

Regulatory Impact Statement

Activity classification of burial at sea, and discharge and dumping activities under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Ministry for the Environment (the Ministry). It provides an analysis of options to classify burial at sea and certain discharge and dumping activities under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act).

Although the regulations have been expanded to include sediment discharges, the Cabinet mandate [CAB Min (11) 36/6 refers]-has been for officials to broadly transfer regulations from the Maritime NZ regime to the EEZ Act without wide scope for a first principles review.

Because sediment discharges have not been regulated in New Zealand previously, the Ministry commissioned a technical report to inform the policy development. In the case of the other discharges, which are transferred from the Marine Protection Rules regime, there has not been the same need to commission new scientific reports. Instead, we have worked primarily with experts across government to inform the policy development.

Lastly, this analysis does not cover the question of *whether* the transfer should be brought into effect but rather analyses *how* this will occur and focuses on the proposed classification for each activity. This is because although technically the decision to transfer the functions happens when regulations are made by Order-in-Council, there has been no uncertainty about whether this will occur or not.

None of the options discussed will impair private property rights, impair incentives for businesses to innovate, override fundamental common law principles, or impact on market competition.

Glenn Wigley – Director, Environmental Systems



Date

14/9/15

Status quo and problem definition

In October 2011, Cabinet agreed to transfer responsibility for burial at sea, and discharge and dumping activities in the exclusive economic zone (EEZ) and continental shelf from the Maritime Transport Act 1994 (MTA) to the EEZ Act regime [CAB Min (11) 36/6 refers].

EEZ Act Classifications

The EEZ Act allows for activities to be classified by regulation as: *permitted*, *non-notified discretionary*, *discretionary* or *prohibited*. An activity's classification will determine whether consent for the activity is required, and what decision-making process must be followed if it is.

The difference between the discretionary and non-notified discretionary classifications is the extent of public involvement in decision making. Table 1 provides a summary of the key elements of the four different activity classifications under the EEZ Act and how they compare with one another.

Table 1: Summary of the EEZ Act activity classifications

	Permitted	Non-notified discretionary	Discretionary	Prohibited
Activity classified in regulations on the Minister's recommendation*	✓	✓	The default classification,** but the Minister can recommend terms and conditions	✓
Marine consent application required; activity can be allowed or declined	* Activity must be allowed subject to compliance with conditions set in regulations	✓ Statutory timeframes adding up to 60 working days for the EPA to process marine consent EPA has full discretion on decision	✓ Statutory timeframes adding up to 140 working days for the EPA to process marine consent EPA has full discretion on decision	n/a
Environmental impact assessment must be carried out	~ The Permitted Activity Regulations require an initial impact assessment	✓	✓	n/a
lwi notification	✓	~***	~***	n/a
Any consultation with existing interests must be described in impact assessment	*	✓	✓	n/a
Public notification is required	*	*	✓	n/a
Application-specific conditions can apply	* Prescribed, generic conditions can be set out in regulation	✓	✓	n/a

Appeal rights for parties other than the applicant are provided for on marine consent decisions	n/a	x	✓	n/a
Ability to judicially review EPA consent decision	x No consent decision to review	✓	✓	x No consent decision to review

* The Minister recommends regulations classifying the activity to the Governor-General, to be made by Order in Council.

** If an activity within the scope of the EEZ Act is not classified in regulations it is *discretionary* by default.

*** iwi authorities, customary marine title groups and protected customary rights groups whom the EPA believe may be affected by the application will be served a copy of the consent application.

Burial at sea, and discharge and dumping activities

A range of discharge and dumping activities occur within the EEZ and continental shelf. These are associated with activities such as exploration and production drilling for oil and gas and mineral mining. In addition, on occasion individuals are buried at sea. Under the Maritime Transport Act 1994 (MTA), Maritime New Zealand (Maritime NZ) is currently responsible for regulating these activities through the Marine Protection Rules (“the Rules”).

Burial at sea

Currently, burial at sea can only be undertaken in the five ‘authorised dumping grounds’ within the EEZ, which were previously used by the Royal New Zealand Navy as munitions dumping grounds. From 2010 to 2012, MNZ authorised three burials at sea: two east of Coromandel and one south of Wellington.

During consultation on the exposure draft it was identified that it would be more appropriate for burial at sea to be considered under its own regulation, therefore this RIS has been amended to reflect this change.

Discharges

Discharges occur as part of a broader marine operation. They include discharges from offshore installations and pipelines, and discharges from production facilities on ships engaged in mineral mining.

The effects of discharges, unless managed, may be as follows:

- Oil discharges can coat mammals, seabirds, fish, etc. Coating may result in the death of birds and mammals through hypothermia, while ingestion may have toxic effects
- Chemical discharges may have acute toxic effects on organisms, mammals, seabirds, fish, etc
- Sediment and tailings discharges from mining may smother the seabed and harm benthic¹ communities, and can affect the water column and its inhabitants.²

¹ The community of organisms which live on, in, or near the seabed.

² See, for example: Maritime New Zealand, *Oil and its impact on the marine environment*. Retrieved from <http://www.maritimenz.govt.nz/Environmental/Oil-and-oily-waste/Oil-biological-impact.asp> (November 2013); UNEP Industry and Environment & E&P Forum (1997), *Environmental Management in oil and gas exploration and production*, UNEP IE/PAC Technical Report 37.

Under the status quo, offshore installations (e.g. drilling platforms) cannot be operated without a Discharge Management Plan (DMP) that meets the requirements of Part 200 of the Rules and is approved by the Director of Maritime NZ.

The DMP process does not involve national public notification, but does have specific consultation requirements set out (Rule 200.6). The core requirement is for operators to consult with persons whose interests in the vicinity of the installation are likely to be affected by a spill of oil or other harmful substances from that installation. The operator must consult on locations and resources identified as being at risk of a spill. The proposed regulations will replace the need for a DMP. However, under the forthcoming consequential amendments to the Rules, operators of offshore installations will still require an approved plan under the *Offshore Installations – Marine Oil Spill Contingency Plans and International Pollution Prevention Certification* rule.

An approved Discharge Management Plan will have conditions attached, such as:

- Certain discharges have prescribed thresholds after which they are only allowed if authorised for geological, technical or safety reasons
- Other discharges, which are subject to the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (MARPOL), must comply with strict thresholds and conditions, outside of which the discharge is prohibited
- The discharge of drilling fluids must be discharged as described, and approved, in the DMP.

In an average year there are two DMP applications for offshore petroleum installations. The seven current producing installations (off the Taranaki Coast) have five plans between them, which must be reviewed every three years. Annually there are around 15 applications for modifications to existing approved DMPs, mostly seeking approval for new ecotoxic chemicals.³ In the future it is expected that there may be more operators applying for discharge consents (under the EEZ Act regime) due to forecasted expansion in the oil and gas and mineral mining industry in New Zealand.

Maritime NZ has estimated that the current process for assessing a DMP requires about 75 hours of staff time, equivalent to approximately \$15,000 of staff costs, although costs can vary depending on the scale and type of activity. Maritime NZ recovers these costs from applicants.

Dumping

Dumping can be a standalone activity, although it is sometimes associated with a broader marine operation. Part 180 of the Rules relates to the dumping of waste or other matter.

Dumping activities will most likely affect the seabed through smothering the benthos and any resulting sediment plumes. Dumping of waste such as dredged spoil will have similar effects to the disposal of tailings in terms of smothering the benthic environment, effects on the water column and potential introduction of contaminants.

Under the status quo burial at sea is considered a dumping activity under the MNZ regime.

Under the MNZ regime no one can dump waste or other matter without a dumping permit issued by the Director of Maritime NZ. An application must include:

³ Estimates provided by Maritime NZ in November 2013.

- An assessment of the alternatives to dumping
- A detailed description and characterisation of the waste to be dumped
- Details of the proposed dump site
- An assessment of potential effects of the proposed dumping on the environment
- Details of the proposed monitoring programme for compliance with any dumping permit issued.

Part 180 of the Rules provides for national public notification of applications with the ability for interested parties to make submissions. However, notification is not required if the Director of Maritime NZ considers the application will have a minor adverse effect on the marine environment. The proposed regulations replace the requirements under Part 180 of the Rules.

Maritime NZ receives, on average, two or three dumping applications annually.⁴ The applications are generally to dump dredged spoil, and occasionally to dump a derelict ship. Maritime NZ's estimates of the costs required for assessing dumping applications range from approximately \$2,000 for burials at sea, and up to approximately \$170,000 for more complex applications. Most typical dumping applications cost around \$9,000. Maritime NZ does not publicly notify small scale applications concerning an existing dumping site for which associated effects are constrained within that area. However, larger scale applications, and those concerning new dumping grounds, are notified. It is expected that this number of applications will remain static, there is little indication of it increasing.

Table 2 outlines the activities that are considered in this RIS. These activities were specifically consulted on (further detail in consultation section), or are being recommended for inclusion in the regulations in response to feedback received during consultation.

Table 2: Burial at sea, and discharge and dumping activities considered in this RIS

Activity
Discharges <ul style="list-style-type: none"> • Discharges of garbage • Discharges of sediments and/or tailings from mineral operations during prospecting and exploration (with conditions to be determined) • Discharges from petroleum extraction • Discharges of oil mixed with water from machinery spaces • Discharges of seawater contaminated with oil • Discharges of operational chemicals • Discharges of drilling fluids • Discharges of harmful substances down well • Discharges of segregated ballast water contaminated with oil • Discharges through domestic waste systems
Dumping <ul style="list-style-type: none"> • Dumping of waste (Candidate wastes under Annex 1 of the London Protocol)
Burial at sea

⁴ Estimates provided by Maritime NZ in November 2013.

Legislative and regulatory reform

The regulation of burial at sea and discharge and dumping activities was not originally included in the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 regime. In October 2011, Cabinet agreed to transfer responsibility for discharge and dumping activities in the EEZ from the MTA to the EEZ regime [CAB Min (11) 36/6 refers]. This decision was made to avoid a situation where both the Environmental Protection Authority (EPA) and Maritime NZ would be responsible for regulating the environmental effects of activities, which would result in duplication for applicants and regulators and the fragmentation of the management of environmental effects in the EEZ and continental shelf.

The EEZ Act was amended by the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Amendment Act 2013 (EEZ Amendment Act) in October 2013. The EEZ Amendment Act transfers the responsibility for regulating certain discharge and dumping activities from the Rules made under the MTA to the EEZ Act, specifically:

- Discharges of harmful substances from structures and production facilities on board mineral mining ships
- Dumping of waste and Burial of sea.

The decisions covered in the RIS relate to *how* the transfer is given effect and what classification is attributed to an activity, rather than *whether* the transfer will be made. Although the final decision to give effect to the transfer is made by Order-in-Council, the Government has decided that the regulations will be made.

Scope of the regulations

The Discharge and Dumping Regulations only apply to the discharge of 'harmful substances' from structures, pipelines and production facilities on board mineral mining ships and to the dumping of waste in the EEZ and continental shelf. Discharges from other sources will continue to be regulated under other regimes (for example, operational shipping discharges and oil spill contingency planning, will continue to be regulated by the Marine Protection Rules under the MTA and enforced by Maritime NZ).

A harmful substance is defined in the regulations as any of the following:

- a) a substance which is ecotoxic to aquatic organisms and considered hazardous for the purposes of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001
- b) oil
- c) garbage
- d) sediments from mining activities (excluding petroleum operations).

The Burial at Sea Regulations permit burial at sea in five specific locations with conditions. The locations are deep enough that anchoring would generally not occur, and are marked on charts to ensure that trawling activities do not occur. A separate set of regulations are proposed, which reflects that this does not fit well with discharge and dumping activities.

Transitional provisions

Burial at sea and discharge and dumping activities being transferred to the EEZ Act are currently regulated by Parts 180 and 200 of the Rules (except for discharges of sediments and/or tailings from mineral mining operations, which are not currently regulated). Once regulations are made under the EEZ Act, Parts 180 and 200 of the Rules will be consequentially amended.

The EEZ Act provides transitional provisions for when the regulation of these activities is transferred from the MTA to the EEZ Act. Table 2 summarises these transitional arrangements.

Table 3: Summary of transitional arrangements

Status of permit, plan or application	Process that will apply
Current discharge management plan or dumping permit	<ul style="list-style-type: none"> • Will be deemed to be marine discharge and marine dumping consents under the EEZ Act • Will be subject to the EPA's monitoring and enforcement obligations under the EEZ Act.
Applications made to Maritime NZ for a discharge management plan or dumping permit before the discharge and dumping regulations are in force	<ul style="list-style-type: none"> • Will be considered and decided upon under the MTA • Aspects transferred by the EEZ Amendment Act will be deemed to be marine discharge and/or marine dumping consents under the EEZ Act • Will be subject to the EPA's monitoring and enforcement under the EEZ Act
Applications for a discharge management plan or dumping permit after EEZ regulations are in force	<ul style="list-style-type: none"> • Will be considered and decided upon by the EPA under the new regime • Will be subject to the EPA's monitoring and enforcement under the EEZ Act

Problem definition

The transfer of responsibility for regulating discharge and dumping activities from Maritime New Zealand (Maritime NZ) to the Environmental Protection Authority (EPA) involves more than a change of jurisdiction. The introduction of comprehensive marine environmental standards through the EEZ Act will place new (and more rigorous) obligations on operators.

To provide continuity and certainty to industry, the Government needs to prescribe an EEZ Act activity classification to all the dumping and discharge activities outlined in Table 2 that are being transferred from the MNZ regime. The transitional provisions outlined in Table 3 will remain in place until these regulations are made under the EEZ Act [CAB Min (11) 36/6 refers]. Without these regulations, the government's intention of enabling an activity, such as exploratory drilling and its associated discharges, to be assessed by the same regulator would not be achieved.

As outlined in Table 1, the EEZ Act allows for activities to be classified in regulations as *permitted*, *non-notified discretionary*, *discretionary*, or *prohibited*. An activity's classification will determine whether a marine consent is required, and what decision-making process must be followed if it is. Different classifications result in different costs for an industry project. Without these regulations, decision makers would not be able to efficiently and effectively assess the application and make the correct decision. This could lead to unnecessary compliance costs for operators and deter investment in New Zealand's natural resources.

The EEZ and continental shelf of New Zealand hold mineral resources of significant economic potential. The well-established petroleum industry make an important contribution to our economy and the potential value of royalties from the development of phosphate nodules, iron sands and seafloor massive sulphides over the lifetime of mine development is estimated to be \$250 million.

However, it is very important to promote the sustainable management of the natural resources of the exclusive economic zone and the continental shelf, by avoiding, remedying, or mitigating any adverse effects of activities on the environment.

A scientific assessment of the environmental effects of each of the discharge and dumping activities proposed to be regulated has not been undertaken. There is considerable knowledge due to the previous regulation under Maritime NZ. Due to the mandate from Cabinet, the following analysis is based on existing information, knowledge of effects and considers classifications proportionate to those currently under the Maritime NZ regime.

With the inclusion of regulations for sediment and tailing discharges, the Ministry commissioned a technical report⁵ to gain a better understanding of the environmental effects. Additional science was commissioned to understand the environmental effects of the discharge of radioactive minerals from the marine environment.

Objectives

The EEZ Act promotes the sustainable management of the natural resources in New Zealand's EEZ and continental shelf. It fills a regulatory gap in the management of activities undertaken in this space, including oil and gas prospecting and drilling, seabed mining, marine scientific research, and the laying of submarine cables.

The Government's objectives in setting EEZ Act regulations that will be used as assessment criteria for this RIS are⁶:

- a) to fulfil New Zealand's obligations under relevant international conventions relating to the marine environment.

New Zealand has relevant international obligations under a number of international agreements, including United Nations Convention on the Law of the Sea (UNCLOS), the Convention on Biological Diversity (CBD) and the Convention for the Protection of Natural Resources and Environment of the South Pacific Region 1986 (the Noumea Convention). These obligations relate to the protection of the marine environment in general, the need for impact assessments, and public participation in decision making. The MARPOL Convention and the London Protocol prescribe specific technical standards and processes for discharge and dumping activities respectively.

A full consideration of New Zealand's international obligations that informed this regulatory impact analysis is considered in Appendix 2.

- b) to provide for protection of the environment in the EEZ and continental shelf
- c) to enable economic activity of benefit to operators and the New Zealand economy
- d) to be cost-effective, with the cost to government and operators proportionate to the level of environmental effects addressed
- e) to provide for consideration of non-environmental impacts, including existing interests, iwi and other matters set out in the EEZ Act, in a manner proportionate to the scale and effects of activities, and

⁵ MacDiarmid et al. 2014. *Environmental risk assessment of discharges of sediment during prospecting and exploration for seabed minerals*. Wellington: NIWA.

⁶ Ministry for the Environment. 2013. *Activity classifications under the EEZ Act: A discussion document on the regulation of exploratory drilling, discharges of harmful substances and dumping of waste in the Exclusive Economic Zone and continental shelf*. Wellington: Ministry for the Environment

- f) to be consistent with the matters the Minister for the Environment must take into account before recommending regulations, including;
- effects on the environment or existing interests
 - effects of other activities undertaken in the EEZ or on the continental shelf
 - biological diversity and integrity of marine species, ecosystems and processes
 - rare and vulnerable ecosystems and the habitat of threatened species
 - New Zealand's international obligations
 - other marine management regimes
 - the desirability of allowing the public to be heard
 - effects on human health, and any other relevant matters.

The Government wants to ensure strong regulatory oversight while providing confidence to investors about regulatory processes and timeframes.

Note that the economic, social and cultural impact is considered as part of the objective analysis.

The criteria outlined in the EEZ Act (objective f) above) are set out and assessed throughout Appendix 1.

Options and Impact analysis

Activity classification options

This Regulatory Impact Statement (RIS) considers how burial at sea, and each of the dumping and discharge activities transferred to the EEZ Act regime should be classified. In addition to the transferred activities the regulation of sediments and tailings discharges is also proposed.

The EEZ Act provides for activities to be classified under four classifications:

- Permitted
- Prohibited
- Discretionary
- Non-notified discretionary.

If an activity is not classified by regulations it is considered discretionary by default. The following analysis examines which activity class is most appropriate for discharge and dumping activities. Burial at Sea is permitted under section 20J of the EEZ Act and there is no ability to classify otherwise.

To identify the appropriate classification for each activity, we have developed a criteria analysis in the form of a flowchart based on the EEZ Act's requirements. The aim of this is to achieve consistent and robust analysis of options. The flow charts and associated assessments work through the criteria that the Minister must take into account under the EEZ Act (which are captured by the objectives) before recommending regulations are made.

Generally, if the environmental effects of an activity are minor or less than minor or the activity can be managed to ensure they are no more than minor, and it would be in line with our relevant International obligations, the activity would be classified as permitted.

If the relevant International conventions specifically prohibit a certain activity, or if information for making decisions about the activity is uncertain or inadequate, and the statutory requirement to favour caution and environmental protection make it more appropriate for the activity to be prohibited, then the activity would be classified as prohibited.

Where an activity could be considered to meet the requirements for either the discretionary or non-notified discretionary consent processes, the analysis has taken into account whether there are any additional reasons that would make it desirable for the public to be heard before assigning it to one of the two classifications.

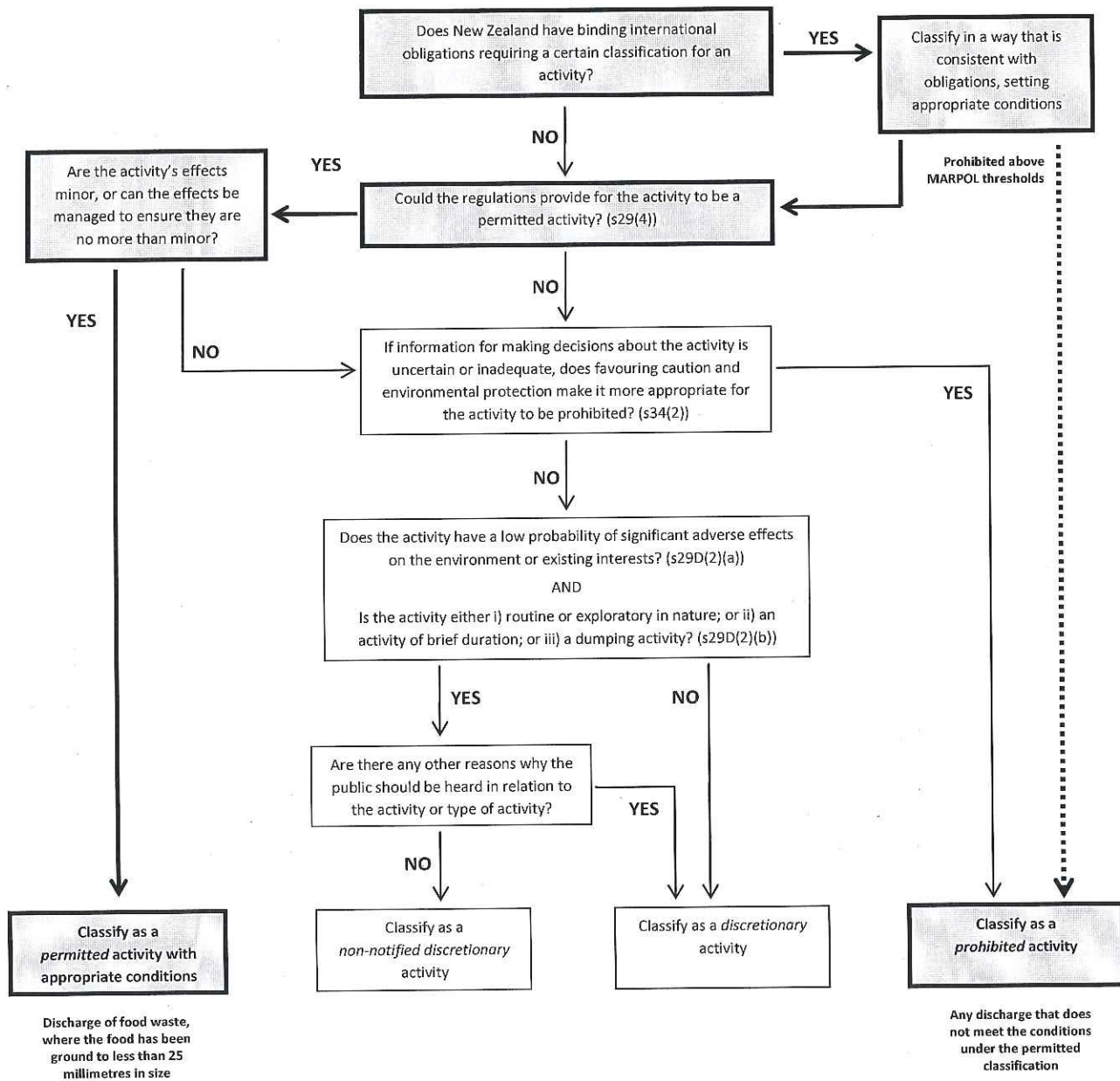
After each step of assessment of the criteria, options for classification that do not meet the requirements are eliminated; the preferred option and the path to the endpoint of the flowchart are highlighted.

The flowchart has been designed to help assess policy options. It does not replace the matters to be considered for regulations under section 33(3) of the EEZ Act (which are captured by the objectives). In addition, the information principles under section 34 of the EEZ Act underlie the assessment.

The analysis of discharge and dumping activities is outlined in summary flowcharts in Figures 1 - 10 and considered in more detail in Appendix 1. Each activity may have multiple classification options, depending on certain conditions; and the conditions are noted at the bottom of the classification option for each respective activity.

Burial at Sea does not have a flowchart as it is permitted under section 20J of the EEZ Act. Detailed assessments of its effects against certain criteria are outlined in Table 13.

Figure 1: Policy and legislative considerations when making the classification for discharges of food waste and other garbage



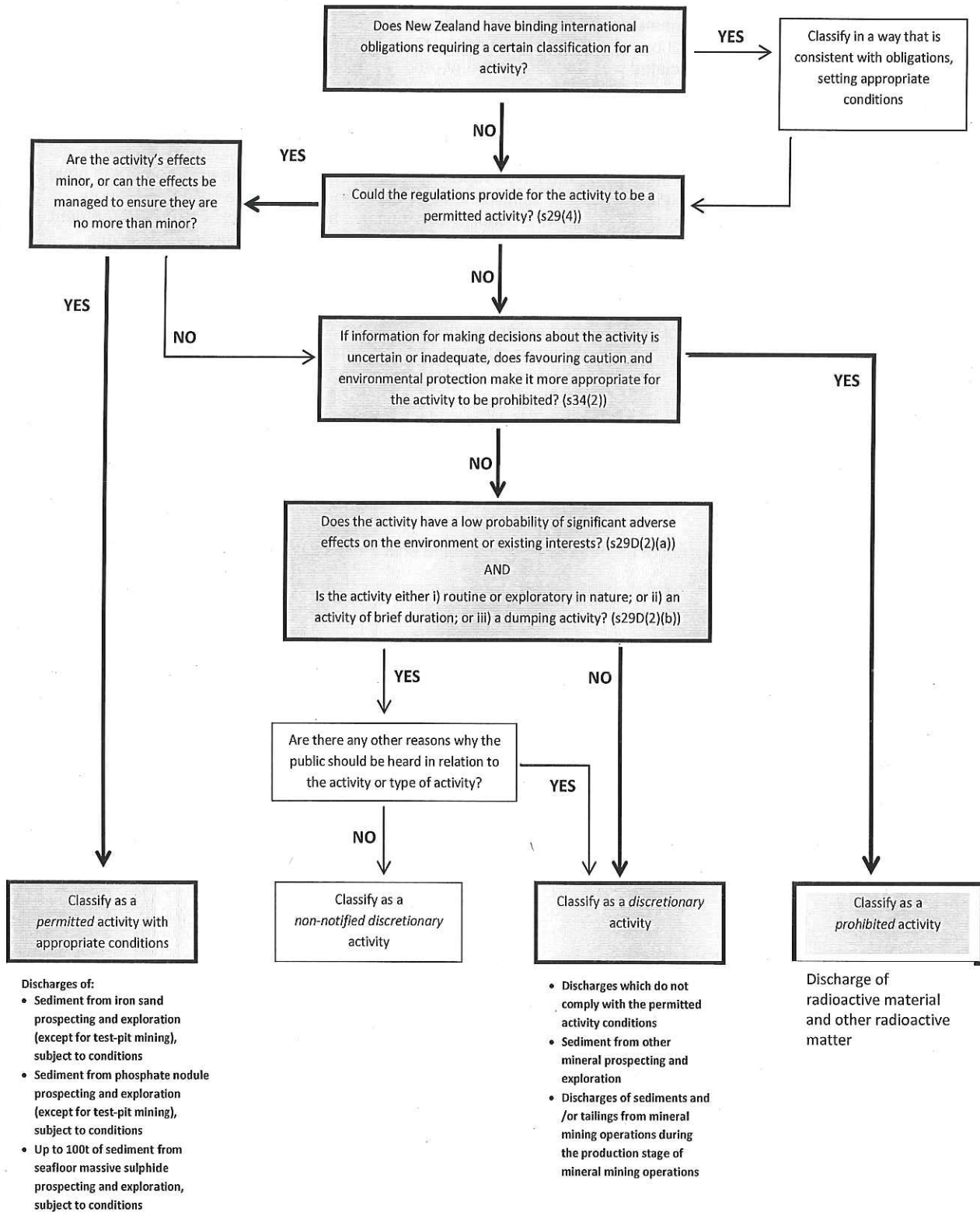
Assessment:

Under the MNZ regime operators must obtain approval for a DMP from Maritime NZ. The DMP is not publicly notified but it requires consultation with affected parties.

The classifications reflect requirements of New Zealand's international obligations under the International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL). It enables economic activity of benefit to operators and New Zealand's economy. Overall the effects on the environment and existing interests of discharging ground food waste into the ocean are considered to be minor or less than minor. As such, the costs and timeframes associated with a marine consent process would be disproportionate.

Discharges of all other garbage, and of food waste above permitted thresholds are prohibited according to MARPOL. The effects of all other garbage have not been assessed as the proposed prohibited classification reflects New Zealand's international obligations under MARPOL.

Figure 2: Policy and legislative considerations when making the classification for discharges of sediments and/or tailings from mineral mining



Assessment:

This activity is not currently regulated under the Marine Protection Rules. Because interest in New Zealand's seabed minerals is increasing it was identified during policy development that the new regulations presented an opportunity to close a significant regulatory gap.

Based on the NIWA report and engagement with industry, the conditions are designed to ensure effects on the environment and existing interests will be minor or less than minor. Given that effects can be managed to this level, the costs and timeframes associated with a marine consent process would be disproportionate.

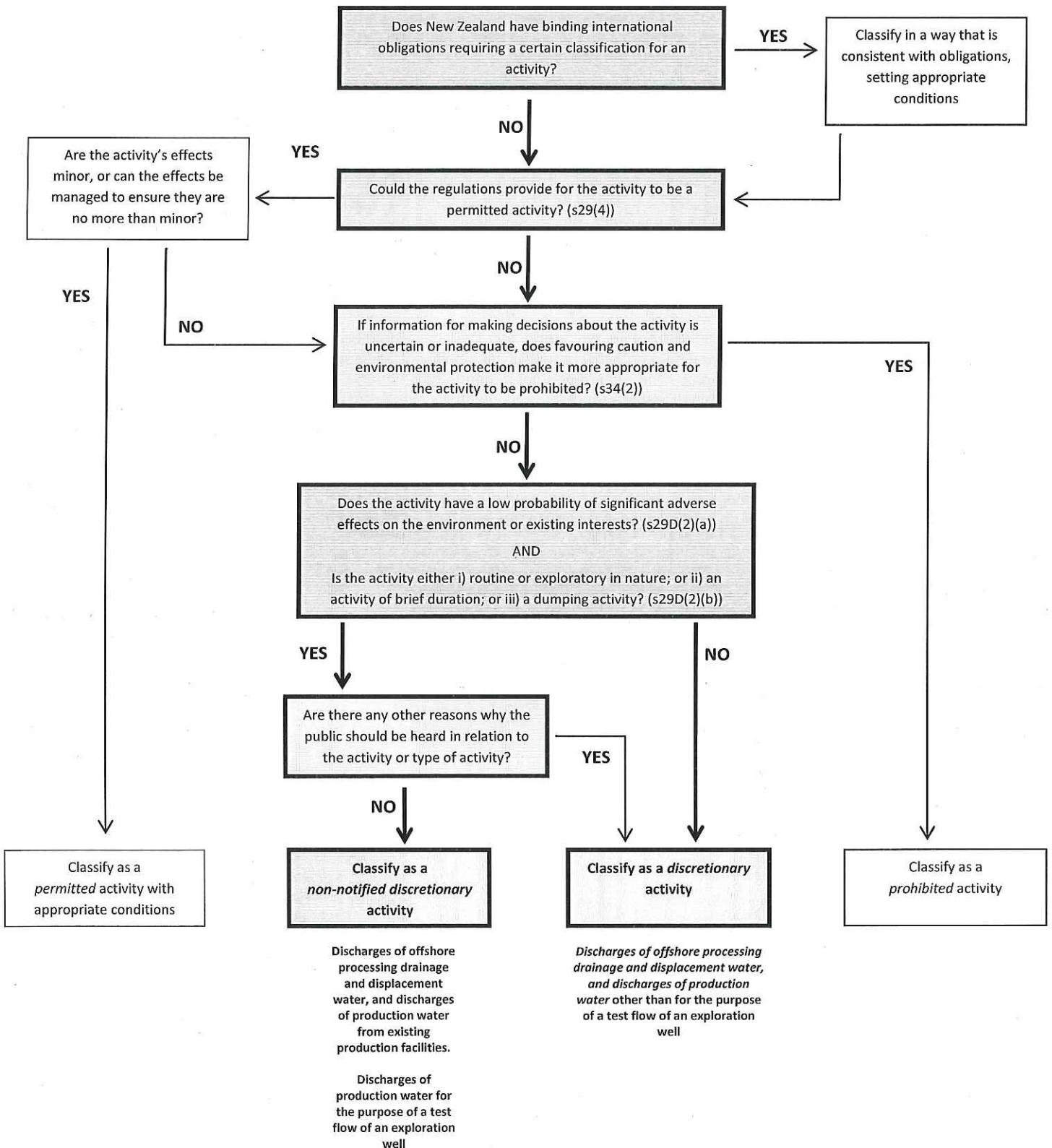
The EEZ Act requires caution to be favoured when there is inadequate information. We consider it would be inappropriate to classify discharges from other mineral prospecting and exploration as non-notified discretionary or permitted without sufficient information and consultation period. Above the conditions which ensure the effects on the environment are minor or less than minor, the NIWA report assessed the effect on the environment to have a moderate consequence level – i.e. it is ecologically significant. In order for an activity to be classified as non-notified discretionary, the activity needs to have a low probability of significant adverse effects on the environment or existing interests (section 29D(2)(a)). Therefore, based on the NIWA report, moderate consequence levels cannot be classified as non-notified discretionary.

Under section 34(2) of the EEZ Act, if information for making decisions about the activity is uncertain or inadequate, the regulations must favour caution and environmental protection. This uncertainty and inadequacy in information arises in relation to sediment as no countries currently mine uranium enriched phosphate from the marine environment.

A discretionary marine consent process enables the EPA to consider the effects of an activity that does not meet the permitted thresholds. A discretionary marine consent process enables the EPA to work with applicants to build case-by-case conditions into marine consents to reduce the level of environmental risk or effects. This process also enables the EPA to consider discharges holistically alongside the broader activity to which they relate, and to consider cumulative effects.

The classifications meet requirements of EEZ Act and could enable economic activity of benefit to operators and the New Zealand economy.

Figure 3: Policy and legislative considerations when making the classification for discharges from petroleum extraction



Assessment:

Under the MNZ regime operators must obtain approval for a Discharge Management Plan (DMP) from Maritime NZ. The DMP is not publicly notified but it requires consultation with affected parties. A limit on the oil content of the discharge is prescribed in the Rules, which can, in specific circumstances, be exceeded for geological, technical or safety reasons if agreed by Maritime NZ.

The preferred options enable the EPA to impose conditions on marine discharge consents that reflect industry best practice. This enables the EPA to consider discharges holistically and to consider cumulative effects and the effects on specific ecosystems.

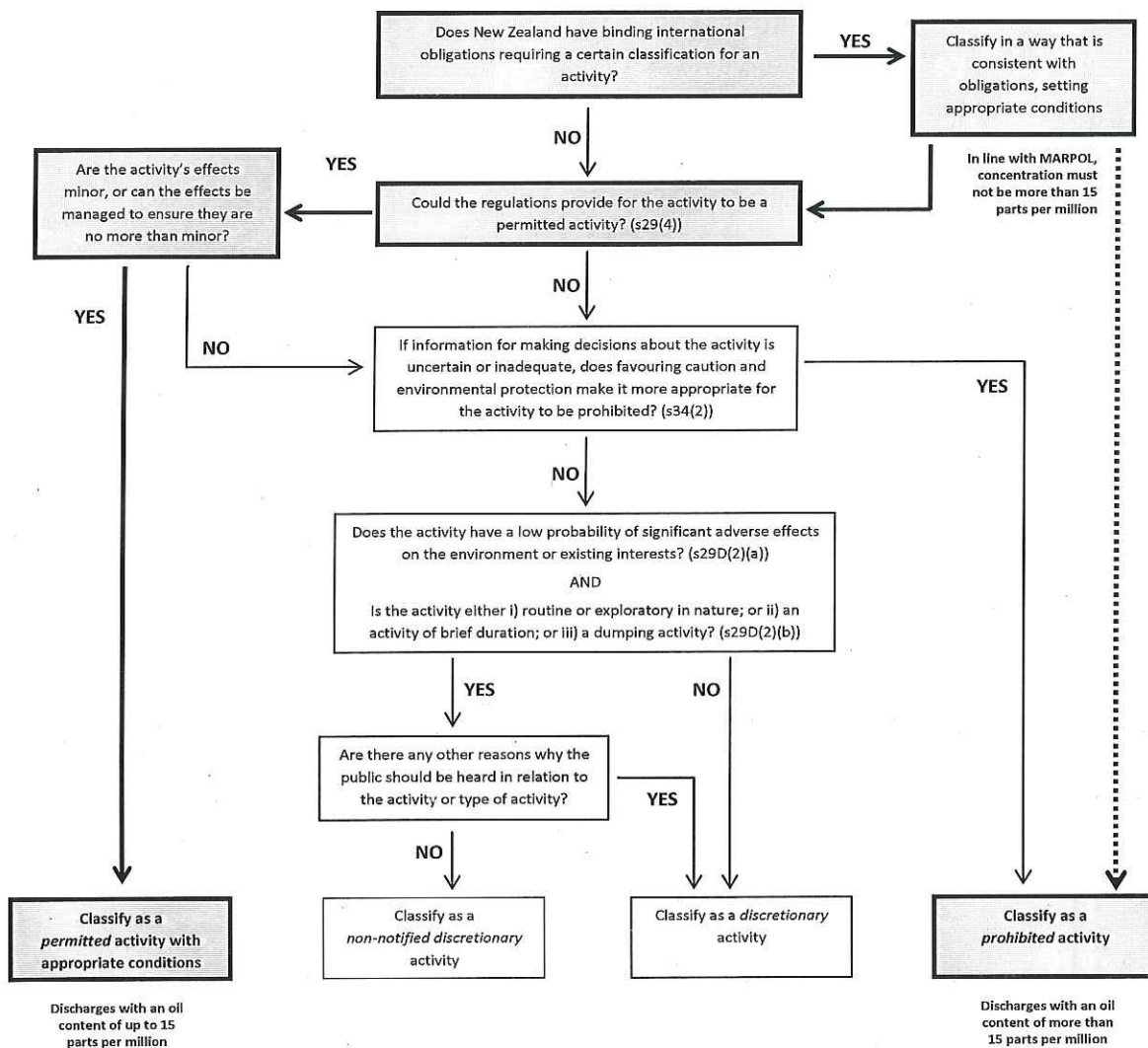
For new production facilities, the entire activity, including discharges, will be subject to public consultation reflecting the scale and likely impact of potential effects. However, for existing production facilities which are subject to the current Marine Protection Rules, a non-notified discretionary classification is more appropriate. This is because there is a low probability of significant adverse effects on the environment and existing interests, as the production stream discharges are existing, therefore the environmental effects are already known and managed under the current regime. Also, the discharges are routine, as they are part of the operation of oil and gas platforms.

In relation to the discharge of fluids from an exploratory test-flow, this would occur over short timeframes and in small quantities, meaning there would be a low probability of significant adverse effects and that a discretionary process would be disproportionate. The requirement for a marine consent and the move away from fixed limits on discharge concentrations for this discharge represents a potentially stricter approach compared to the current Marine Protection Rules. This is because a marine consent process is also best suited to monitoring and managing the discharge of chemicals and heavy metals potentially associated with produced water, which cannot be easily accounted for within a permitted classification.

The large quantities and long duration, in addition to the unknown effects of chemicals present in this discharge, makes it more appropriate to be classified as discretionary and for the public to be heard in relation to each marine consent application.

Overall, the classifications meet the requirements of the EEZ Act and are considered proportionate and cost effective. The discretionary classification represents a potentially stricter approach compared to current requirements under the Maritime NZ regime. Non-notified discretionary classification for existing production facilities may be considered not appropriate by some existing interests and iwi, but the Ministry considers it the best approach as the effects are known and currently managed effectively.

Figure 4: Policy and legislative considerations when making the classification for discharges of oil mixed with water from machinery spaces



Assessment:

Under the MNZ regime operators must obtain approval for a DMP from Maritime NZ. The DMP is not publicly notified but it requires consultation with affected parties. The oil content is prescribed to MARPOL⁷ standards of 15 parts per million and cannot be exceeded.

Regulations will set a condition that oil should constitute no more than 15 parts per million of a discharge to reflect New Zealand's international obligations under the MARPOL convention.

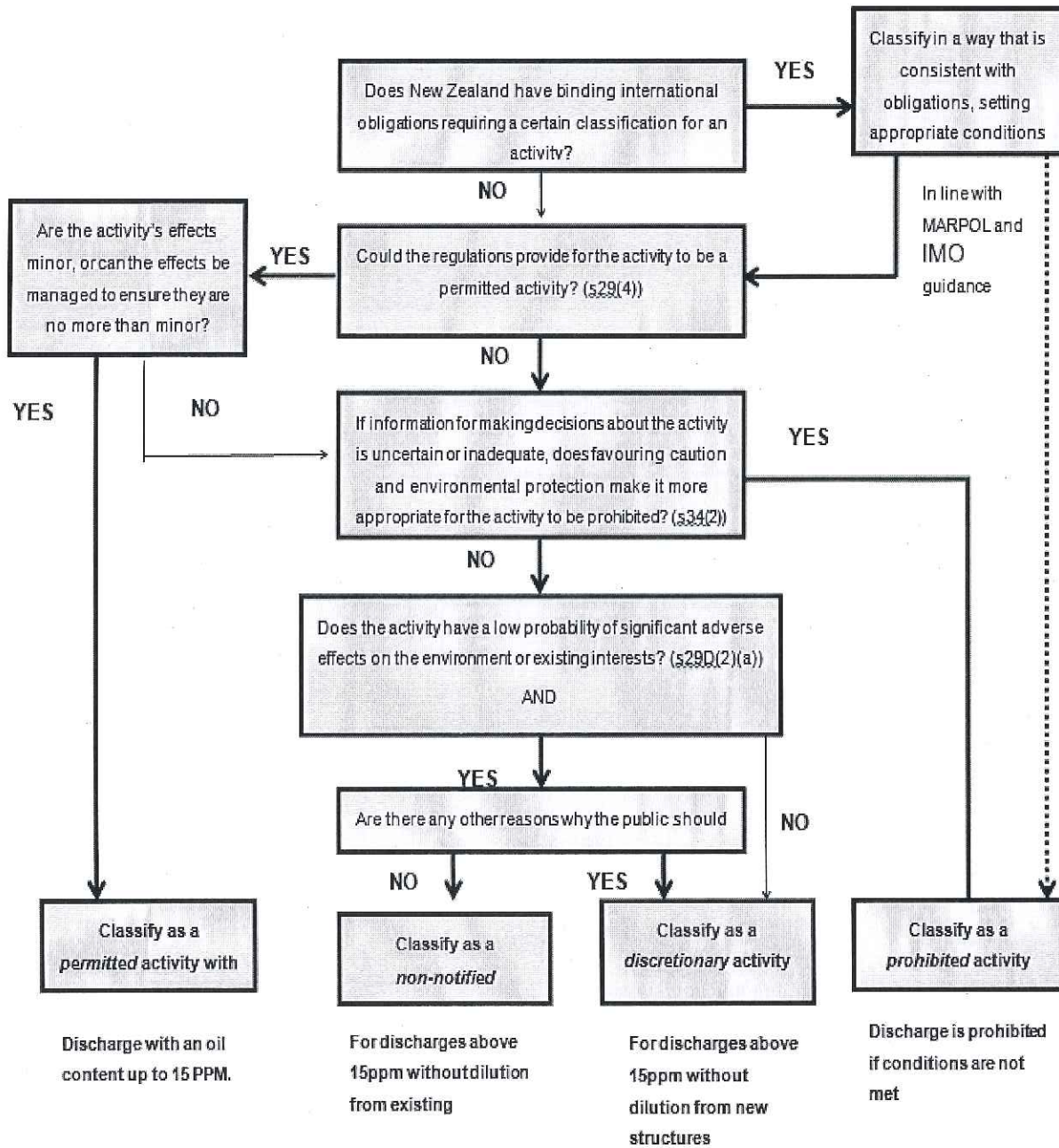
The proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges, mean that the effects of this activity on the environment and existing interests are likely to be minor or less than minor. As such, the costs and timeframes associated with a marine consent process would be disproportionate.

The classifications are consistent with our International obligations and meet the requirements of the EEZ Act. They enable economic activity of benefit to operators and New Zealand economy.

Some may consider that the permitted classification is not appropriate for the discharge of oily water, but this has been assessed as appropriate when considering the conditions in place and the effects.

⁷ The International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (MARPOL), Annex I. Note that definition of ship in MARPOL includes fixed and floating platforms.

Figure 5: Policy and legislative considerations when making the classification for discharges of seawater contaminated with oil



Assessment:

This discharge is not specifically included in the requirements for a DMP but Maritime NZ has used operational procedures in the past to require compliance with MARPOL. Under the current Maritime NZ regime, operators of FPSOs and FSUs are able to apply for an exemption to the 15ppm threshold. This is in line with IMO guidance on MARPOL (MEPC.139(53)), which states that for FPSOs and FSUs seawater contaminated with oil and oil mixtures from machinery spaces can be discharged through the production stream, which is only subject to national regulations.

This activity may only become necessary for a brief duration during an operation. In cases where it was not originally intended to take place but later becomes necessary with little warning, the marine consent process is unlikely to allow for decisions relating to this activity to be made in a timely manner.

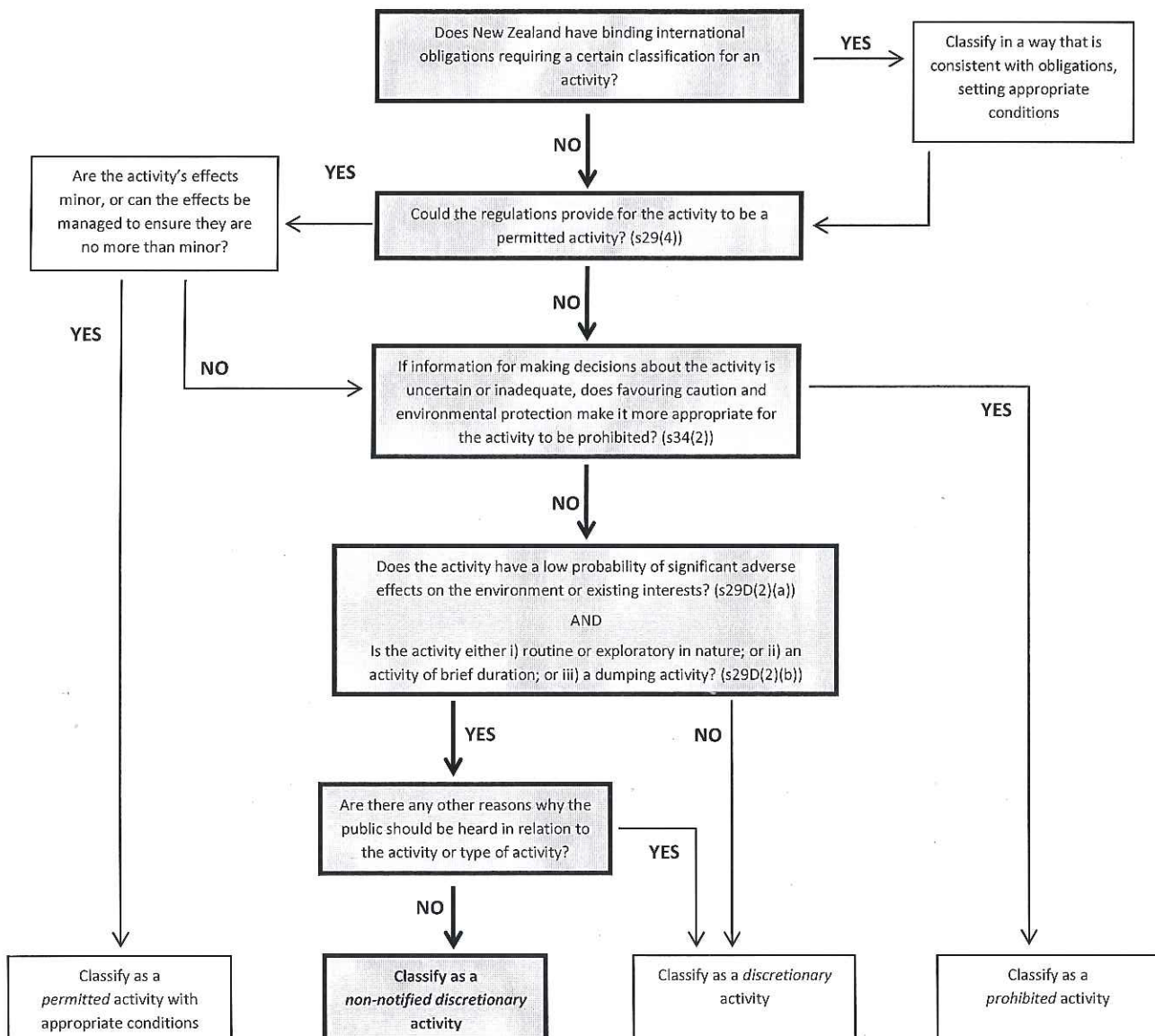
The brief duration of this activity, the proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges mean that the adverse effects of this activity on the environment and existing interests are unlikely.

The intent of this regulation is for operators to comply with the 15ppm standard. However, the consent process, in line with IMO guidance is available for exceptional circumstances. Requiring a consent process for discharges above 15ppm incentivises operators to comply with the permitted discharge conditions.

Overall, the classifications are consistent with our International obligations and meet the requirements of the EEZ Act. They enable economic activity of benefit to operators and New Zealand economy.

Some may consider that the permitted classification is not appropriate for the discharge of seawater contaminated with oil, but this has been assessed as appropriate when considering the conditions in place and the effects.

Figure 6: Policy and legislative considerations when making the classification for discharges of operational chemicals



Assessment:

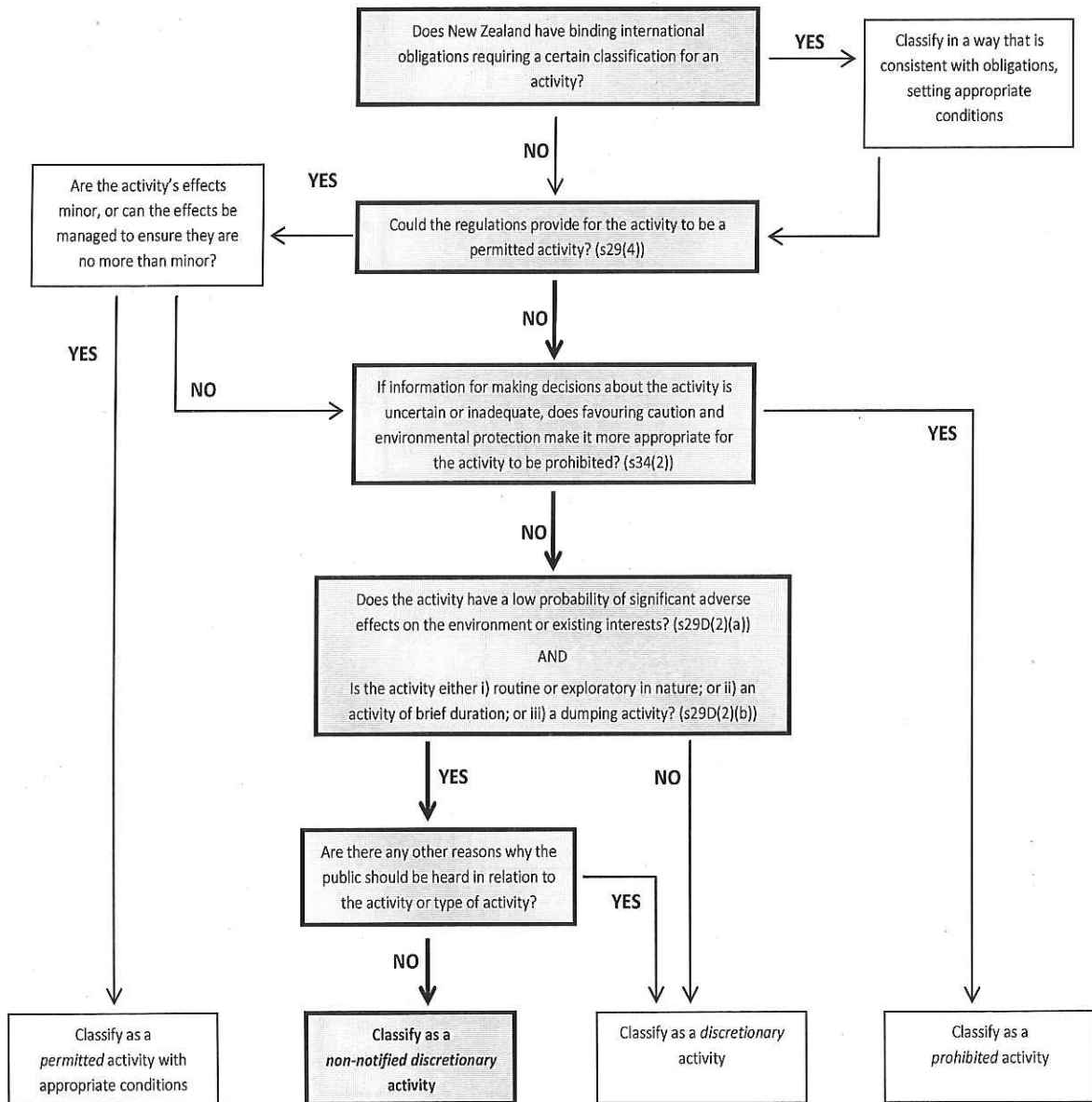
Under the MNZ regime operators must obtain approval for a DMP from Maritime NZ. The DMP is not publicly notified but it requires consultation with affected parties. No specific prescriptive rules but discharges must be made in accordance with the DMP.

Operational chemical discharges are a routine part of mineral mining operations (including oil and gas operations), and can be planned and controlled to a degree that makes the likelihood of significant adverse effects low. The classification enables the EPA to thoroughly assess the effects on the environment and existing interests on a case-by-case basis. It enables the EPA to impose any appropriate conditions on marine discharge consents.

The classification also facilitates the introduction of innovative low-impact technologies by allowing for operators to adopt lower-impact chemicals during the life of their operation without a change in chemicals triggering the need for a public consultation process. It enables the EPA to thoroughly assess the effects of new chemicals on a case-by-case basis.

Overall, the classification is consistent with our International obligations and considered proportionate and cost effective. It meets the requirement of the EEZ Act. Non-notified discretionary classification may be considered not appropriate by some stakeholders, but it is considered appropriate for the above reasons.

Figure 7: Policy and legislative considerations when making the classification for discharges of drilling fluids



Assessment:

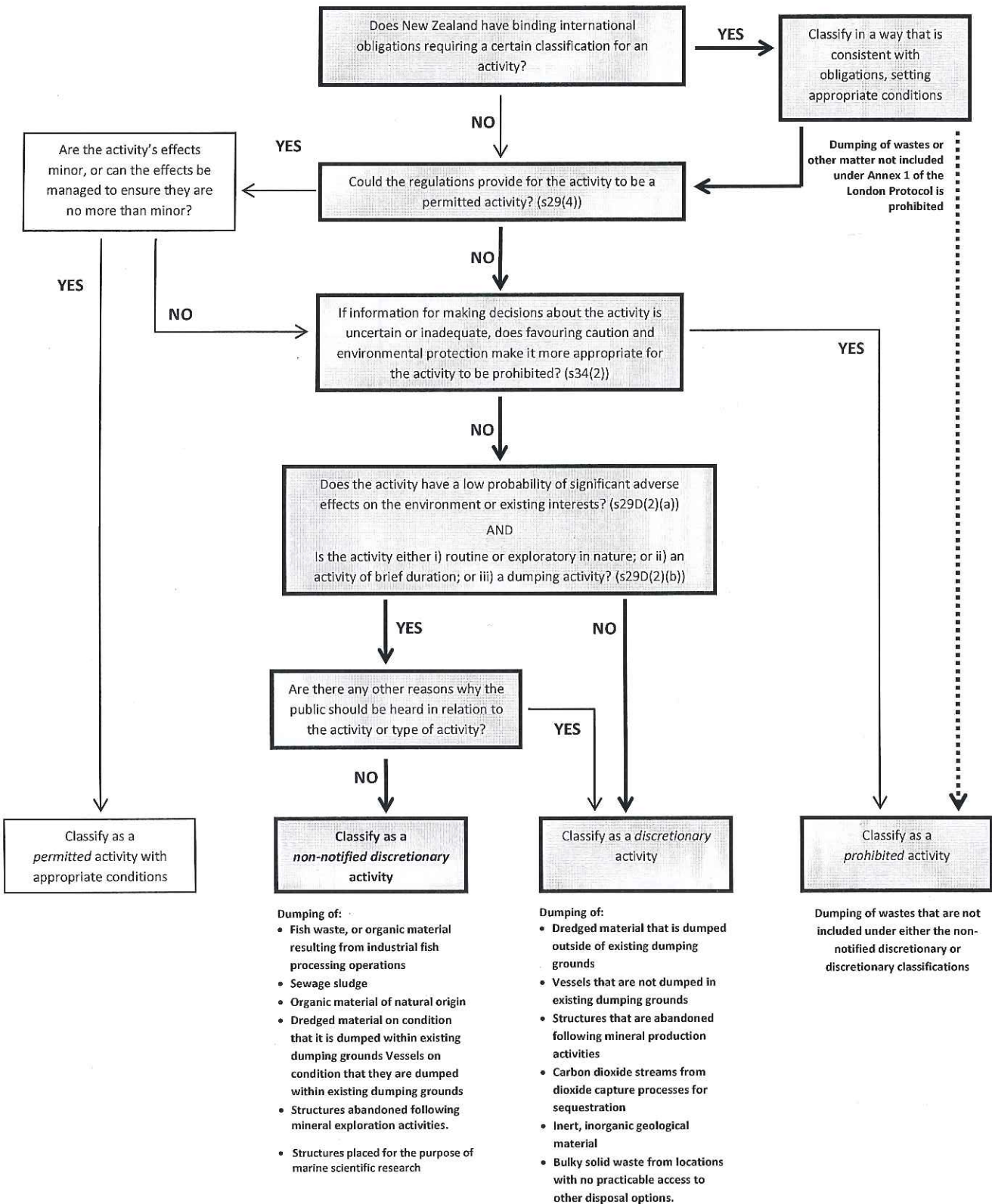
Under the MNZ regime operators must obtain approval for a DMP from Maritime NZ. The DMP is not publicly notified but it requires consultation with affected parties. No specific prescriptive rules but discharges must be made in accordance with the DMP.

The classification enables the EPA to thoroughly assess the effects on the environment and existing interests on a case-by-case basis. It enables the EPA to impose any appropriate conditions on marine discharge consents. The ability of operators to plan for, control and measure quantities and concentrations of these discharges to meet conditions set by the EPA means that they have a low probability of significant adverse effects. It allows for the adoption of lower-impact drilling fluids without triggering the need for a public consultation process.

Drilling fluids may contain ecotoxic effects that are not fully understood, however it is considered that the effect can be managed to less than significant. Non-notified discretionary classification may be considered not appropriate by some existing interests and iwi, but is considered appropriate for the above reasons.

Overall, the classification is consistent with our International obligations and considered proportionate and cost effective.

Figure 8: Policy and legislative considerations when making the classification of dumping of waste



Assessment:

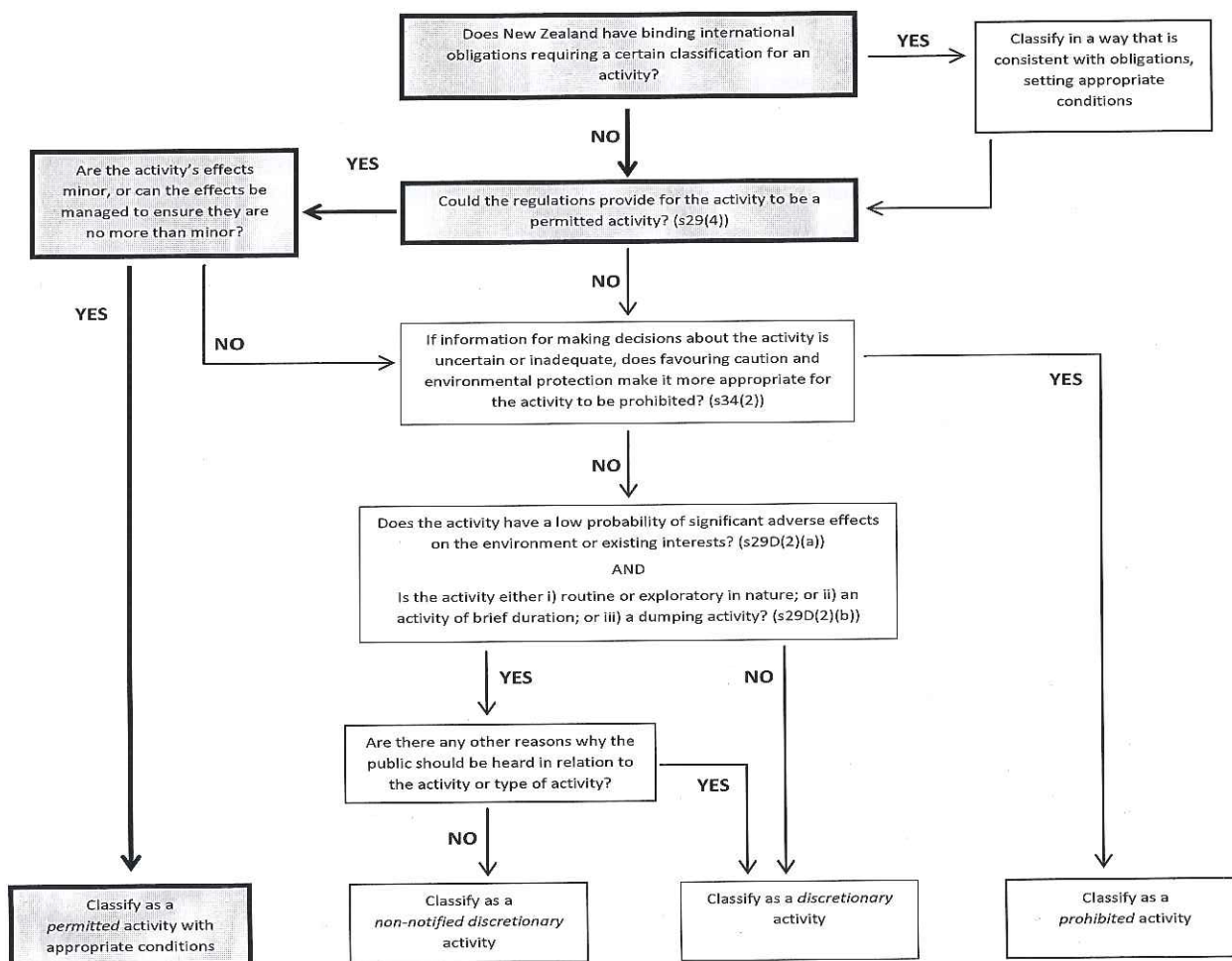
Under the MNZ regime all dumping requires a permit which Maritime NZ can grant or decline. The Rules require national public notification but this requirement may be waived if the Director considers the dumping will have "minor adverse effects on the marine environment".

The classifications enable the EPA to set appropriated conditions through a marine consent process and to prohibit those unspecified actives.

While Non-notified discretionary classification may be considered not appropriate by some existing interests and iwi, overall the classifications are consistent with or exceed our International obligations and meet the EEZ Act requirements.

They enable economic activity of benefit to operators and the New Zealand economy and are considered to be proportionate and cost effective.

Figure 9: Policy and legislative considerations when making the classification for discharges of harmful substances down a well



Assessment:

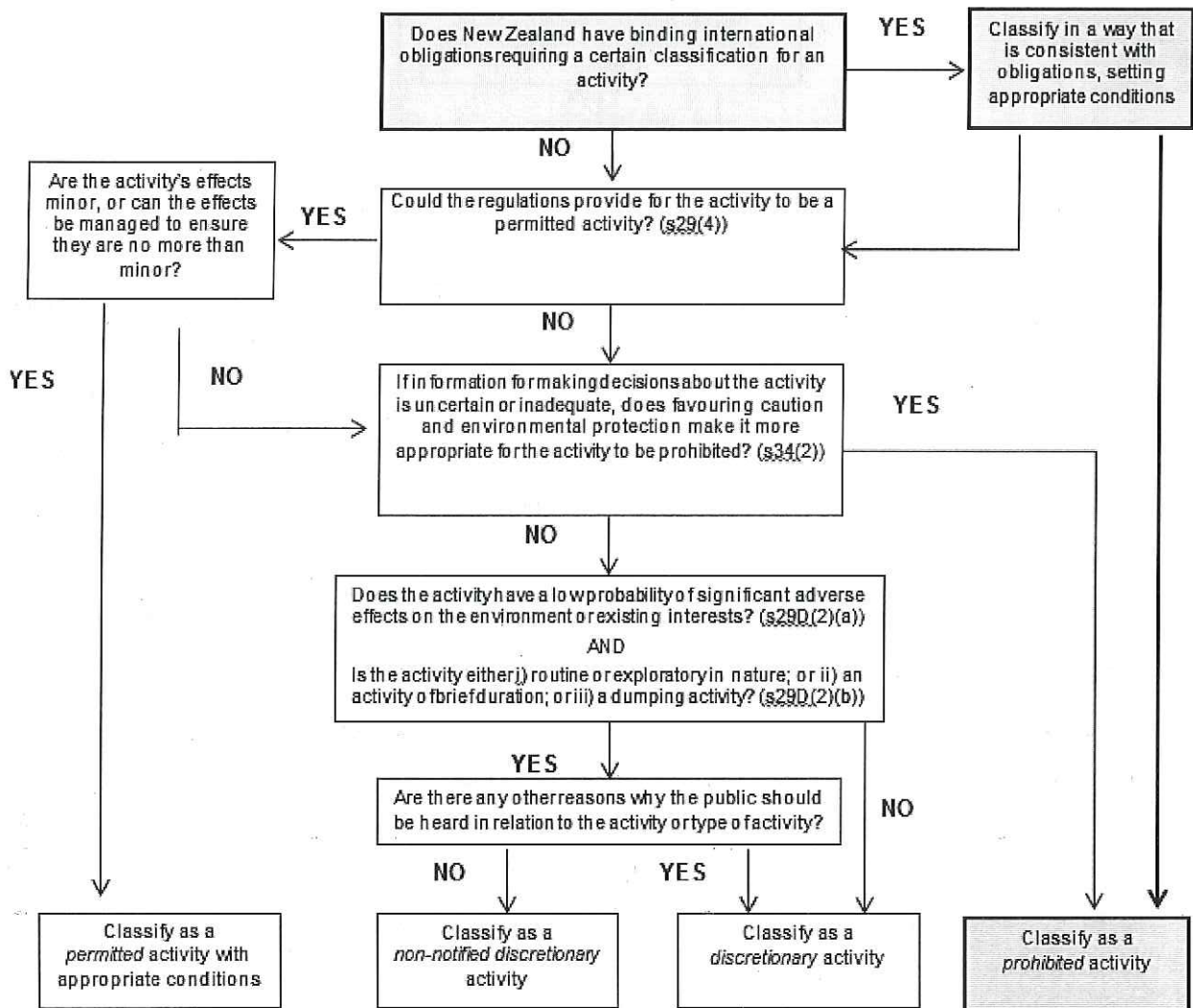
Maritime NZ requires information on down-well discharges but conditions on concentrations and thresholds only apply when a discharge is made at sea. These discharges will be contained within the reservoir and as such will have less than minor adverse effects on the marine environment or existing interests. To monitor their rates occurrence reporting conditions are set in the regulations.

Under the Discharge and Dumping Regulations, down well discharges do not include those for the purpose of hydraulic fracturing (fracking). Hydraulic fracturing is a separate activity that would require a marine consent.

Some stakeholders may consider that the permitted classification is not appropriate. The effects and potential implications of this activity have been considered and it is determined to be appropriate due to the less than minor effects.

The classification enables economic activity of benefit to operators and the New Zealand economy and is considered to be proportionate and cost effective. It is consistent with our International obligations and meets the EEZ Act requirements.

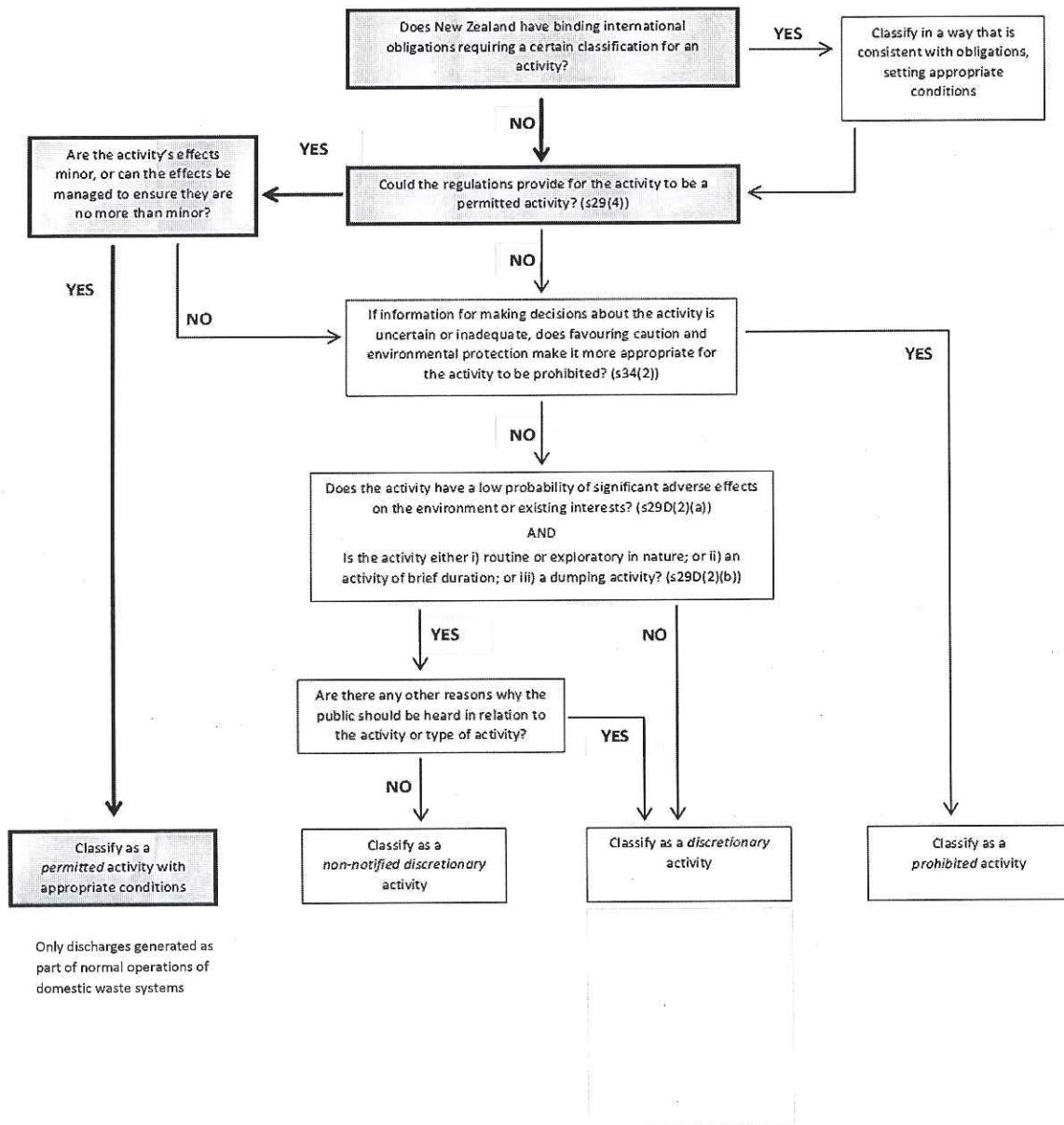
Figure 10: Policy and legislative considerations when making the classification for discharges of segregated ballast water contaminated with oil



Assessment:

This Regulation will prohibit the discharge of ballast water used to stabilise an offshore installation that contains oil. If there is oil in ballast water this indicates a problem with the installation. The prohibition will ensure that operators are not incentivised to be able to discharge this water, if contaminated with oil. In an emergency or safety situation an operator can rely on the provisions in the EEZ Act. This classification aligns with the intent of international obligations and Maritime NZ's current approach.

Figure 11: Policy and legislative considerations when making the classification for discharges of harmful substances through domestic waste systems



Assessment:

This Regulation will classify the discharge of harmful substances from grey water and sewage systems as permitted, on condition that the discharges include only those generated during the normal operation of the grey water or sewage systems.

The effects and potential implications of this activity have been considered and it is determined to be appropriate due to the less than minor effects. The condition on these proposed permitted discharges will mitigate any adverse effects, and ensure the effects are managed in a way proportionate to the scale of activities.

The classification is considered to be proportionate and cost effective. It is consistent with our International obligations and meets the EEZ Act requirements.

Summary of the analysis

Classifications are proposed for different activities based on the assessment against the objectives. Regulations have been developed to reflect the requirement of the legislation, the international obligations and best practice.

More detailed consideration of objective f and section 34 A of the EEZ Act requirements for the proposed preferred options for each activity are outlined in tables in Appendix 1. Further analysis of New Zealand's international obligations (objective f) is in Appendix 2. Cost effectiveness (objective d) is considered in more detail in Appendix 3.

Overall, costs to the industry will increase under the EEZ Act regime, but the new regime improves environmental protection, increases social involvement and creates greater certainty for economic opportunity. After the functions for managing discharges of harmful substances from offshore installations, dumping of waste, and burial at sea are transferred to the EEZ Act, the EPA will be able to assess an activity holistically. This removes duplication and provides an integrated approach to activity management.

Consultation

Consultation requirements for making regulations are set out in Section 32 of the EEZ Act. The Minister directed officials to undertake three separate processes to seek public feedback on proposals. The activities considered in this RIS were specifically consulted on, or are being recommended for inclusion in the regulations in response to feedback received during consultation.

Discussion document

In line with the requirements, there was a four-week public consultation during August and September 2013. A discussion document was both published online and sent to environmental groups, councils, stakeholders and iwi at the start of that period. Hui were held with iwi at seven locations around the country: Christchurch, New Plymouth, Gisborne, Napier, Wellington, Dunedin and Auckland. These locations ensured a range of iwi views were heard. The Ministry also held stakeholder workshops with industry in Wellington to discuss and better understand issues.

A total of 21,221 submissions were received. Of these, 119 were unique and modified form submissions. The rest were form submissions. These submissions predominantly came from campaigns organised by Greenpeace and the Green Party. Unique submissions were received from individuals (78), iwi (12), environmental/community groups (10), industry (8), local authorities (8), legal groups (2) and one policy research organisation.

The majority of submissions focused solely on proposals to regulate exploratory drilling for oil and gas. However, a total of 50 submissions addressed burial at sea, and discharge and dumping proposals. These comments were exclusively from unique submissions.

Key feedback received

Key issues raised by submitters were:

- There was not enough information in the discussion document about activities and their effect to make informed judgements about whether the proposed classifications are appropriate. The discussion document did not provide enough information about whether the existing regime under the Marine Protection Rules adequately protected the environment
- The need to ensure the right incentives are set up in terms of dumping and removal of structures, bearing in mind the adverse effects that both (dumping and removal) can have on existing users and the environment
- The need to ensure there are mechanisms to facilitate the adoption of innovative low-impact technologies.

These concerns have been addressed by the provision of additional information that supports the regulations (supporting information) and were relevant the exposure draft reflects amendments to address submitter concerns.

Harmful substances definition: Submitters were mostly supportive of the proposed definition of harmful substances. Concerns and caveats to this support were generally around the specificity of specific terms. In particular submitters addressed the interpretation and measurability of ecotoxicity, especially cumulative when there is a mix of chemicals. In response to submissions, we have clarified the definition to exclude sediments from oil and

gas operations. It is also proposed that terms that relate to that definition are clearly defined in regulations, for example garbage.

Proposed *permitted* activities: Submitters' responses varied. Several submitters disagreed with proposals for regulating discharges associated with oil and gas and mineral mining activities, and questioned the evidential basis for the proposed thresholds. Some iwi groups expressed a view that they should be notified prior to burials at sea.

Some submitters commented that there was inadequate evidence on which to base permitted thresholds for discharges from petroleum extraction. Based on this feedback, and other weaknesses identified with a *permitted* classification for this discharge, we have recommended it be classified as *discretionary*.

Proposed *non-notified discretionary* activities: Other than submissions from the petroleum industry, submissions were generally opposed to the proposed classifications. In particular, they were concerned that decisions about notification should be made based on the scale and potential impact of individual applications, rather than being based on the type of activity.

In light of these submissions, we have reviewed the proposed activity classifications to ensure that they are effects-based rather than industry-focused.

Proposed *discretionary* activities: Submitters' responses varied. Many supported the proposals. Of those who did not support the proposals, the majority considered that all or some of the proposed activities should be considered *prohibited*. Submissions received from industry were that:

- Discharges of sediments and/or tailings from mineral operations should be *permitted* or *non-notified discretionary*, as the effects of the discharges would have been considered as part of the marine consent application for the wider activity
- Discharges of drilling fluids from oil and gas drilling during the production stage, and dumping of structures during decommissioning of oil and gas production structures where the effects are minor, should be considered *non-notified discretionary*.

Some submitters commented that certain discharges which were proposed as *discretionary* should be *prohibited*. However, because these discharges will be part of a broader activity, a prohibition would effectively ban the activity of which the discharge is part. Also, under a *discretionary* classification, discharge applications will require case-by-case approval from the EPA. In addition, certain discharge and dumping activities are proposed to be *prohibited* as required to comply with international obligations.

Submitters from the petroleum industry noted their reservation about the proposed *discretionary* classification for drilling fluids in terms of not having adequate information at the time of lodging the marine consent application for production. They also argued that this lengthier process would disincentivise the adoption of more environmentally benign fluids. As such, we revised our proposal for this discharge to be *non-notified discretionary*.

Exposure draft consultation

On 20 February 2014, the Minister released an exposure draft of regulations, with additional supporting information, for public consultation. This was open for a four week consultation period that ended on 19 March 2014. The draft regulations and supporting information was released online and sent to environmental groups, councils, stakeholders and iwi at the start of that period. An invitation was made to all Ministry's iwi contacts to meet to discuss at Hui,

one Hui with Rangitāne O Tamaki nui a Rua representatives was held in Dannevirke. The Ministry also held stakeholder workshops with industry and environmental non-government organisations in Wellington to discuss and better understand issues.

A total of 22 submissions were received, all of which were unique. These included from individuals (two), local government bodies (three), statutory bodies (one), iwi organisations and Maori representative groups (four), policy organisations (one), private companies and industry organisations (11). It is important to note, is that none of the key environmental groups (such as Forest & Bird or Greenpeace) submitted on the exposure draft of these regulations.

Key feedback received

Proposed permitted activities: Submitters responses varied. Submitters with existing interests generally considered the permitted classification for certain sediment discharges did not appear to address the possible scale of effects. Some of these submitters also expressed concern that the technical report, on which the regulations are based, made significant assumptions.

A range of submitters expressed concern about the lack of ability for existing interests to be notified of, and have input in, the process for managing permitted discharge activities. However, some other submitters considered the notification requirements to be proportionate, or slightly disproportionate, to the minor effects of the activities in question.

The Ministry considers that the NIWA report provides a sound basis on which to base policy to manage effects to be minor. The Ministry has revised its recommended conditions on sediment discharges to make them more workable and enforceable, while still managing their effects to be minor.

Proposed non-notified discretionary activities: Several submitters expressed concern about the non-notified discretionary classification itself as it is not believed to provide enough opportunity for input. However, submitters from industry groups who would use the non-notified discretionary classification submitted that it provides an appropriate classification for mid-level activities. Several other submitters considered that certain non-notified discretionary activities should have 'triggers' which, at a certain point, require a (notified) discretionary consent instead.

Several submitters considered that certain non-notified dumping activities should either be discretionary or should have a 'trigger' built in to render

The Ministry considers that this classification is proportionate to the activities, as considered in the above analysis.

Proposed discretionary activities: Submitters responses varied. The only submitters who expressed concern about the use of the discretionary classification were from the oil and gas or seabed minerals industry. They generally considered that down well discharges, discharges from *existing facilities*, and sediments from environments other than those classified as permitted, should not be discretionary but should rather be non-notified discretionary or permitted. Other submitters were generally silent on the proposed discretionary activities or supported them being discretionary.

In relation to discharges from existing facilities, the Ministry has revised its proposal so that discharges are non-notified discretionary. Down well discharges from existing and new facilities will be permitted with conditions.

Proposed prohibited activities: few submissions were received on this classification and, noting that the prohibitions are required by New Zealand's international obligations, submitters did not oppose the classifications.

Burial at Sea: As a result of feedback received during consultation it was considered appropriate for burial at sea to be separated out as its own regulation. The provisions for burial at sea that were set out in the exposure draft have been amended to become the Exclusive Economic Zone and Continental Shelf (Burial At Sea) Regulations 2014 (Burial at Sea Regulations). The Ministry considers that this activity does not fit well with discharge and dumping activities. Burial at sea is permitted if it meets the required conditions under section 20J of the EEZ Act.

These submissions and feedback were considered in developing the regulations, and changes have been made where appropriate.

Targeted consultation on the exposure draft

To confirm these Regulations would work operationally, in August 2014 the previous Minister undertook targeted consultation on a second exposure draft with those who submitted in February 2014.

Nine submissions were received on the second exposure draft, all of which were unique. These included submissions from individuals (one), local government (one), a statutory body (one), iwi organisations (two), seabed mining industry (one), petroleum industry (two) and seafood industry (one).

Key feedback received

Proposed permitted activities: Submitters responses varied, but they generally supported these provisions, including the revised conditions on sediment discharges to make them more workable and enforceable. Any objections largely reiterated the concerns raised during the first exposure draft consultation set out above.

One submitter did not consider the conditions are robust enough for down well discharges. The Ministry considers this classification to be proportionate to the effects of the activity.

As noted above, the Ministry considers that the NIWA report provides a sound basis on which to base policy to manage effects to be minor, and has revised its recommended conditions on sediment discharges to make them more workable and enforceable, while still managing their effects to be minor.

Proposed non-notified discretionary activities: Several submitters reiterated concern that the non-notified discretionary classification itself, as it is not believed to provide enough opportunity for input.

Two submitters consider that all EEZ drilling and discharge activities should be subject to a discretionary marine consent. As outlined above, we consider that this classification is proportionate to the activities.

Proposed discretionary activities: No further substantive comments were received on this classification.

Proposed prohibited activities: Two submitters considered that there should be discretion to apply for a marine consent for discharges of water contaminated with oil above 15ppm. As outlined above, the Ministry considers that this approach is in line with the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex I, and International

Maritime Organization guidance MEPC.139 (53). It is also in line with Maritime NZ's current approach.

Feedback on the second exposure draft has been further considered in developing the Regulations. As a result, relevant changes have been made where appropriate.

A complete summary of submissions for the discussion document and the exposure draft consultation are publicly available on the Ministry for the Environment website.

Conclusion and recommendations

Taking into account the evidence we have collected, and the views and material supplied through the three consultation processes, the Ministry's view is that the proposed regulations satisfy the objectives and requirements (as considered in Table 4).

What is being proposed for burial at sea, and discharge and dumping activities is a mix of the four available classifications (permitted, non-notified discretionary, discretionary and prohibited). With regard to the activities classified as non-notified discretionary, we have not attempted to quantify or weight the relative value of public engagement in the process compared with the impact this has on the quality of the decision made by the EPA.

Officials are satisfied that the proposed classifications fulfil New Zealand's international obligations as discussed previously. The regulations promote the sustainable management of natural resources and protect the environment from pollution. In achieving that purpose of the EEZ Act, the regulations are also consistent with the matters the Minister must take into account.

Implementation plan

The transfer of responsibility for regulating discharge and dumping activities from Maritime NZ to the EPA involves more than a change of jurisdiction. The introduction of comprehensive marine environmental standards through the EEZ Act will place new (and more rigorous) obligations on operators.

Transferring the burial at sea, and discharge and dumping activities under consideration from the MTA to the EEZ Act will be achieved by promulgating of these regulations under the EEZ Act. Until that time, the requirements under the MTA remain in force.

The exposure draft consultation process provided a further opportunity for comments to be made about the workability of the proposed regulations and identified operational matters that the Ministry, Maritime NZ and the EPA have worked to improve or resolve.

While the regime is settling in, operators will also face some uncertainty about meeting the new standards. This sentiment has been reflected in the submissions from the oil and gas industry on how the discharge and dumping regulations will be implemented, particularly for existing operators.

A number of submitters have raised concern with the risk of the EPA being able to effectively implement and operationalise the proposed regulations. The Ministry, Maritime NZ, the Ministry of Business, Innovation and Employment, the Ministry for Primary Industries and the EPA have been engaging with stakeholders and are working through these concerns, by undertaking stakeholder workshops and working through theoretical applications.

The Ministry acknowledges there are legislative constraints regarding the transition of DMPs to the new regime, but the risk is considered to be low.

The EPA and Maritime NZ have been anticipating this transfer for some time, and the EPA has been proactively engaging with stakeholders and Maritime NZ to ensure the handover process is as smooth as possible.

Monitoring, evaluation and review

The effectiveness of the four activity classifications under the EEZ Act will be monitored, evaluated and reviewed as part of the wider EEZ framework.

Under the Regulations, the EPA must monitor permitted activities to ensure compliance. The EPA is also responsible for the decision and administration of marine consents for discharge and dumping. For burial at sea, the EPA is required to issue a certificate of compliance.

The burial at sea and discharge and dumping regulations will be reviewed within five years of implementation, consistent with the Cabinet decision [EGI Min (13) 29/10] by mid-2019.

Part of this ongoing monitoring, evaluation and review may include:

- Evaluation of compliance costs and the effectiveness of all EEZ functions, including the *non-notified discretionary* activity classification
- Evaluation of the activity classifications, including their ease of use for operators, and their effectiveness in managing environmental effects.

Appendix 1: Assessment of activity classifications against criteria

The following tables and figures consider objective f and section 34 A of the EEZ Act requirements for the proposed preferred options for each activity.

Table 5: Consideration of the classification of discharges of garbage under the EEZ Act

Description of the activity:	<p>This refers to garbage discharged from an offshore installation and includes: all kinds of food waste, domestic waste, operational waste, plastic, cargo residue, incinerator ash and cooking oil generated during the normal operation of the ship and liable to be disposed of continuously or periodically; but does not include—</p> <ul style="list-style-type: none"> i) any substance that is defined or listed in any annex to MARPOL other than Annex V; or ii) fresh fish and parts of fresh fish generated as a result of fishing activity undertaken during a voyage, or as a result of aquaculture activity that involves the transport of fish including shellfish for placement in an aquaculture facility and the transport of harvested fish including shellfish from such facilities to shore for processing.
Classifications:	<p>All garbage discharges from offshore installations are classified as prohibited, except for the discharge of food waste which is classified as permitted provided the following MARPOL conditions are met:</p> <ul style="list-style-type: none"> • The food waste has been passed through a comminuter or grinder • The comminuted or ground food waste is capable of passing through a screen with openings no greater than 25 millimetres • Disposal of garbage are recorded in a garbage record book (prescribed in the regulations) and reported to the EPA. <p>Discharge of food waste is classified as prohibited in cases where it does not meet the above conditions. It should be clarified that the intent is that emergency or accidental garbage discharges are activities covered by the defence provisions of the EEZ Act as outlined in section 134A, rather than providing explicit exemptions in regulations.</p>
Reasons for the proposed classification, and matters considered under section 34A of the EEZ Act	
Effects on the environment or existing interests:	<p>The discharge of food waste into the ocean would introduce additional nutrients into the marine environment. It may also attract marine animals to the source of the discharge, which increases their likelihood of being harmed by any activities taking place as part of the broader activity (for example, if a marine animal is attracted to an oil or gas drilling installation by food waste, and then becomes more likely to be affected by discharges of oily water from the drilling operation). Overall the effects on the environment and existing interests of discharging ground food waste into the ocean are considered to be minor or less than minor.</p> <p>The effects of all other garbage have not been assessed as the proposed prohibited classification reflects New Zealand's international obligations under MARPOL.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>The discharge of food waste would be made from installations engaged in broader activities such as oil and gas exploration. These broader activities are likely to have effects on the environment and existing interests that may be cumulative to the effects of discharging food waste; however, these activities are separately defined in the EEZ Act and are subject to regulatory conditions, or require marine consents, which take into account their effects.</p>

Biological diversity and integrity of marine species, ecosystems, and processes:	The discharge of food waste would occur in relation to a broader activity. Where the broader activity is permitted, biological diversity and integrity of marine species, ecosystems and processes will have been taken into account when the activity was classified. Where the broader activity requires a marine consent, the EPA will have the ability to impose appropriate conditions on the activity. The discharge of food waste is likely to have a negligible effect on ecosystems and marine species beyond the effects of the broader activity.
Rare and vulnerable ecosystems and the habitats of threatened species:	The discharge of food waste would occur in relation to a broader activity. Where the broader activity is permitted, the activity would already be subject to conditions relating to sensitive environments. Where the broader activity requires a marine consent, the EPA will have the ability to impose appropriate conditions on the activity. The discharge of food waste is likely to have a negligible effect on sensitive environments beyond the effects of the broader activity.
New Zealand's international obligations:	The proposed classifications and the associated conditions align with New Zealand's obligations under MARPOL, which prohibits the discharge of garbage from installations other than food waste ground to 25 millimetres or less.
Other marine management regimes:	MARPOL standards apply in both the EEZ and the territorial sea. While these regulations will manage discharges from structures (such as oil and gas rigs), Part 170 of the Marine Protection Rules regulates garbage discharges from ships. The Resource Management (Marine Pollution) Regulations 1998 give effect to these obligations in the territorial sea, and are enforced by regional councils.
The desirability of allowing the public to be heard:	It is not considered desirable to provide a mechanism for the public to be heard on individual cases of discharging food waste because of the controlled and minor nature of the activity.
Effects of the discharge on human health:	Due to the relatively small quantities of food that would be discharged, and the distance from shore, any effects on human health would be negligible.
Any other relevant matter:	The proposed classifications and the associated conditions align with the existing approach set out in part 200 of the Marine Protection Rules under the MTA.

The discharge of food waste can be managed to ensure adverse effects are less than minor, and regulatory conditions do not require tailoring through a case-by-case assessment. Because of this, as well as MARPOL's binary regulation of the activity, a permitted classification is most appropriate with discharges outside the permitted limits being prohibited.

Because effects are not likely to be significant in the circumstances that activity can be classified as permitted under the test in section 29A⁸.

⁸ Section 29A will be inserted into the EEZ Act by the EEZ Amendment Act when it comes into force.

Table 6: Discharges of sediments and/or tailings from seabed mineral mining

Description of the activity:	Sediments and/or tailings from seabed mineral mining are created when extracted material from the seabed is processed on board a mining ship to remove the desired minerals (eg, iron ore is removed from extracted iron sands). The residual sediment (sometimes known as 'tailings') must then be discharged back into the sea because it has no commercial value and cannot be stored on the vessel.
Classifications:	<p><i>Sediment from iron sand prospecting and exploration:</i></p> <p>Permitted except for discharges from test-pit mining. All reasonable measures should be taken to ensure the discharge should be made back into the area from which the sediments were extracted.</p> <p>Discharges from test-pit mining are discretionary.</p> <hr/> <p><i>Sediment from phosphate nodule prospecting and exploration</i></p> <p>Permitted for incidental discharges except for discharges from test-pit mining. All reasonable measures should be taken to ensure the discharge should be made back into the area from which the sediments were extracted.</p> <p>Discharges from test-pit mining are discretionary.</p> <hr/> <p><i>Sediment from seafloor massive sulphide prospecting and exploration:</i></p> <p>A total discharge per permit area for the life of the permit up to 10t (~8.3m³) is permitted.</p> <p>A total discharge per permit area for the life of the permit of between 10t and 100t is permitted on condition that it is discharged at the surface of the water. Any other location is discretionary.</p> <p>All reasonable measures should be taken to ensure the discharge should be made back into the area from which the sediments were extracted.</p> <p>A total discharge per permit area for the life of the permit above 100t is discretionary.</p> <hr/> <p><i>Sediment from other mineral prospecting and exploration: Discretionary</i></p> <hr/> <p><i>Sediments and /or tailings from mineral mining operations during the production stage of mineral mining operations: Discretionary</i></p> <hr/> <p>Discharges of radioactive waste or other radioactive material associated with sediments above the thresholds established in the Radiation Protection Act 1965: Prohibited.</p>
Additional conditions for sediment discharges classified as permitted:	<p>In addition to the conditions outlined above, all permitted sediment discharges will be subject to the following conditions:</p> <ul style="list-style-type: none"> • pre-activity notification must be provided to the EPA 40 days before beginning the activity • pre-activity notification must be provided to iwi 25 days before the activity begins • the outcome of notification to iwi must be provided to the EPA five days before the activity begins • the EPA must be notified within 24 hours of the activity beginning and completing • a post-activity report must be provided to the EPA within 60 days of the activity completing. <p>Explanation: Reporting requirements have been set to allow the EPA to monitor whether regulations are being complied with and to monitor for cumulative effects. Notification to iwi allows iwi the opportunity to be aware of environmental effects occurring in areas of interest to them and raise any concern they have about the activity with operators.</p> <p>Reporting on sediment discharges is intended to be carried out alongside the extraction activities to which they relate. It is anticipated reporting could relate to a collection of extraction and discharge activities, rather than a single event.</p>

Reasons for the classification, and matters considered under section 34A of the EEZ Act

Effects on the environment or existing interests:	<p>The most significant potential effects from discharging sediment into the sea include:</p> <ul style="list-style-type: none"> • smothering or choking sea floor organisms • decreased abundance of organisms in the water column • forcing mobile animals away from the area affected by the discharge <p>The effects of the activity will vary according to:</p> <ul style="list-style-type: none"> • the receiving environment • the volume and nature of material discharged • the location in the water column it is discharged (ie, at the surface or close to the seabed) • whether it is discharged in one event or multiple smaller events • The effects on the environment and existing interests will be managed appropriately by the regulations setting the thresholds described above. <p>¹¹ NIWA identified that moderate effects from sediment discharges can have effects which are "ecologically significant", affecting 5-20% of the habitat in question. Any discharge with effects that are "moderate" or greater are proposed to be classified as discretionary. Discharges with effects that are minor or less than minor are proposed to be classified as permitted.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>The discharge of sediments and/or tailings will occur as part of the broader activities of seabed prospecting, exploration or mining. These activities will have the effect of disturbing the seafloor, removing material and creating near-seafloor sediment plumes. The conditions on permitted discharges are designed to mitigate effects. At discretionary levels the EPA will be able to consider the cumulative effects of the discharge.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	<p>For any permitted activity the effect of the activity on the biological diversity and integrity of marine species, ecosystems and processes will be minor or less than minor because of the thresholds and conditions set in the regulations. For discretionary activities, the EPA will be able to assess the likely effects when deciding whether to grant a marine consent for the activity.</p>
Rare and vulnerable ecosystems and the habitats of threatened species:	<p>For any permitted activity the effect of the activity on rare and vulnerable ecosystems and the habitats of threatened species will be minor or less than minor. For discretionary activities the EPA will be able to assess the likely effects when deciding whether to grant a marine consent for the activity.</p>
New Zealand's international obligations:	<p>The proposed regulations align with New Zealand's obligations under UNCLOS. They also align with obligations under the Noumea Convention for the public to be able to comment on any major projects. The discharges classified as permitted are considered be less than major.</p>
Other marine management regimes:	<p>The regulations do not interfere with obligations under the Continental Shelf Act 1964 or the Crown Minerals Act 1991. The discharge is not regulated under the Marine Protection Rules.</p>
The desirability of allowing the public to be heard:	<p>It is desirable to allow the public to be heard in relation to large-scale projects that could significantly affect the environment or existing interests. This has been provided for by making discharges with potentially moderate or greater consequences discretionary.</p>
Effects of the discharge on human health:	<p>There are not likely to be any effects on human health from this activity.</p>
Any other relevant matter:	<p>No other relevant matters have been identified.</p>

⁹ MacDiarmid et al. 2014. *Environmental risk assessment of discharges of sediment during prospecting and exploration for seabed minerals*. Wellington: NIWA.

¹⁰ Ibid.

¹¹ Ibid.

Assessment of the permitted classification

In recommending an activity be classified as permitted, the test in section 29A¹² must be satisfied. The discharge of the three sediments, within the permitted conditions, is considered not to have more than minor effects on the environment or existing interests. This is because the NIWA Report assessed effects of various volumes of discharges and only discharges with effects assessed as being either 'negligible' or 'minor' are classified as permitted in the regulations. The NIWA Report identified management conditions that are tailored to the different kinds of environment and these conditions are well suited to a permitted classification. The permitted classification for the discharge also corresponds with the classification of the actual extraction under the Exclusive Economic Zone and Continental Shelf (Environmental Effects—Permitted Activities) Regulations 2013. For discharges with minor effects a marine consent process would not add significant benefits. However, if undertaken outside the conditions, the effects are not considered to be permissible and retain the default discretionary classification.

¹² Section 29A will be inserted into the EEZ Act by the EEZ Amendment Act when it comes into force.

Table 7: Discharges from petroleum extraction

<p>Description of the activity:</p>	<p>This refers to discharges of water that contain diluted oil from offshore installations. It includes:</p> <ul style="list-style-type: none"> • offshore processing drainage (water from hazardous and non-hazardous deck drains, but does not include oil mixed with water from machinery spaces) • displacement water (water displaced from crude oil tanks during oil transfers to or from the tank) • production water (the water found in reservoirs along with the oil or gas, which may contain oil or hazardous substances that occur naturally in the reservoir).
<p>Classification:</p>	<p>This activity is classified as discretionary.</p> <p>The discharge of production water sourced from a test flow of an exploration well is classified as non-notified discretionary</p> <p>For discharges from existing production facilities the activity is classified as non-notified discretionary.</p>

Reasons for the classification, and matters considered under section 34A of the EEZ Act

<p>Effects on the environment or existing interests:</p>	<p>These discharges will contain oil in low concentrations, and can also contain a number of compounds of changeable and often unknown composition. Chemicals which may naturally occur within the geological formation (or which may be injected) may be extracted and discharged as produced water. Such chemical discharges may have acute toxic effects on organisms in the marine environment.</p> <p>The activity can be planned for and controlled to ensure concentrations of oil and any other contaminants present are at a level that is unlikely to cause significant environmental effects when it is discharged.</p> <p>At the production stage the activity can continue for several years, which increases the likelihood of significant cumulative effects; however, the marine consent process will allow the EPA to consider discharges holistically and to consider cumulative effects when making decisions on applications for marine discharge consents. A marine consent process is also best suited to monitoring and managing the discharge of chemicals and heavy metals potentially associated with produced water, which cannot be easily accounted for within a permitted classification. The large quantities and long duration, in addition to the unknown effects of chemicals present in this discharge, makes it more appropriately classified as discretionary.</p> <p><i>Test flow discharges</i></p> <p>If production water sourced from a test flow of an exploration well is discharged, it is only likely to occur over a short duration. Therefore, it carries a low probability of significant adverse effects on the environment and existing interests.</p> <p><i>Discharges from existing production facilities</i></p> <p>For existing production facilities which are subject to the current Marine Protection Rules, a non-notified discretionary classification is more appropriate. This is because there is a low probability of significant adverse effects on the environment and existing interests, as the production stream discharges are currently undertaken; therefore the environmental effects are already known and managed under the current regime. The discharges are routine, as they are part of the operation of oil and gas platforms.</p>
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Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>This activity will occur as a result of a broader activity (namely, oil or gas drilling) which will have its own effects on the environment and existing interests. The proposed classifications will enable the EPA to holistically consider the effects of the discharge activity alongside the effects of the broader drilling activity.</p> <p>Other activities such as commercial fishing, shipping, seabed mining and seismic surveying will also have effects that will be cumulative to the effects of oily water discharges. These types of effects will be considered by the EPA alongside the effects of the discharge activity when considering applications for marine discharge consents.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	<p>When considering an application for a marine discharge consent, the EPA is required to take into account the importance of protecting the biological diversity and integrity of marine species, ecosystems, and processes. The EPA will assess the potential effects of an activity on a case-by-case basis, and can decline an application for a marine discharge consent or apply conditions it deems appropriate before granting a marine discharge consent.</p>
Rare and vulnerable ecosystems and the habitats of threatened species:	<p>The marine consent process will allow the EPA to impose appropriate conditions on a case-by-case basis to address the potential effects on vulnerable ecosystems.</p>
New Zealand's international obligations:	<p>New Zealand has international obligations under UNCLOS and the Noumea Convention, to take measures to prevent, reduce and control pollution of the marine environment. This includes a requirement to minimise pollution from installations and devices used in exploration or exploitation of natural resources. New Zealand also has obligations under the Noumea Convention to endeavour to ensure sound environmental management and development of natural resources and where a "major project" is occurring to invite public comment where appropriate. Under the CBD, New Zealand has obligations to provide for environmental impact assessments of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimising such effects, and where appropriate, to allow for public participation in such procedures. However, New Zealand does not have any specific international obligations relating to the amounts or concentrations of this particular type of discharge, or the specific operational conditions under which it can be discharged.</p>
Other marine management regimes:	<p>The oil and gas industry in New Zealand has to meet a number of regulatory requirements before operations can begin.</p>
The desirability of allowing the public to be heard:	<p>Due to the potentially long duration of the activity and the significant volumes involved during production, there is cause for the public to be heard in relation to each marine consent application. As this activity occurs at the production stage of oil and gas operations, the publicly notified process for the discharge activity would occur alongside the publicly notified process for the oil and gas production activity itself.</p> <p>However, for discharges from existing production facilities, a non-notified discretionary classification is appropriate as there is likely to be a relatively less public interest than a new application, as these activities have occurred for 5 to 35 years already.</p> <p>If production water sourced from a test flow of an exploration well is discharged it is only likely to occur over a short duration and carry a low probability of significant adverse effects. Therefore, it is not desirable for the public to be heard in relation to the activity.</p>

Effects of the discharge on human health:

Human health could be affected through the consumption of seafood that had been contaminated. Given distance from shore, and the ability for the EPA to set conditions ensuring a low concentration of oil and other contaminants contained in the discharge, the likely effects on human health arising from this activity are considered to be low.

Effects on human health will be considered by the EPA when considering applications for marine discharge consents, and the EPA can set conditions it considers appropriate to avoid, remedy, or mitigate these types of effects.

Any other relevant matter:

Although the effects of offshore processing drainage and displacement water are likely to be much lower than the effects of production water, these types of discharges may be mixed together and discharged from a single point. Therefore, it is appropriate for them to be classified and regulated together.

In relation to the non-notified discretionary classification for this discharge from existing production facilities, there is a high cost of uncertainty to industry of undertaking a public notification process without a corresponding or proportionate gain from public notification given the known effects from existing operations.

The likely effects of discharges associated with petroleum extraction can be considered in two groups.

Discharges from existing offshore installations are currently managed under the Marine Protection Rules and the effects are known and as established discharges the effects on existing interests are understood. Nonetheless, a permitted classification has inherent weaknesses in terms of not easily managing constituents of the discharge other than oil. As such, a non-notified discretionary classification is most appropriate.

Because the activity has a low probability of significant adverse effects, as required by section 29D, the activity can be classified as non-notified discretionary. As required under section 29D(2)(b), the discharges associated with petroleum extraction is a routine part of oil and gas operations.

In the case of new offshore installations the effects on the environment and existing interests are not known and because of the large quantities and long duration a notified discretionary process is most appropriate.

Table 8: Discharges of oil mixed with water from machinery spaces

Description of the activity:	This refers to the discharge of water that has accumulated in machinery spaces on board an offshore installation.
Classifications:	<p>This activity is proposed to be classified as permitted, provided the following conditions are met:</p> <ul style="list-style-type: none"> • The discharge must be processed by oil filtering equipment that has International Oil Pollution Prevention certification in accordance with the requirements set out in MARPOL Annex I for the purposes of the issue of an IOPP certificate. • The oil content of the discharge, without dilution, does not exceed 15 parts per million • An oil record book (as required by, and prescribed in, Appendix III of MARPOL Annex I) must be kept for three years after the last entry and a true copy submitted to the EPA within 15 working days of the end of the month in which it was completed. • In the case of a structure of 10,000 gross tonnes or more, the oil filtering equipment must be fitted with an alarm to indicate when the oil content of the effluent exceeds 15 parts per million; and arrangements to ensure that any discharge of oily mixture is automatically stopped when the alarm is activated. <p>This activity is proposed to be classified as prohibited where the oil content of the discharge exceeds 15 parts per million. If the oil content is below the proposed limit but other conditions are not met, the operator would be considered to have breached the conditions of the EEZ Act.</p>
Reasons for the classification, and matters considered under section 34A of the EEZ Act	
Effects on the environment or existing interests:	Oil contained in discharges can coat animals in the marine environment. This coating, along with ingestion, may have toxic effects. However the proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges, mean that the effects of this activity on the environment and existing interests are likely to be minor or less than minor.
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>This activity will occur as a result of a broader activity (namely, oil or gas drilling) which will have its own effects on the environment and existing interests.</p> <p>Other activities such as commercial fishing, shipping, seabed mining and seismic surveying will also have effects that will be cumulative to the effects of oil mixed with seawater from machinery spaces.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	This activity will occur as a result of a broader oil or gas drilling activity, which will only be able to take place if it has obtained a marine consent. When considering an application for a marine consent, the EPA is required to take into account the importance of protecting the biological diversity and integrity of marine species, ecosystems, and processes. The EPA will assess the potential effects of an activity on a case-by-case basis, and can decline an application for a marine consent or apply conditions it considers appropriate.
Rare and vulnerable ecosystems and the habitats of threatened species:	Because of the proposed oil content limit and the ability for operators to control and measure quantities and concentrations of these discharges the effects on rare and vulnerable ecosystems and threatened species are likely to be minor.
New Zealand's international obligations:	The proposed conditions are required to comply with MARPOL.
Other marine management regimes:	The oil and gas industry in New Zealand has to meet a number of regulatory requirements before operations can begin.

The desirability of allowing the public to be heard:	The MARPOL standards align most closely with a split permitted/prohibited classification meaning that public input through a discretionary consent is not desirable. The discharge is also routine and strictly controlled in accordance with MARPOL standards.
Effects of the discharge on human health:	Human health could be affected through the consumption of seafood that had been contaminated. The condition in proposed regulations ensuring a low concentration of oil contained in the discharge would ensure the likely effects on human health arising from this activity are considered to be low.
Any other relevant matter:	The proposed classification reflects the current approach under Part 200 of the Marine Protection Rules under the Maritime Transport Act, with some minor modifications.

Assessment of the permitted classification

The discharge of oil mixed with water from machinery spaces can be managed to ensure adverse effects are less than minor, and regulatory conditions do not require tailoring through a case-by-case assessment. Because of this, as well as MARPOL's binary regulation of the activity, a permitted classification is most appropriate with discharges outside the permitted limits being prohibited.

Because effects are not likely to be significant in the circumstances that activity can be classified as permitted under the test in section 29A¹³.

¹³ Section 29A will be inserted into the EEZ Act by the EEZ Amendment Act when it comes into force.

Table 9: Discharges of seawater contaminated with oil

Description of the activity:	This refers to seawater contaminated with oil but does not include production water, offshore processing drainage, displacement water and oil mixed with water from machinery spaces.
Classifications:	<p>This activity is proposed to be classified as permitted, provided the following MARPOL-prescribed conditions are met:</p> <ul style="list-style-type: none"> • the oil content of the discharge, without dilution, does not exceed 15 parts per million. • an oil record book must be kept and a copy submitted to the EPA within 15 working days of the end of the month in which it was completed • the discharge must be processed by approved oil filtering equipment that has International Oil Pollution Prevention certification for the installation. <p>For discharges above 15ppm without dilution, the draft Regulations provide a non-notified discretionary classification for existing structures, and a discretionary classification for new structures, provided the following conditions are met:</p> <ul style="list-style-type: none"> • discharges are limited to floating production, storage and offloading facilities (FPSO) and floating storage units (FSU); • discharges must be added to the production stream; and • an oil record book is kept in accordance with the draft Regulations <p>This activity is proposed to be classified as prohibited where conditions are not met.</p>

Reasons for the classification, and matters considered under section 34A of the EEZ Act

Effects on the environment or existing interests:	Oil contained in discharges can coat animals in the marine environment. This coating, along with ingestion, may have toxic effects. However the brief duration of this activity, the proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges, mean that the effects of this activity on the environment and existing interests are likely to be minor or less than minor.
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>This activity will occur as a result of a broader activity (namely, oil or gas drilling) which will have its own effects on the environment and existing interests; however, these activities are separately defined in the EEZ Act and are subject to regulatory conditions, or require marine consents, which take into account their effects.</p> <p>Other activities such as commercial fishing, shipping, seabed mining and seismic surveying will also have effects that will be cumulative to the effects of discharges of seawater contaminated with oil.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	The brief duration of this activity, the proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges, mean that the effects of this activity on biological diversity and integrity of marine species, ecosystems, and processes are likely to be minor or less than minor.

Rare and vulnerable ecosystems and the habitats of threatened species:	The brief duration of this activity, the proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges, mean that the effects of this activity on the rare and vulnerable ecosystems and the habitats of threatened species are likely to be minor or less than minor.
New Zealand's international obligations:	The proposed conditions are required to comply with the Unified Interpretation to Annex I of MARPOL ¹⁴ . Unified Interpretations, while not strictly binding, form guidance on international best practice. Diversion from these interpretations therefore requires strong justification.
Other marine management regimes:	The oil and gas industry in New Zealand has to meet a number of regulatory requirements before operations can begin.
The desirability of allowing the public to be heard:	This discharge is only likely to become necessary from time to time and would occur over a brief duration. Because it may not be a planned discharge, any regulatory requirements should be proportionate in terms of timing requirements. These factors mean it is not desirable for public consultation.
Effects of the discharge on human health:	Human health could be affected through the consumption of seafood that had been contaminated. The condition in proposed regulations ensuring a low concentration of oil contained in the discharge means the effects on human health arising from this activity are considered to be low.
Any other relevant matter:	Under the current regime Maritime NZ is able to process applications for this discharge to the standard of the Unified Interpretation within short timeframes and without public notification.

Assessment of the permitted classification

The discharge of oil-contaminated seawater can be managed to ensure adverse effects are less than minor, and regulatory conditions do not require tailoring through a case-by-case assessment. Because of this, as well as the Unified Interpretation of MARPOL's binary regulation of the activity, a permitted classification is most appropriate with discharges outside the permitted limits being prohibited.

Because effects are not likely to be significant in the circumstances that activity can be classified as permitted under the test in section 29A¹⁵.

¹⁴ MARPOL Annex I, Regulation 39, Unified Interpretation 63

¹⁵ Section 29A will be inserted into the EEZ Act by the EEZ Amendment Act when it comes into force.

Table 10: Discharges of segregated ballast water contaminated with oil

Description of the activity:	This refers to the discharge of contaminated segregated ballast water. Segregated ballast is completely separated from cargo oil and the oil fuel system, and therefore should never have oil.
Classifications:	This activity is proposed to be classified as prohibited

Reasons for the classification, and matters considered under section 34A of the EEZ Act

Effects on the environment or existing interests:	Oil contained in discharges can coat animals in the marine environment. This coating, along with ingestion, may have toxic effects. However the brief duration of this activity, the proposed oil content limit, and the ability of operators to control and measure quantities and concentrations of these discharges, mean that the effects of this activity on the environment and existing interests are likely to be minor or less than minor.
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>This activity will occur as a result of a broader activity (namely, oil or gas drilling) which will have its own effects on the environment and existing interests. However, the broader activities are separately defined in the EEZ Act and are subject to regulatory conditions or marine consents requirements, which take into account their effects.</p> <p>Other activities such as commercial fishing, shipping, seabed mining and seismic surveying will also have effects that will be cumulative to the effects of discharges of segregated ballast water contaminated with oil.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	As the discharge is prohibited, the effects of this activity on biological diversity and integrity of marine species, ecosystems, and processes are nil.
Rare and vulnerable ecosystems and the habitats of threatened species:	As this discharge is prohibited, the effects of this activity on the rare and vulnerable ecosystems and the habitats of threatened species are nil.
New Zealand's international obligations:	The proposed prohibition aligns with the intent of regulation 18 of MARPOL Annex I.
Other marine management regimes:	The oil and gas industry in New Zealand has to meet a number of regulatory requirements before operations can begin.
The desirability of allowing the public to be heard:	N/A
Effects of the discharge on human health:	As the discharge is prohibited, the effects on human health arising from this activity are considered to be nil.
Any other relevant matter:	Under the current regime Maritime NZ would not allow the discharge of segregated ballast water.

Table 11: Discharges of operational chemicals

Description of the activity:	This refers to the discharge of chemicals used in mining activities.
Classification:	This activity is proposed to be classified as non-notified discretionary .

Reasons for the classification, and matters considered under section 34A of the EEZ Act

Effects on the environment or existing interests:	<p>Chemicals may have ecotoxic and bio-accumulation effects on ocean habitats, fish and other creatures, depending on the type of chemical and the quantity and concentration of the discharge. This may affect existing interests' use of ocean resources.</p> <p>However, the activity can be planned and controlled to a degree that makes the likelihood of significant adverse effects low. The proposed classification enables the EPA to thoroughly assess the effects on the environment and existing interests on a case-by-case basis, and to impose appropriate conditions on marine discharge consents.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>Other activities such as commercial fishing, shipping, oil and gas operations, seabed mining and seismic surveying will have effects that will be cumulative to the effects of operational chemical discharges.</p> <p>These types of effects will be considered by the EPA alongside the effects of the discharge activity when considering applications for marine discharge consents.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	<p>When considering an application for a marine discharge consent, the EPA is required to take into account the importance of protecting the biological diversity and integrity of marine species, ecosystems, and processes. The EPA will assess the potential effects of an activity on a case-by-case basis, and can decline an application for a marine discharge consent or apply conditions it deems appropriate before granting a marine consent.</p>
Rare and vulnerable ecosystems and the habitats of threatened species:	<p>The marine consent process would identify effects in particular locations and methods to mitigate those effects. The proposed classification enables the EPA to impose conditions on a marine discharge consent to mitigate any adverse effects on sensitive environments.</p>
New Zealand's international obligations:	<p>New Zealand has international obligations under UNCLOS and the Noumea Convention, to take measures to prevent, reduce and control pollution of the marine environment. This includes a requirement to minimise pollution from installations and devices used in exploration or exploitation of natural resources. New Zealand also has obligations under the Noumea Convention to endeavour to ensure sound environmental management and development of natural resources and where a "major project" is occurring to invite public comment where appropriate. Under the CBD, New Zealand has obligations to provide for environmental impact assessments of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimising such effects, and where appropriate, to allow for public participation in such procedures. However, New Zealand does not have any specific international obligations relating to the amounts or concentrations of this particular type of discharge, or the specific operational conditions under which it can be discharged.</p>

Other marine management regimes:	<p>The seabed mineral industry in New Zealand has to meet a number of regulatory requirements before operations can begin. Specifically:</p> <ul style="list-style-type: none"> • Under the Crown Minerals Act 1991, operators must obtain a permit from New Zealand Petroleum and Minerals (NZP&M), a branch of the Ministry of Business, Innovation and Employment. NZP&M assess the financial and technical capability of an operator and high level health, safety and environmental ability. • Other legislation applicable in the EEZ includes the Biosecurity Act 1993, Continental Shelf Act 1964, Marine Mammals Protection Act 1978, the Wildlife Act 1953, and the Fisheries Act 1996. • The oil and gas industry must also meet the regulatory requirements.
The desirability of allowing the public to be heard:	<p>A discretionary classification would make it overly difficult, costly and time-consuming to change chemicals or potentially to introduce innovative and low-impact chemicals over the life of the operation.</p> <p>A non-notified discretionary classification will still allow the EPA to thoroughly assess the effects of new chemicals on a case-by-case basis.</p>
Effects of the discharge on human health:	<p>Human health could be affected through the consumption of seafood that has been contaminated. Effects on human health will be considered by the EPA when considering applications for marine discharge consents, and the EPA can set conditions it considers appropriate to avoid, remedy, or mitigate these types of effects.</p> <p>The ability for the EPA to set conditions relating to the type of chemicals contained in the discharge and their concentration means the effects on human health arising from this activity are considered to be low.</p>
Any other relevant matter:	<p>The proposed classification facilitates the introduction of innovative low-impact technologies by allowing operators to adopt lower-impact chemicals during the life of their operation without a change in chemicals triggering the need for a publicly notified marine consent process, while still enabling the EPA to thoroughly assess the effects of new chemicals on a case-by-case basis.</p>

Assessment of the non-notified discretionary classification

This discharge of operational chemicals is considered to have a low probability of significant adverse effects on the environment or existing interests.

This is because while chemicals may have ecotoxic and bio-accumulation effects on ocean habitats, and consequential effects on existing interests by extension, the activity can be planned and controlled to a degree that makes the likelihood of significant adverse effects low.

Although this discharge is planned and controlled, unlike oil for example, there are many kinds of chemicals that can be used for a range of purposes which can change frequently as technology develops. As such, a permitted classification is inappropriate because of the technical difficulties, and inflexibility, of setting the required conditions in 'up-front' regulations.

As such, a non-notified discretionary classification is most appropriate. The classification enables the EPA to thoroughly assess effects on a case-by-case basis, and to impose appropriate conditions on marine discharge consents, if granted.

Because the activity has a low probability of significant adverse effects, as required by section 29D, the activity can be classified as non-notified discretionary. As required under section 29D(2)(b), the discharge of operational chemicals is a routine part of oil and gas operations.

Table 12: Discharges of drilling fluids

Description of the activity:	Drilling fluids, or 'drilling muds', are used to lubricate a drill and to maintain pressure in the formation to prevent formation fluid flowing into the well. Fluids can either be water-based, synthetic-based or oil-based, although the latter is used only rarely.
Classification:	This activity is proposed to be classified as non-notified discretionary .

Reasons for the classification, and matters considered under section 34A of the EEZ Act

Effects on the environment or existing interests:	<p>Drilling fluids may have ecotoxic effects on ocean habitats, fish and other creatures, depending on the type of chemical and the quantity and concentration of the discharge. This may affect existing interests' use of ocean resources.</p> <p>However, the ability of operators to plan for, control and measure quantities and concentrations of these discharges to meet conditions set by the EPA means they have a low probability of significant adverse effects. The proposed classification enables the EPA to thoroughly assess the effects on the environment and existing interests on a case-by-case basis, and to impose appropriate conditions on marine discharge consents.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>Other activities such as commercial fishing, shipping, seabed mining and seismic surveying will have effects that will be cumulative to the effects of drilling fluid discharges.</p> <p>These types of effects will be considered by the EPA alongside the effects of the discharge activity when considering applications for marine discharge consents.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	<p>When considering an application for a marine discharge consent, the EPA is required to take into account the importance of protecting the biological diversity and integrity of marine species, ecosystems, and processes. The EPA will assess the potential effects of an activity on a case-by-case basis, and can decline an application for a marine discharge consent or apply conditions it deems appropriate before granting a marine consent.</p>
Rare and vulnerable ecosystems and the habitats of threatened species:	<p>The marine consent process would identify effects in particular locations and methods to manage those effects. The proposed classification enables the EPA to impose conditions on a marine consent to mitigate any adverse effects on sensitive environments.</p>
New Zealand's international obligations:	<p>New Zealand has international obligations under UNCLOS and the Noumea Convention, to take measures to prevent, reduce and control pollution of the marine environment. This includes a requirement to minimise pollution from installations and devices used in exploration or exploitation of natural resources. New Zealand also has obligations under the Noumea Convention to endeavour to ensure sound environmental management and development of natural resources and where a "major project" is occurring to invite public comment where appropriate. Under the CBD, New Zealand has obligations to provide for environmental impact assessments of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimising such effects, and where appropriate, to allow for public participation in such procedures. However, New Zealand does not have any specific international obligations relating to the amounts or concentrations of this particular type of discharge, or the specific operational conditions under which it can be discharged.</p>
Other marine management regimes:	<p>The oil and gas industry in New Zealand has to meet a number of regulatory requirements before operations can begin.</p>

The desirability of allowing the public to be heard:	<p>A discretionary classification would make it overly difficult, costly and time-consuming to change drilling fluids or potentially to introduce innovative and low-impact fluids over the life of the operation.</p> <p>A non-notified discretionary classification will still allow the EPA to thoroughly assess the effects of new drilling fluids on a case-by-case basis.</p>
Effects of the discharge on human health:	<p>Human health could be affected through the consumption of seafood that had been contaminated. The ability for the EPA to set conditions ensuring a low concentration of oil contained in the discharge means the effects on human health arising from this activity are considered to be low.</p> <p>Effects on human health will be considered by the EPA when considering applications for marine discharge consents, and the EPA can set conditions it considers appropriate to avoid, remedy, or mitigate these types of effects.</p>
Any other relevant matter:	<p>The discharge of drilling fluids is a routine part of mineral mining operations (including oil and gas operations).</p> <p>The proposed classification allows for the adoption of lower-impact drilling fluids without triggering the need for a public consultation process, while the marine consent process still enables the EPA to thoroughly assess the environmental effects of new drilling fluids to reflect industry best practice.</p> <p>Part 200 of the Marine Protection Rules currently allows drilling fluids to be discharged in accordance with the conditions agreed in the Discharge Management Plan. This closely resembles the proposal for drilling fluids to be non-notified discretionary under the EEZ Act.</p>

Assessment of the non-notified discretionary classification

This discharge of drilling fluids is considered to have a low probability of significant adverse effects on the environment or existing interests.

This is because while chemicals may have ecotoxic and bio-accumulation effects on ocean habitats, and consequential effects on existing interests by extension, the activity can be planned and controlled to a degree that makes the likelihood of significant adverse effects low.

Although this discharge is planned and controlled, unlike oil for example, there are various kinds of drilling fluids that can be used and fluids may need to be changed on site depending on circumstances that may arise. As such, a permitted classification is inappropriate because of the technical difficulties, and inflexibility, of setting the required conditions in 'up-front' regulations.

Because the activity has a low probability of significant adverse effects, as required by section 29D, the activity can be classified as non-notified discretionary. As required under section 29D(2)(b), the discharge of used drilling fluids is a routine part of oil and gas operations.

As such, a non-notified discretionary classification is most appropriate. The classification enables the EPA to thoroughly assess effects on a case-by-case basis, and to impose appropriate conditions on marine discharge consents, if granted.

Table 13: Burial at sea

Description of the activity:	This refers to the burial of human remains at sea. It does not include the scattering of ashes at sea, as this is not covered by the EEZ Act.
Conditions:	<p>This activity is allowed under section 20J of the EEZ Act provided conditions, set in regulations, are met and the EPA certifies that the proposed disposal complies with the regulations. Proposed conditions are:</p> <ol style="list-style-type: none"> 1. The person disposing of remains provides the EPA with a copy of the death certificate at least three working days prior to burial. 2. The casket or containment is of a nature that will sink to the seafloor on disposal and is unlikely to resurface. 3. The location for disposal is an authorised dumping ground. 4. The proposal for disposal is provided to the EPA for certification at least three working days before the proposed disposal. 5. The person provides evidence to the EPA that the disposal took place in accordance with conditions 2 and 3. <p>It is proposed that the EPA notify relevant iwi of the date and location of burials at sea as soon as practicable following the issuance of a certificate of compliance.</p>

Reasons for the proposed classification, and matters considered under section 34A of the EEZ Act

Effects on the environment or existing interests:	<p>Burials at sea may result in very minor and discrete disturbances to the seabed, but would have minimal effects on the environment in any location.</p> <p>The effect on existing interests would be minimal when carried out subject to the conditions set in regulations, as these conditions would make it unlikely for human remains to come into contact with other users of the marine environment.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	The condition requiring burials at sea to occur in authorised dumping grounds will limit any effects on this activity by other activities occurring in the marine environment.
Biological diversity and integrity of marine species, ecosystems, and processes:	Burials at sea, being very minor in scale, will have negligible effects. They are proposed to only occur in specified dumping grounds, which have been zoned for such purposes.
Rare and vulnerable ecosystems and the habitats of threatened species:	Burials at sea, being very minor in scale, will have negligible effects. They are proposed to only occur in specified dumping grounds, which have been zoned for such purposes.
New Zealand's international obligations:	The certificate of compliance will comply with the requirement of the London Protocol that dumping cannot occur unless the relevant state issues a permit.
Other marine management regimes:	Nil
The desirability of allowing the public to be heard:	There is little benefit in allowing the public to be heard in relation to individual applications for burial at sea. The short timeframe between a person's death and their burial would also generally make it unfeasible to allow the public to be heard.
Effects of the dumping on human health:	Due to the depth and distance from shore, any effects on human health from burials at sea would be negligible.
Alternative methods of disposal, or opportunities to reuse, recycle or treat waste	Given that there is very little demand for burials at sea, it is not considered necessary to require alternative methods of burial.

Any other relevant matter:

Section 20J of the EEZ Act provides that burial at sea be “allowed” when certain conditions are met, but does not require this activity to be assigned a particular classification. Therefore, there are no legislative tests (such as the ones under section 29A or 29D) that need to be applied for this activity.

The scattering of ashes is not covered by these proposed regulations and is exempt from restrictions under the EEZ Amendment Act.

Table 14: Dumping of waste

Description of the activity:	This refers to the dumping of a range of types of wastes set out under the London Protocol. It includes wastes or other matter loaded onto vessels for the purpose of sea disposal. It does not include operational disposals of wastes if the disposal is part of the normal operation of a ship, aircraft or structure. It also does not include the disposal of wastes directly arising from, or related to, a mining activity. The wastes excluded from dumping regulations may however be regulated as a restricted <i>discharge</i> .
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Classifications:	<p>The dumping of the following types of waste is proposed to be classified as non-notified discretionary:</p> <ul style="list-style-type: none">fish waste, or organic material resulting from industrial fish processing operationssewage sludgeorganic material of natural origindredged material dumped within authorised dumping groundsvessels dumped within authorised dumping groundsdumping of structures that were originally placed for the purpose of mineral exploration.dumping of structures that were originally placed for the purpose of marine scientific research <p>The dumping of the following types of waste is proposed to be classified as discretionary:</p> <ul style="list-style-type: none">dredged material that is dumped outside of authorised dumping groundsvessels that are not dumped in authorised dumping groundsstructures that were originally placed in relation to mineral production activitiescarbon dioxide streams from dioxide capture processes for sequestrationinert, inorganic geological materialbulky solid waste from locations with no practical access to other disposal options. <p>The dumping of other types of waste not specified above is proposed to be classified as prohibited.</p>
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Reasons for the classification, and matters considered under section 34A of the EEZ Act

<p>Effects on the environment or existing interests:</p>	<p>Dredged material and inert, inorganic material has the potential to physically harm the marine environment by smothering marine life on the seafloor. Dredged material may also contain toxins but under the London Protocol wastes must be audited by the relevant authority (in New Zealand this will be the EPA) to ensure any toxic components are identified and removed. If the waste cannot be satisfactorily cleaned it cannot be dumped.</p> <p>Sewage sludge tends to concentrate a wide range of substances by absorbing or binding them to the organic matrix of the sludge. It has a high bio-chemical oxygen demand and may be contaminated by pathogens and parasites.</p> <p>The organic components of fish waste have a high biological oxygen demand and, if not managed properly, can pose environmental and health problems.</p> <p>Dumped vessels, platforms and structures, and bulky solid waste, can smother marine life on the seafloor and pose an obstacle to fishing or navigation, and can release oil and chemicals into the ocean if not properly cleaned. Material from a vessel, platform or structure can create floating debris if not removed before dumping.</p> <p>Material dumped in authorised dumping grounds is likely to have a negligible effect on existing interests, as these dumping grounds are too deep to be used for other purposes that come into contact with the seafloor, such as trawling.</p> <p>By classifying the dumping of vessels and dredged material differently depending on whether they are dumped in an authorised dumping ground, an incentive is created for operators to dump these types of waste in areas where they will have a lesser impact on the environment and existing interests.</p> <p>The marine consent process will enable the EPA to thoroughly assess the effects of the activity and to consider cumulative effects.</p>
<p>Effects of other activities undertaken in the EEZ or on the continental shelf:</p>	<p>Other wastes may be discharged or dumped in the same proximity and other activities such as fishing or shipping could have effects that become cumulatively significant. Through the proposed marine consent process the EPA would be required to consider such cumulative effects and set conditions if appropriate.</p>
<p>Biological diversity and integrity of marine species, ecosystems, and processes:</p>	<p>When considering an application for a marine dumping consent, the EPA is required to take into account the importance of protecting the biological diversity and integrity of marine species, ecosystems, and processes. The EPA will assess the potential effects of an activity on a case-by-case basis, and can decline an application for a marine dumping consent or apply conditions it deems appropriate before granting a marine dumping consent. In addition, the proposals incentivise the dumping of certain wastes within the existing dumping grounds which are already modified.</p>
<p>Rare and vulnerable ecosystems and the habitats of threatened species:</p>	<p>The proposed classification enables the EPA to impose conditions on a marine dumping consent to mitigate any adverse effects on sensitive environments.</p>
<p>New Zealand's international obligations:</p>	<p>The proposed classifications align with New Zealand's obligations under the London Protocol, which require the dumping of all types of waste, other than those proposed to be classified above, to be prohibited.</p>
<p>Other marine management regimes:</p>	<p>Disposal of wastes from fishing and discharges from shipping is managed under the Fisheries Act 1996 and the Maritime Transport Act 1994 respectively.</p>
<p>The desirability of allowing the public to be heard:</p>	<p>The proposed split between notified and non-notified discretionary classifications is designed to provide for public input on activities that will have significant effects or limit future use of the marine environment. The proposed classifications allow for the public to be heard in relation to types of dumping that are more likely to have greater environmental effects.</p>
<p>Effects of the dumping on human health:</p>	<p>Dumped wastes must be audited to check for toxic components and must be cleaned to a satisfactory level in accordance with the London Protocol. In considering applications, the EPA must consider effects on human health including cumulative effects.</p>

<p>Alternative methods of disposal, or opportunities to reuse, recycle or treat waste</p>	<p>The requirement for a marine dumping consent to dump waste enables the EPA to consider whether other options, such as removal or recycling, would be more appropriate.</p> <p>The publicly notified discretionary classification for dumping structures in relation to mineral production activities provides an incentive for operators to remove structures, or plan for their disposal before they begin their production operation.</p>
<p>Any other relevant matter:</p>	<p>The current regime under the MTA requires that operators obtain a dumping permit from Maritime NZ. Part 180 of the Marine Protection Rules provides for national public notification of applications with the ability for interested parties to make submissions. However, notification is not required if the Director of Maritime NZ considers the application will have a minor adverse effect on the marine environment. It is considered that the proposed distinction between the non-notified discretionary and discretionary classifications approximates the approach taken under the existing regime.</p> <p>Some submissions from the consultation noted the need to ensure the right incentives are set up for dumping and removal of structures, bearing in mind the adverse effects that both dumping and removal can have on existing users and the environment.</p>

Assessment of the non-notified discretionary classification

In recommending an activity be classified as non-notified discretionary the test in section 29D must be satisfied (see page 12).

As required by section 29D(2)(a), this dumping of the following wastes is considered to have a low probability of significant adverse effects on the environment or existing interests.

1. fish waste, or organic material resulting from industrial fish processing operations
2. sewage sludge
3. organic material of natural origin
4. dredged material dumped within authorised dumping grounds vessels dumped within authorised dumping grounds
5. structures abandoned following mineral exploration.
6. structures abandoned following marine scientific reserach

This is because the first three items are organic in nature and as such will dissipate over time so as to not have long-term effects on future use of the dumping site. The waste audit, which the EPA will undertake in assessing applications, is intended to identify toxic constituents and prevent them from being dumped.

The authorised dumping grounds were used historically for dumping explosives and are already modified. In addition, trawling and anchoring cannot take place at these locations, meaning that the dumping of dredged material and vessels will not have adverse effects on existing interests.

The abandonment of structures following mineral exploration may include items such as anchors or other arrays and due to their relatively small size would not have significant effects. Also, once an anchor is in place its removal may cause more disturbance than its abandonment.

Dumping of marine scientific research equipment, being very minor in scale and infrequent, will have negligible effects on the environment or existing interests. Abandoning structures used for marine scientific research is part of wider marine scientific research activities, which are otherwise permitted under the Exclusive Economic Zone and Continental Shelf (Environmental Effects—Permitted Activities) Regulations 2013. A non-notified discretionary classification exceeds New Zealand’s international obligations under the London Protocol, which specifically excludes such equipment from regulatory requirements.

More generally, the effects on the environment will be managed through the EPA’s ability to thoroughly assess effects on a case-by-case basis, and to impose appropriate conditions on marine dumping consents, if granted. The dumping of waste meets the test under section 29D(2)(b), as this section provides for an activity to be classified as non-notified discretionary if it is a dumping activity.

Lastly, dumping is a discrete and planned activity meaning that uncontrolled quantities of disposal would not occur.

Table 15: Discharges down well

Description of the activity:	This refers to discharges of harmful substances that are discharged down a well into a geological formation. This may include production water or drill cuttings that are injected as a way of disposing of the waste without needing to discharge them at sea. It may also include discharges associated with maintaining a well.
Classification:	This activity is classified as permitted .
Reasons for the classification, and matters considered under section 34A of the EEZ Act	
Effects on the environment or existing interests:	<p>These discharges will be contained within the reservoir and will have less than minor adverse effects on the marine environment or existing interests.</p> <p>However, if the production of oil and gas is occurring while the down-well discharge is made the injected material may be extracted. If a subsequent discharge is made at sea the extracted elements may be discharged as well.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>This activity will occur as a result of a broader activity (namely, oil or gas drilling) which will have its own effects on the environment and existing interests.</p> <p>Because the discharge is made into a geological formation and not into the marine environment its effects on other activities are less than minor. As such, the effects will not be cumulative to the effects of other activities such as commercial fishing, shipping, seabed mining and seismic surveying.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	Because this discharge is made into a geological formation and not into the marine environment it will not have adverse effects on the biological diversity.
Rare and vulnerable ecosystems and the habitats of threatened species:	Because this discharge is made into a geological formation and not into the marine environment it will not have adverse effects on the biological diversity.
New Zealand's international obligations:	New Zealand has international obligations under UNCLOS and the Noumea Convention, to take measures to prevent, reduce and control pollution of the marine environment. This includes a requirement to minimise pollution from installations and devices used in exploration or exploitation of natural resources. New Zealand also has obligations under the Noumea Convention to endeavour to ensure sound environmental management and development of natural resources and where a "major project" is occurring to invite public comment where appropriate. Under the CBD, New Zealand has obligations to provide for environmental impact assessments of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimising such effects, and where appropriate, to allow for public participation in such procedures. However, New Zealand does not have any specific international obligations relating to the amounts or concentrations of this particular type of discharge, or the specific operational conditions under which it can be discharged.
Other marine management regimes:	The oil and gas industry in New Zealand has to meet a number of regulatory requirements before operations can begin..
The desirability of allowing the public to be heard:	Any regulatory requirements should be proportionate to the effect of the activity. As the discharges have a minor or less than minor effect on the marine environment and existing interests, public consultation is not desirable.
Effects of the discharge on human health:	Because the discharge is made into a geological formation and not into a human environment or an environment from which seafood etc is sourced its effects on human health will be less than minor.
Any other relevant matter:	

Assessment of the permitted classification

In recommending an activity be classified as permitted, the test in section 29A¹⁶ must be satisfied.

The discharge of the harmful substance down well will be contained within the reservoir and is considered not to have more than minor effects on the environment or existing interests. A separate marine consent for this activity would be disproportionate to its effects and would not add to environmental protection.

¹⁶ Section 29A will be inserted into the EEZ Act by the EEZ Amendment Act when it comes into force.

Table 16: Discharges of harmful substances as part of normal operations of grey water and sewage systems on offshore installations a permitted activity

Description of the activity:	This refers to the discharge of harmful substances that are incidental to or derived from the normal operation of domestic waste systems on offshore installations.
Classifications:	This activity is proposed to be classified as permitted , on condition that discharges include only those generated during normal operation of the domestic waste systems.
Reasons for the classification, and matters considered under section 34A of the EEZ Act	
Effects on the environment or existing interests:	<p>Grey water and sewage systems will include some amount of chemical discharge as a result of normal operations of domestic accommodation areas – for example, dishwashing liquids or toilet cleaning products. Some of these substances may have ecotoxic effects. However, during normal operations there will be relatively small quantities of harmful substances discharged, relatively low concentrations, and mixing will occur once discharged into the sea.</p> <p>The effects on the environment and existing interests will be managed appropriately by the draft Regulations setting the condition described above.</p>
Effects of other activities undertaken in the EEZ or on the continental shelf:	<p>This activity will occur as a result of a broader activity (e.g. oil or gas drilling) which will have its own effects on the environment and existing interests; however, these activities are separately accounted for under the proposed Regulations and are subject to regulatory conditions, or require marine consents, which take into account their effects.</p> <p>Other activities such as commercial fishing, shipping, seabed mining and seismic surveying will also have effects that may be cumulative to the effects of discharges through grey water and sewage systems. The condition on these proposed permitted discharges will mitigate any adverse effects. At discretionary levels the EPA will be able to consider the cumulative effects of the discharge.</p>
Biological diversity and integrity of marine species, ecosystems, and processes:	The effect of the activity on the biological diversity and integrity of marine species, ecosystems and processes will be minor or less than minor because of the thresholds and conditions set in the draft Regulations.
Rare and vulnerable ecosystems and the habitats of threatened species:	The effect of the activity on rare and vulnerable ecosystems and the habitats of threatened species will be minor or less than minor because of the thresholds and conditions set in the draft Regulations.
New Zealand's international obligations:	The proposed regulations align with the intent of New Zealand's obligations under the International Convention for the Prevention of Pollution from Ships (MARPOL). They also align with obligations under the Noumea Convention for the public to be able to comment on any major projects, as these discharges are considered to be less than major.
Other marine management regimes:	The proposed regulation generally aligns with the approach under the Resource Management (Marine Pollution) Regulations 1998, which apply to these discharges within 12 nm.
The desirability of allowing the public to be heard:	It is desirable to allow the public to be heard in relation to large-scale projects that could significantly affect the environment or existing interests. This has been provided for by making discharges with potentially moderate or greater consequences discretionary.
Effects of the discharge on human health:	There are not likely to be any effects on human health from this activity.
Any other relevant matter:	Under the current regime Maritime NZ does not specifically regulate discharges through these systems.

Appendix 2: New Zealand's international obligations

When considering whether the proposed regulations are consistent with New Zealand's international obligations the following have been considered:

UNCLOS: With respect to the protection of the marine environment, UNCLOS reiterates that States have an obligation to protect and preserve the marine environment (Article 192). They also have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment (Article 193). Among the requirements of UNCLOS are duties to take measures necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of life (Article 194(5)), and to take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction and control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto (Article 196 (1)).

With respect to impact assessments and public participation, UNCLOS requires that when States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and publish reports of the results of such assessments (or provide them to the competent international organisations (Articles 205 and 206)). UNCLOS also includes requirements for ongoing monitoring of the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment.

The EEZ Act is aligned with the rights and obligations set by UNCLOS. The EEZ Act allows for use of the resources in the EEZ with due regard to the appropriate protection and preservation of the marine environment. These regulations have been developed within this framework.

Convention on Biological Diversity (CBD): The CBD reiterates that States have the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction (Article 3). The CBD requires States to introduce appropriate procedures requiring environmental impact assessment of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures.

Under the EEZ Act, activities that are likely to have significant adverse effects can only be classified as discretionary (which requires an impact assessment to be made by the applicant and allows for public submission) or prohibited. Activities can only be classified as non-notified discretionary if the activity has a low probability of significant adverse effects. Therefore, the regulations are consistent with the CBD.

MARPOL: New Zealand is party to Annex I, II, III and V of the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (MARPOL). MARPOL Annex I prescribes standards for the prevention of pollution by oil and Annex V sets regulations for the prevention of pollution by garbage. These regulations outline the mandatory thresholds, conditions and reporting requirements. The proposed discharge and dumping regulations under EEZ Act are consistent with the MARPOL regulations.

The London Convention and Protocol: New Zealand is party to the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (the London Convention) and the subsequent 1996 Protocol (the London Protocol). The London Protocol stresses the need to protect the marine environment from all sources of pollution and to promote the sustainable use and conservation of marine resources. Under the London Protocol, dumping of wastes or other matter is prohibited with the exception of those listed in Annex I of the London Protocol.

The London Protocol embodies the precautionary approach to dumping waste at sea. Rather than setting out the wastes that are not allowed to be dumped, the London Protocol defines categories of wastes that may be considered for dumping at sea. All other categories are prohibited from disposal at sea.

The regulations have been drafted in alignment with the London Protocol. Only dumping of wastes stated in the London Protocol will be allowed providing the EPA provides consent. The regulations are consistent with London Protocol requirements in that under the framework of the EEZ Amendment Act, dumping cannot be permitted and will require a marine consent, or will be a prohibited activity.

Noumea Convention: The Noumea Convention requires Parties to, inter alia, take all appropriate measures to prevent, reduce and control pollution of the Convention Area, from any source, and to ensure sound environmental management and development of natural resources, using for this purpose the best practicable means at their disposal, and in accordance with their capabilities (Article 5).

The Noumea Convention requires each Party to, within its capabilities, assess the potential effects of major projects on the marine environment, so that appropriate measures can be taken to prevent any substantial pollution of, or significant and harmful changes within, the Convention Area. Where appropriate, each Party is to invite public comment on such assessments according to its national procedures, and communicate the results of the assessments to the relevant organisation.

There is no definition of “major project” in the Noumea Convention but, in consultation with the Ministry of Foreign Affairs and Trade, officials have concluded that where the environmental effects of a project are minor and the probability of causing pollution is low, then the activity is unlikely to be considered a major project.

Appendix 3: Cost effectiveness

A key consideration has been to ensure the level of regulation is proportionate to the likely level of effects on the environment and existing interests.

The approach of the Marine Protection Rules is focused on assessing discharges on a chemical-by-chemical basis against either international standards or domestic concentration limits rather than assessing whether the likely effects of the discharge on the environment are acceptable.

Under the EEZ Act regime, the EPA can grant 35-year consents (with the ability to alter the consents if necessary) as opposed to Maritime NZ requiring a revised discharge management plan every three years. This represents an increase in regulatory certainty for operators and explains for some of the increased cost.

The information below sets out the likely processes and estimated costs of applications under both the current Marine Protection Rules and the new regulations under the EEZ Act. However, there are some difficulties in comparing the costs of the regimes these include:

- the Marine Protection Rules applications are stand-alone processed by Maritime NZ that cannot be bundled with any other consent processes. This differs fundamentally from the EEZ Act which either permits activities (although dumping cannot be permitted) or requires a marine consent. Applications for marine discharge or dumping consents can be lodged together with an application for the activity to which it relates
- the cost of marine consent applications under the EEZ Act relates to the complexity of the application and the degree of interest in the application. In the case of notified discretionary cases, the cost will depend on the amount and complexity of submissions, whether hearings are held and whether appeals are made.

Examples of costs comparisons between Marine Protection Rules and EEZ Act regime:

- ***Costs of discharge management plans under Part 200 of the Marine Protection Rules***

The initial cost of the discharge components of a DMP to operators (not including oil spill response, which is not being transferred to the EEZ Act) is around \$15,000 every three years (equating to \$165,000 over 35 years - 35 years being the maximum term of a discharge marine consent).

This cost is repeated every three years when the DMP is revised. Operators also face costs related to the preparation of their DMP application every three years. Operators also face costs related to annual auditing of their operations. These can equal a large proportion of the DMP application costs every year.

Costs can also vary depending on the type and scale of activity. All Maritime NZ costs are estimated based on their new staff charge-out rate of \$235/hour. The hourly rate for EPA staff ranges from \$103 to \$140/hour.

A further non-monetary cost is the uncertainty related to requirements to apply for a new DMP at least every three years.

- ***Costs of permitted discharges and marine discharge consents under the EEZ Act regulations***

The EPA's monitoring costs for permitted activities is estimated to range from \$5,000 to \$10,000 per annum. 80% of staff time costs can be cost-recovered from the applicant and 20% will be met by the EPA.

If operators apply for a marine discharge consent at the same time as they apply for a marine consent to which the discharge relates, the EPA expects the marginal costs of the discharge component to be minimal or zero, depending on the quality of the discharge application.

If operators apply for a discharge consent in isolation (which the EPA considers unlikely) the operator would face the costs of a consent application, although this is likely to be at the lower end of the range if the discharge application is delegated to a staff member to decide.

A non-notified discretionary consent is estimated to cost operators between \$100,000 to \$450,000. Costs would only fall in the upper range if a Committee was required to make the decision. A discretionary consent is estimated to cost operators between \$250,000 to \$1,500,000, depending on the scale of the application, the level of public interest and the amount of submissions.

The cost of monitoring compliance with conditions will cost between \$12,000 to \$100,000 per annum, of which 80% can be cost-recovered from the applicant.

- ***Costs of dumping permits under Part 180 of the Marine Protection Rules***

Depending on scale of activity the up-front costs to an operator applying for a permit can be up to \$170,000 (This range is based on applying the new charge-out rate to an historical upper range for processing dumping applications).

- ***Costs of marine dumping consents under the EEZ Act regulations***

A non-notified discretionary consent is estimated to cost operators between \$100,000 and \$450,000. Costs would only fall in the upper range if a Committee was required to make the decision. A discretionary consent is estimated to cost operators between \$250,000 and \$1,500,000, depending on the scale of the application, the level of public interest and the amount of submissions.

The EPA estimates that the cost of an expedited process for a non-notified discretionary consent for marine scientific research equipment will likely cost between \$5,000.00 – \$10,000.00. This does not include the cost to operators.