are clearly expressed.
Q:	Are there any other matters that appear relevant to you that have not been included? Or is additional information needed? Please specify what additional info you require and why [please explain]
R:	No, the application and s92 response address all relevant matters.
Q:	If granted, are there any specific conditions that you recommend should be included in the consent?
R:	<p>As per the original assessment, the most critical consent condition would be to prepare and submit finalised copies of the EMPs to the consent authority, Dunedin City Council and Chalmers Properties Limited.</p> <p>Additionally, it would be appropriate, as discussed above, to include a consent condition requiring an Environmental Site Assessment towards the end of the consent term. This investigation should be completed at least 1 year before the expiry of the consent to allow adequate time for consent renewal if needed. In the intervening years, it is likely that some of the existing monitoring well network will be lost or destroyed. To avoid any uncertainty, it may be useful to include a sub-clause to the consent condition stating something to the effect of: 'if any of the monitoring wells shown in Figure 2 of the EMP are lost or destroyed, their need for replacement prior to the Environmental Site Assessment should be evaluated by a suitably qualified and experienced contaminated land practitioner, in consultation with the Consent Authority.'</p>
Q:	Has the Applicant addressed Q1 of the s92 response adequately? Is the information provided sufficient to understand any potential current and ongoing adverse effects associated with the potential historic use of PFAS on the site?
R:	Yes, the applicant has addressed Q1 of the s92 response adequately. The response provides multiple lines of evidence to support the conclusions in the report and to characterise the likelihood and scale of adverse effects as a result of PFAS storage or use.

4 Summary and Conclusions

Overall, the consent application, Closure Report, and s92 information provide a thorough summary of the environmental conditions at the site. Past investigations at the site have been comprehensive and hydrocarbon contamination at the site is well understood.

If you have any questions regarding the information provided in this letter, please contact Simon Beardmore on 03 409 8664 or via email at simon.beardmore@e3scientific.co.nz

Yours sincerely,



Simon Beardmore

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