ACTION FOR HEARTLY WATERWAYS - CONSULTATION (SEPTEMBER 2019)

To: Ministry for the Environment
PO Box 10362
Wellington 6143

By E-Mail: consultation.freshwater@mfe.govt.nz

Submitter: Z Energy Limited  BP Oil New Zealand Limited
PO Box 2091  PO Box 1859
WELLINGTON  WELLINGTON

Mobil Oil New Zealand Limited
PO Box 1709
AUCKLAND

Hereafter referred to as the Oil Companies

Address for service: 4Sight Consulting
PO Box 911 310
Victoria St West
Auckland 1142

1.0 INTRODUCTION

This submission addresses the Draft National Policy Statement for Freshwater Management, September 2019 (the Draft NPSFM) and certain aspects of the document entitled ‘Action for healthy waterways: A discussion document on national direction for our essential freshwater’, September 2019 (The Discussion Document). It has been prepared on behalf of Z Energy Limited, BP Oil New Zealand Limited and Mobil Oil New Zealand Limited (the Oil Companies).

The Oil Companies receive, store and distribute refined petroleum products nationwide through a network of commercial, shore and marine based storage facilities. The Oil Companies are also owners of retail outlets and suppliers of petroleum products to individually owned retail outlets, commercial clients and operate bulk fuel storage terminals.

Operationally, the Oil Companies’ sites have potential to affect freshwater receiving environments, for instance when discharging stormwater to ground (including via engineered soakage systems) or via reticulated stormwater systems to surface water. Temporary and infrequent construction
activities, such as the installation or replacement of underground fuel tanks and associated infrastructure may also necessitate temporary groundwater take and discharge activities to dewater excavations and enable safe and efficient tank installs and replacement. These activities are important for minimising the risk of tank failure and contamination of soil and groundwater resources. Depending on final wording, stormwater discharges and essential temporary activities such as dewatering, undertaken in accordance with best practice, may not be clearly provided for under the Draft NPSFM, despite potential adverse effects being at the de minimis end of the scale and the intent of the activities supporting the intent of the Draft NPSFM. Accordingly, the Oil Companies make the following comments on the Draft NPSFM and the content of the Discussion Document in the following subsections.

2.0 GENERAL APPROACH

The Oil Companies support the Government’s intent to improve the management of freshwater and appreciate the opportunity to submit feedback regarding the proposals.

Case law, particularly King Salmon (The Environmental Defence Soc Inc v New Zealand King Salmon Co Ltd [2014] NCSC 38), has helped refocus parties on ensuring provisions in all levels of policy clearly articulate exactly what they mean, for instance only using avoid when it really is intended to prevent the occurrence of a particular effect or activity. The King Salmon decision has been reinforced by subsequent decisions, most recently by the High Court in Environmental Defence Society Incorporated v Otago Regional Council [2019] NZHC 2278. That decision reinforced (in the context of the New Zealand Coastal Policy Statement (NZCPS) and a port) that avoid policies could not be interpreted to avoid effects as far as practicable and otherwise remedy, mitigate or use adaptive management to address such effects. Further, it highlighted that recourse was not possible to the strategic policies of the NZCPS to circumvent the requirement to avoid adverse effects on other policies in error.

Clear direction and drafting of the NPSFM is therefore critical to ensure that it addresses the key issues affecting fresh water and avoids unintended consequences for a range of other activities with limited potential for adverse effects. This direction is particularly important for regional councils and territorial authorities who must be able to give effect to national policy statements in regional and district plans. If the provisions are not clear, the implications will be significant, as they have proven to be for parties seeking to give effect to the NZCPS while providing for sustainable management.

In particular the draft NPSFM appears to elevate the health and wellbeing of water over the balance of matters which are recognised at Section 5 of the Resource Management Act (the Act) as contributing to sustainable management, including the social, economic and cultural well-being of people and communities, and their health and safety. This is a significant shift and one which may have implications for a range of activities, especially given the inability for decision makers to have resource to Part 2 of the Act where a plan has been competently prepared under the Act, as determined by the Court of Appeal in R J Davidson Family Trust v Marlborough District Council [2019] NZCA 57.

For instance, Policy 7 of the Draft NPSFM is as follows:

*Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided;*
A requirement to phase out existing over-allocation and avoid future over-allocation (quality or quantity) is a strong directive and one which may lead to council’s seeking to introduce prohibited activity provisions for new discharges and takes in particular catchments. The Oil Companies anticipate this will have wide ranging implications for a range of activities, for instance temporary construction activities and the operation, maintenance, upgrade and development of regionally and nationally significant infrastructure. New reticulated stormwater network discharges serving urban catchments in existing centres for instance will, despite best practice, likely have unavoidable adverse effects on water quality during storm events. Where the receiving environment is over-allocated, such discharges may be interpreted as inconsistent with Policy 7. Specific examples relative to the activities of the Oil Companies are discussed below.

Similarly, policies to safeguard habitats of indigenous freshwater species (Policy 11) and protect the significant values of outstanding waterbodies (Policy 12) are directive and establish high thresholds. Establishing the spatial extent of these habitats and waterbodies will be a highly technical exercise and critical to ensuring that such directive policies only apply in areas where this level of protection is required and minimise unintended consequences for a range of essential activities. In the coastal environment for instance, all of Wellington Harbour is identified in the Wellington Natural Resources Plan as being an ecosystem and habitat with significant indigenous biodiversity values. This is potentially problematic for a range of activities in Wellington, including operation of the Port, particularly given directive policies in the NZCPS in relation to the requirement to avoid adverse effects on indigenous biodiversity.

Unlike the NZCPS, the Draft NPSFM is being prepared post King Salmon and the Oil Companies consider it is essential that it is drafted accordingly to provide certainty for all parties.

### 3.0 OPERATIONAL AND CONSTRUCTION WATER DISCHARGES

Section 7 of the Discussion Document discusses the requirement for stormwater and wastewater operators to meet new standards and improved practices as ‘at present stormwater is managed through multiple pieces of legislation, creating a confusing regulatory system’. Further there is ‘significant variation in the approaches used by stormwater operators to document and report on how they manage risks to the environment, people and property’.1

The Discussion Document indicates that network operators will be required to prepare stormwater risk management plans (RMP) in relation to maintaining or improving the health of freshwater systems. The detail on how this may be implemented by network operators is yet to be determined, (including whether risk management will extend to certain industries), and notably in this context the Oil Companies are currently implementing a nationally recognised guideline document2 which seeks to ensure consistent operational stormwater discharge quality and consistent management of risks such as spill events.

In recognition of the potential risk to freshwater (including groundwater) and marine receiving environments from the operation of petroleum industry sites, a joint working group was formed in the 1990s including the Oil Companies, the Ministry for the Environment and other industry partners to develop a guideline document complementary to the relevant Acts and Regulations. That document

---

1 Section 7.3, Action for healthy waterways – A discussion document on national direction for our essential freshwater.
2 Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand, Ministry for the Environment, 1998
is titled ‘The Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand’ (the Guideline).

The purpose of the Guideline is to ‘assist with the sustainable management of water resources by ensuring that water discharges from petroleum industry sites meet the quality objectives laid down in regional policy statements and plans’. This means providing guidance for the design and implementation of oil and water separator systems, system maintenance, water quality monitoring and procedural management systems to support the infrastructure. Principally the Guideline addresses the storage and handling of gasoline, kerosene, diesel, lubricating oil and fuel oil for retail fuel stations, truck stops, terminals and depots, and lubricating oil blending and grease manufacturing plants.

Although there is variance in the characteristics of the Oil Company sites (size, site contour, fuel storage volumes) the basic premise of stormwater quality management remains a constant which is to provide a water quality treatment device capable of removing total petroleum hydrocarbons (TPH) entrained in stormwater runoff down to a standard not exceeding 15mg/L (15 parts per million) averaged over the design storm event. This standard was derived from monitoring data gathered by NIWA and by drawing on international best practice at the time. Indicative of the relevance of the standard for implementation throughout the country, the 15mg/L standard was also adopted in the Auckland Regional Council’s Stormwater Management Devices: Design Guideline Manual and has been adopted in other regional and district planning documents throughout the country.

The Guideline also includes a discharge quality standard for total suspended solids (TSS) of 100mg/L averaged over the design storm event. This limit is also commonly applied in regional and district planning documents throughout the country as a permitted standard for operational stormwater and temporary construction discharges, including discharges associated with excavation dewatering, and has proven to be an effective means of managing these discharges.

The Oil Companies implement procedural documents specifying maintenance frequency for site stormwater systems and oil and water separator devices. Typically, these procedures document matters such as oil and water separator inspection and cleanout frequency as well as the requirement for clean out and disposal of product and contaminated water immediately following a spill. Relative to the scale of the operation are spill response procedures for staff to implement in the event of a spill, including provision for spill containment and protocols for contacting the fire service and local authorities. The Oil Companies also utilise dewatering methodologies to provide appropriate treatment for dewatering water.

A revised Guideline is being drafted to account for changes in the industry, including the availability of a range of oil and water separators (of which only the API and SPEL have been demonstrated to comply with the existing Guideline), industry practice and additional products (e.g. urea-based diesel exhaust fluid) but in the meantime the 1998 version remains industry standard and is referenced in various planning documents throughout the country.

In summary, and what will be relevant for network operators to consider in developing activity specific RMPs, it is considered the Guideline is embedded in the Oil Companies’ operations and that its outcomes are widely accepted as best practice in a range of receiving environment. Further,

---

3 e.g. Tairawhiti Resource Management Plan (Gisborne District Council), Regional Fresh Water Plan for Taranaki,
4 e.g. Regional Water and Soil Plan for Northland, Land & Water Regional Plan (Environment Canterbury)
temporary discharges related to construction activities are managed through the implementation of best practice to ensure discharge quality is acceptable.

The Oil Companies look forward to further participation in the development of the Stormwater NES and the defining of activities which may present a risk to aligning with the objectives and policies of the Draft NPSFM. In this regard the Oil Companies seek recognition of industry sectors that are currently implementing best practice regarding operational and temporary discharges.

4.0 REASONABLE MIXING

The Discussion Document also outlines in Section 7.3 the proposal for nationally consistent measures of stormwater including water quality parameters to assess the effect that the discharge is having on receiving environments. The document does not suggest examples of appropriate water quality parameters and the Oil Companies would support the use of recognised parameters such as those listed in the ANZECC guidelines which are commonly implemented by Councils throughout the country. Equally, should the outcome of implemented RMP documents by the Councils require monitoring of point source discharge activities (such as from Oil Company sites) it is submitted that discharge quality is measured after reasonable mixing as is required by the ANCECC guidelines and is consistent with typical measurement and analysis of discharge effects on freshwater and marine receiving environments in regional policy statements and regional planning documents nationwide. Further, and due to the inherent variability in monitoring stormwater runoff quality the application of monitoring parameters (such as ANZECC) should not be applied as an absolute point of compliance or non-compliance, but rather a measure of discharge quality trends with appropriate response (e.g. contaminant source control, stormwater runoff treatment implementation) as necessary.

5.0 DELIVERY OF SAFE DRINKING WATER

As is outlined in the Discussion Document, amendments are proposed to the National Environment Standard for Sources of Human Drinking Water (the Drinking Water NES) which will seek to better protect surface and groundwater drinking water sources. Proposals listed in the Discussion Document are as follows:

- Define the types of activities that must be assessed as potential risks to source waters within the source protection areas, including consent applications that require public notification.
- Develop a new approach for managing specific contaminants in source waters, including nitrate-nitrogen, that are challenging for drinking water suppliers to remove with conventional treatment processes.
- Require regional councils and territorial authorities to place appropriate controls on the development and use of land in source water risk management areas, to support the ongoing provision of safe drinking water.
- Require regional councils and territorial authorities to review plan rules for activities located within source water risk management areas, to ensure appropriate controls are in place.

It is understood at the Drinking Water NES will be further developed for consultation in 2020 and the Oil Companies would welcome further discussion to define activities which pose a potential risk to surface and groundwater drinking water sources. The Oil Companies submit that any such discussion should take into account mitigation afforded by process control and best practice relative to activity...
type and the implementation of industry specific codes of practice (e.g. HSNOCOP 44) regulated by the Hazardous Substances and New Organisms Act.

As was discussed in Section 3, the Oil Companies are implementing the Guideline to treat stormwater runoff and prevent spills of product migrating off site through site design practices and the operation of spill containment devices. Treatment of stormwater runoff from areas of the sites where product is handled is also included in the site design to remove hydrocarbons entrained in stormwater runoff to a standard of at least 15mg/L averaged over the design storm event. An update to the Guideline document is proposed to account for new stormwater treatment and spill containment technology as well and for the handling of new products such as urea-based diesel exhaust fluid.

Further, business as usual safeguards are in place in relation to other operational risks such as ensuring the integrity of underground storage tanks and pipe infrastructure, thereby minimising the potential for soil and groundwater contamination. This includes the likes of double contained tanks, reconciliation, and use of Automatic Tang Gauging, as required by other legislation, regulation, and codes or practice, for instance HSNOCOP 44: Below ground stationary container systems for petroleum – design and installation, June 2013. HSNOCOP 44 requires that below ground tanks with integral secondary containment be provided with a means of monitoring the interstitial space. This system must be capable of detecting leaks in the primary and secondary containers. Detail of how typical systems are monitored is also included in HSNOCOP 44 and are being implemented by the Oil Companies.

The Oil Companies consider that the best practice measures they adopt are appropriate, including for the storage and use of hazardous substances within catchments used for drinking water supply. The Oil Companies seek to ensure that this is recognised in the Drinking Water NES.

6.0 TEMPORARY ACTIVITIES

Groundwater takes for dewatering tank pits to enable the safe installation of underground petroleum storage systems (UPSS) are essential for the Oil Companies. The importance of the soil disturbance aspect of UPSS replacement works is recognised in the National Environmental Standard for Contaminated Soils but the dewatering aspects do not benefit from similar recognition at a national level.

Temporary dewatering takes are not restricted to the Oil Companies but are also required by a range of other parties, for instance network utility operators and the construction industry. These dewatering takes may be required in fully allocated or over allocated groundwater catchments but have little to no potential effect on the water quantity values, attributes, or freshwater objectives in the NPSFM.

In setting the national direction in relation to freshwater management the NPSFM does not address the detail of activities. There is no recognition of the potential need for exemptions of activities, for instance temporary takes that may be required for construction purposes or to maintain existing assets, including in over allocated catchments. No guidance in this regard has been provided by MFE to date and the Oil Companies’ experience is that councils are not providing for these activities in draft plans. The Oil Companies are active in drawing these issues to the attention of councils but consider
it would be efficient and appropriate for MfE to provide national direction. Without this direction there is a risk that policy frameworks in some regions will lead to such takes being overlooked (as has been the case in a number of regions, at least in notified plans) with the potential result that temporary dewatering takes may be prohibited, non-complying and/or contrary to relevant objectives and policies, despite the limited potential for effects associated with temporary construction focused dewatering takes. This may lead to situations where councils are unable to consent essential takes which do not prejudice water quantity objectives.

The Oil Companies also consider there are merits of similar direction in relation to the Metering Regulations as is discussed in Section 5.12 of the Discussion Document. From previous discussions with MfE, the Oil Companies understand that the Metering Regulations were not drafted with the intent of requiring metering of temporary dewatering takes. However, in applying to water permits that allow fresh water to be taken at a rate of 5l/s or more and only exempting non consumptive takes as (narrowly) defined in the Metering Regulations5 they frequently capture temporary construction related dewatering takes.

For the same reasons the Oil Companies consider temporary dewatering takes are unlikely to prejudice water quantity objectives, they are of the opinion they do not warrant metering. There are also significant practical difficulties associated with metering these takes, at least to the accuracy required by the Metering Regulations, noting that dewatering rates are variable, pipes are often not full, and flows are inconsistent. Most Councils typically recognise this and are often pragmatic in how they interpret and give effect to the Metering Regulations regarding temporary construction dewatering takes, for instance accepting that the takes will be estimated via pumping rates and reported upon completion of the works. However, some Councils have taken a literal interpretation and insisted upon meters being installed even when the take is only to remove water from a shallow excavation. This has resulted in significant and unnecessary costs. Formal recognition from MfE that this metering of temporary construction dewatering takes is unnecessary would help clarify the intent of the metering regulations.

7.0 CONTAMINATED LAND

The Oil Companies are concerned that the management of contaminated land is not explicitly recognised in the proposed framework, especially passive discharges from sites with contamination from historic uses and spills.

MfE has developed a range of guidelines for contaminated land management. Where contaminated land results in a hazardous substance entering land and where it may enter groundwater or even surface water, it is generally accepted that this is a passive discharge. Many Regional Councils have been managing the identification of such sites and any associated discharges from such areas via rules requiring identification, reporting (complemented by the NES for Contaminated Soils) and discharge screening thresholds beyond which some form of risk assessment is required and sanctioned through the resource consent process. These rules and consents (where discharges are not permitted) provide for management of discharges in a controlled and transparent way. For completeness, the Oil Companies do not expect to seek or get consent for spills or leaks of hazardous substances but rather focus on ensuring such incidents do not happen in the first instance.

5 The same amount of water is returned to the same water body at or near the location from which it was taken and there is no significant delay between the taking and returning of the water.
However, for the management of existing legacy sites, the Oil Companies require clarity regarding how such processes will operate under the NPSFM framework. There is a risk that the framework will make the consent pathway for passive discharge consents very difficult as by definition contaminated land (as defined under the RMA\(^6\)) is about significant adverse effects.

If passive discharge consents cannot be granted, the Oil Companies seek to understand what mechanisms will replace the consent process. If enforcement orders or similar are utilised, the Oil Companies suggest this risks undermining the current contaminated land framework, which is reliant on open exchange of information and disclosure. Further, there is the issue for many sites where the polluter is not the one faced with the issue or there are orphan sites. To avoid the potential for the NPSFM to undermine the current approach to discharges from contaminated land, the Oil Companies consider the NPSFM should recognise that contaminated land management is not captured by the framework.

### 8.0 STORMWATER CONTAMINANT SOURCE CONTROL

The Oil Companies also consider that further direction regarding source control would be appropriate in the freshwater reforms, noting that the reforms seem to be silent on this matter. Aligning with international practice such as the implementation of the legislated reduction of copper in brake linings in Washington State and California\(^7\), contaminant source control is a tool in the management of contaminants in stormwater where national measures and industry standards have an important role to play in reducing the load of contaminants in stormwater discharging to freshwater and marine receiving environments. This includes (as relevant to the Oil Companies) zinc and copper from metal roofs, car tyres and brake pads. While the Oil Companies have been active in raising this issue with territorial and regional authorities, for instance through submissions to network discharge consent applications, the relevant authorities have been clear that these matters require intervention at a national level. The Oil Companies would welcome further discussion with MfE on this matter.

---

\(^6\) **contaminated land** means land that has a hazardous substance in or on it that— (a) has significant adverse effects on the environment; or (b) is reasonably likely to have significant adverse effects on the environment.

\(^7\) SB 346, Hazardous materials: motor vehicle brake friction materials (California), SB 6557 - 2009-10 Limiting the use of copper and other substances in vehicle brake pads (Washington State).