

Regulatory Impact Statement

Coversheet: National Environmental Standard (NES) for Outdoor Storage of Tyres

Advising agencies	Ministry for the Environment	
Decision sought	Approve policy as the basis for regulations to be drafted.	
Proposing Ministers	Hon David Parker, Minister for the Environment Hon Eugenie Sage, Associate Minister for the Environment	

Summary: Problem and Proposed Approach

Problem Definition
What problem or opportunity does this proposal seek to address? Why is Government intervention required?

The Problem

Approximately four million used car tyres and one million used truck and other tyres are generated annually in New Zealand, and the total number of tyres entering into New Zealand each year is increasing. A large number of end-of-life tyres will end up being stored outdoors as stockpiles due to the lack of markets for these tyres. Storing or stockpiling tyres outdoors poses a risk of harm to the environment, human health and local communities – through the discharge of contaminants, fire risk (a low probability event with significant adverse effects), visual and amenity effects, pests and liability issues.

Why Government intervention is required

There is a very limited market for resource recovery of tyres once they reach the end of their usable life. As a consequence, end-of-life tyres accumulate and there are incentives to dispose of tyres in the cheapest way possible. There is a lack of effective regulation to deal with the outdoor tyre storage of end-of-life tyres and the associated risks. Government intervention is required to introduce nationally consistent rules to address the risks associated with outdoor tyre storage.

Summary of Preferred Option or Conclusion (if no preferred option)
How will the agency’s preferred approach work to bring about the desired change? Why is this the preferred option? Why is it feasible? Is the preferred approach likely to be reflected in the Cabinet paper?

The preferred option is the introduction of a National Environmental Standard (NES) under the Resource Management Act 1991 (RMA) to provide a nationally consistent set of rules to manage the environmental effects of outdoor tyre storage. This is the preferred option

as it will address the issue in a timely, cost-effective, and nationally consistent manner and provides a solution that is commensurate to the issue it seeks to address.

Section B: Summary Impacts: Benefits and costs

Who are the main expected beneficiaries and what is the nature of the expected benefit?

The main beneficiaries are people and communities through a reduction in the adverse effects and risks associated with outdoor storage of tyres (e.g. fire (and the associated pollution into the air and from run-off), discharge through leaching, adverse visual and amenity effects, pests). The tyre industry will benefit from having an environmental standard that will prevent irresponsible collectors from undercutting responsible ones and damaging the reputation of the industry as a whole. The NES will also benefit regional councils by assisting them to undertake compliance monitoring and enforcement action when necessary, and minimise the risk of enforcement action being needed after a tyre fire. These benefits are expected to vary significantly throughout New Zealand and be felt most where outdoor tyre storage is a problem. Benefits have not been monetised in this impact statement.

Where do the costs fall?

The implementation costs would fall primarily on regional councils who will have the responsibility to implement and enforce the NES in accordance with section 44A of the RMA. Resource consent processing and monitoring costs are recoverable and the NES will empower regional councils to charge for monitoring activities that are permitted under the NES (section 43A(8) of the RMA). Compliance costs will primarily fall on tyre collection operations, and other businesses with outdoor tyre storage, to comply with the NES or obtain a resource consent when required.

What are the likely risks and unintended impacts? how significant are they and how will they be minimised or mitigated?

There are no significant risks associated with the preferred option. The main risks relate to inconsistent implementation and enforcement of the NES and unnecessary compliance costs for tyre businesses (e.g. a resource consent requirement when there are no adverse effects, onerous consent conditions).

This will be mitigated through clear implementation guidance for regional councils and specific exemptions in the NES for legitimate businesses and uses of tyres that pose a low risk to the environment (e.g. farm silage tyres). There is also a small risk that outdoor tyre storage below the permitted activity threshold that is not regulated through the NES may result in adverse effects. However, this risk is sufficiently mitigated through a lower permitted activity threshold (20m³) and allowing regional council rules to be more stringent than the NES.

Section C: Evidence certainty and quality assurance

Agency rating of evidence certainty?

Research and surveys of councils have been undertaken to obtain more detailed information on the nature and scale of problems associated with unauthorised outdoor tyre storage. However, there are significant gaps in the information relating to the extent and scale of outdoor tyre storage in New Zealand and the available evidence remains largely anecdotal. The available evidence indicates that the extent of the problem of tyre storage varies across the country. For example, feedback from regional councils in 2019 suggests outdoor tyre storage is a significant issue in some regions (Auckland, Waikato, Bay of Plenty and Canterbury), but is not a significant issue for other regions throughout New Zealand¹. Feedback from submitters in 2017 and 2020 has also confirmed that outdoor tyre storage is an issue in some regions, although the scale of the issue is still not well understood.

To be completed by quality assurers:

Quality Assurance Reviewing Agency:

Ministry for the Environment

Quality Assurance Assessment:

The panel considers that overall, the RIA for the proposed NES “partially meets” the quality assurance (QA) criteria.

Reviewer Comments and Recommendations:

The “partially meets” rating reflects the lack of data and evidence of the extent of adverse effects upon the environment arising from the outdoor storage of end-of-life tyres at the threshold levels proposed by the NES. Specifically, the RIA does not sufficiently articulate how the thresholds in the proposed NES relate to the purpose of regional level rules under the Resource Management Act 1991 (as set out in section 30(1)(c) of the RMA ‘Functions of regional councils under this Act’). In the absence of evidence to support the thresholds in context of the s30(1)(c) functions, we consider that the RIA is unable to achieve a ‘meets’ rating as it is unable to be fully ‘complete’ and ‘convincing’ in relation to the proposed thresholds.

The Ministry’s approach to the analysis is otherwise generally sound, is based on relevant available information, and makes a compelling case for stronger regulation through an NES. We note that the use of regional level rules within the proposed NES will ensure that compliance and enforcement responsibilities will sit primarily with regional councils, who are generally better resourced and have greater capacity and capability for this work than territorial authorities.

¹ 4Sight Consulting (2019), ‘Outdoor tyre storage and the Resource Management Act 1991’ <https://www.mfe.govt.nz/publications/waste/outdoor-tyre-storage-and-resource-management-act-1991>

Impact Statement: National Environmental Standard (NES) for Outdoor Storage of Tyres

Section 1: General information

1.1 Purpose

The Ministry for the Environment is solely responsible for the analysis and advice set out in this Regulatory Impact Statement, except as otherwise explicitly indicated. This analysis and advice has been produced for the purpose of informing Cabinet policy decisions to enable the drafting of the regulations.

1.2 Key Limitations or Constraints on Analysis

Limitations and constraints on the scope of the analysis are as follows:

- **There is limited evidence on extent of problem.** There are significant gaps in the evidence on the extent and scale of outdoor tyre storage and actual impacts this is having on the environment at the national, regional and local level. The available information on outdoor tyre storage remains largely anecdotal. This is despite research undertaken to get more detailed information, including surveys of regional councils. The lack of evidence at the national level can largely be attributed to an absence of proactive compliance monitoring of outdoor tyre storage and reporting at the local level. This is not limited to outdoor tyre storage but symptomatic of inadequate resourcing and low prioritisation of compliance, monitoring and enforcement under the RMA generally. The options identified have focused on addressing gaps in the regulatory framework for outdoor tyre storage based on available evidence and feedback from stakeholders.
- **The scope is limited to outdoor storage of tyres.** This RIS is focused on the activity of storing tyres outdoors, as tyres stored indoors are usually in smaller amounts and do not have the same adverse environmental effects and risks arising from outdoor tyre storage. In particular, tyres stored indoors:
 - Do not pose a risk of leaching as they are separated from the ground (by flooring) and are generally not stored in wet conditions;
 - Have reduced fire risk due to better security and storage methods; and
 - Are generally smaller than outdoor stores, reducing the risk of harm.
- **The scope does not extend to addressing the lack of markets for end-of-life tyre.** The lack of a market for used tyres is identified as the key cause of the problems associated with outdoor tyre storage. However, as discussed further below, there are a number of Government interventions to address this problem. These initiatives are likely to complement the proposed NES, but it is too early to

determine their success. Accordingly, the scope of this analysis does not extend to increasing markets for end-of-life tyres.

1.3 Responsible Manager (signature and date):

Approved electronically on 26 June 2020

Glenn Wigley
Director, - Waste and Resource Efficiency
Ministry for the Environment

26 June 2020

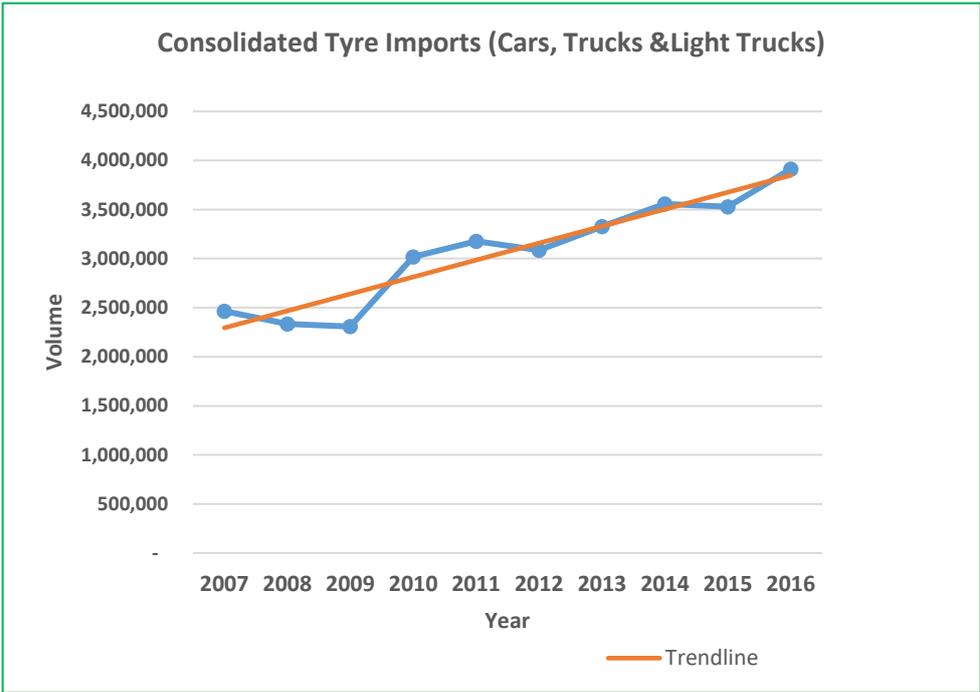
Section 2: Problem definition and objectives

2.1 What is the current state within which action is proposed?

Tyre generation, storage and markets

In 2016, approximately 4 million car, truck and light truck tyres were imported into New Zealand. The trend is an increasing one, as shown in Table One below.

Table One: Consolidated Tyre Imports (based on Customs data)



Tyres are characterised as being new, retread and end-of-life tyres (ELTs) or waste tyres. ELTs or waste tyres are used tyres that are not or cannot be reused for their originally-intended purpose, and are not retreaded. The term ELT refers to all air-filled tyres for cars, motorcycles, trucks, buses, off-road vehicles, aircraft etc., and certain solid tyres such as forklift tyres. In New Zealand, truck tyres and larger tyres are retreaded (it is not currently commercially economic to retread car tyres). Some large, industry-specific tyres are retreaded several times.

End-of-life tyres come from:

- Retail tyre shops and garages when new tyres are put on vehicles
- Auto dismantlers
- Non-standard tyres on imported cars (unsuitable for New Zealand)
- Retreaders and large vehicle companies, when the tyres can no longer be retreaded (some types are retreaded several times)
- Farmers with silage tyres that have become surplus to requirements.

We do not have clear data on where all the tyres go when they reach their end of life. Research in 2015 estimated that around 70% of ELTs in New Zealand go to landfill, stockpiles or illegal dumping, or are otherwise unaccounted for². Since then, there have been changes to the waste tyre market, primarily an increase in overseas demand for

waste tyres for energy recovery. This market fluctuates according to the price of other fuels and evolving environmental regulations in importing countries (such as India).

Businesses that may need to store quantities of ELTs outside are tyre retail stores, transporters/distributors, auto-dismantlers, retreaders, collectors, exporters, processors and recyclers, large vehicle operators, and farmers. Responsible management involves fire prevention and management measures such as security (fencing), an impermeable surface, a run-off management system and spacing of tyre piles.

Large truck and heavy machinery tyres (new, retread and ELTs) are stored outdoors because it is not practical to store them indoors.

Examples of inappropriately stored tyres may be found on permeable soil, in gullies, close to vegetation or water bodies.

Demand for tyres in New Zealand will continue to increase, as tyres continue to be required for a growing New Zealand vehicle fleet (NZTA).

Currently, when a new tyre is purchased in New Zealand the price typically includes a disposal fee (this is a private arrangement). The fee is then used to pay for someone to collect the end-of-life tyres. However, there is no specific obligation for the tyre disposal to occur in an environmentally sound manner to avoid or mitigate adverse environmental effects². Consequently, responsible waste tyre collectors are being under-cut by collectors who dispose of tyres in the cheapest way possible. This has led to end-of-life tyres being disposed of in non-levied landfills, stockpiled or illegally disposed of. Feedback from regional councils through a survey conducted in 2019 indicated that unauthorised tyre piles are a significant concern in four regions of New Zealand (Auckland, Waikato, Bay of Plenty, Canterbury), although they were not able to provide accurate data on the scale of the problem.³

² Environmentally sound uses and disposal of ELTs includes re-use (eg as buffers or weights), crumbing and recycling, energy recovery (pyrolysis). Tyre material can also be landfilled or monofilled (although this is not an ideal outcome it is sometimes necessary if the tyres are contaminated).

³ 4Sight Consulting (2019), 'Outdoor tyre storage and the Resource Management Act 1991'
<https://www.mfe.govt.nz/publications/waste/outdoor-tyre-storage-and-resource-management-act-1991>

2.2 What regulatory system(s) are already in place?

Resource Management Act 1991

There are no national regulations relating specifically to the environmental effects of outdoor tyres⁴. The rules for outdoor tyre storage are determined by regional councils and territorial authorities (councils) under the Resource Management Act 1991 (RMA). Regional councils and territorial authorities can include rules in their plans that require resource consents for particular activities where the effects of that activity relate to their statutory functions under section 30 and 31 of the RMA. Regional council functions include managing the discharge of contaminants into the environment (land, water, air, coastal marine area) and the control of land for certain purposes (e.g. maintaining water quality). Territorial authorities (city and district councils) have the primary function of managing the effects of land-use, including amenity and visual effects associated with land-use activities.

Although the RMA provides councils with the ability to develop and enforce rules to manage the adverse effects of outdoor tyre storage, there is a lack of specific rules that address this issue⁵. Research has found that district plans often contain general rules relating to outdoor storage to manage amenity effects in certain zones, but these are generally not used to address issues associated with outdoor tyre storage. Regional plans also do not specifically address outdoor tyre storage. The exact reasons for the lack of rules in council plans relating to outdoor storage remain unclear, although resourcing, competing priorities, and variability in nature and scale of the issues are all likely to be contributing factors.

Feedback from regional councils indicates they often rely on the general enforcement provisions in the RMA (e.g. section 15 and 17) to deal with this issue. However, reliance on the general enforcement provisions in the RMA presents challenges because of the need to obtain evidence and the practical difficulties involved in this. For example, section 17(3) of the RMA requires councils to demonstrate that the storage of the tyres is likely to be noxious, dangerous, offensive or objectionable to such an extent that it has or is likely to have an adverse effect on the environment, which can be difficult to demonstrate in practice. Feedback from some councils indicates that they have not been able to rely on the general enforcement provisions in the RMA to deal with outdoor tyre storage in some cases and this has resulted in costly, unsuccessful enforcement action⁶. Anecdotally, some enforcement actions have simply resulted in tyres being shifted to another part of the country.

The overall absence of specific rules on outdoor storage of tyres throughout New Zealand and council feedback indicates it can be difficult to effectively and efficiently manage this issue under the existing RMA framework. This problem, combined with resourcing constraints and competing priorities for councils, means there is often a tendency not to

⁴ In 2004, MfE produced a guide to enforcement action under the RMA to deal with unauthorised tyre storage, dumping and disposal of end-of-life tyres: <https://www.mfe.govt.nz/sites/default/files/tyre-storage-enforcement-action.pdf>

⁵ Councils that currently have rules for ELT businesses or tyre storage are Auckland Council, Hastings District Council and Napier District Council.

⁶ 4Sight Consulting (2019), 'Outdoor tyre storage and the Resource Management Act 1991' <https://www.mfe.govt.nz/publications/waste/outdoor-tyre-storage-and-resource-management-act-1991>

proactively monitor outdoor storage of tyres and not to intervene when necessary to manage the adverse effects associated with this storage.

Waste Minimisation Act 2008

The Waste Minimisation Act 2008 (WMA) does not contain a provision to enable central government regulation of the storage of tyres. However, it does enable local government to make bylaws for the purposes of regulating waste. Waste bylaws have tended to be designed to regulate recycling operations rather than outdoor storage.

Other legislation

There are a number of pieces of legislation that can be relevant to tyres in certain situations, as outlined below:

- RMA plan rules may be used to control the landfilling or burying of tyres.
- The RMA National Planning Standard defines clean fills such that a tyre may not be put in a clean fill.
- Under the National Environment Standard for Air Quality, it is illegal to set fire to a tyre.
- Under the Litter Act 1979, it is illegal to litter or dump rubbish, including tyres, on public property or on private property without the property owner's consent.
- The Fire and Emergency Act (section 65) can be used where there is a risk of fire. This section is useful in situations where there is evidence of fires being lit in a tyre pile previously.
- Under section 145 and 146 of the Local Government Act 2002, territorial authorities have power to make bylaws for the purposes of protecting health and safety and regulating waste management.
- Under the Health Act 1956 section 64, territorial authorities can make bylaws for preventing the outbreak or spread of disease caused by mosquitoes, rats, or mice. All of these can be harboured in end-of-life tyres that are stored outside.
- The Building Act may be used to control the use of tyres in building structures.

Regulated product stewardship

One of the problems that has led to tyre stockpiles is a lack of end uses for end-of-life tyres. One solution that is common overseas is product stewardship schemes, where the producers and industry across a supply chain take responsibility for managing the environmental impacts of their products. New Zealand does not yet have a product stewardship scheme for tyres but this is set to change.

The Government has recently consulted on the proposal to declare tyres a priority product under the Waste Minimisation Act 2008. If tyres are declared a priority product, this will provide a strong framework for implementing an effective, comprehensive and national-scale regulated product stewardship scheme that would support the objectives of the NES. Cabinet is due to make a decision on this step in June. A scheme for tyres could be accredited by the Minister for the Environment in 2020.

Currently, when a new tyre is purchased in New Zealand the price typically includes a disposal fee (this is a private arrangement). The fee is then used to pay for someone to collect the end-of-life tyres when they accumulate. However, there is no obligation for the tyre disposal to be environmentally sound. A product stewardship scheme with a disposal

fee that is paid when the tyre goes to an environmentally sound end use would encourage responsible operators, and could create an incentive for developing more uses for end-of-life tyres. This would help the owners of stockpiles to find legitimate destinations for excess tyres and to comply with the NES.

The expected outcomes of these two initiatives working together are:

- Safe outdoor storage of tyres
- Steady supply of end-of-life tyres for reuse and recovery
- Demand for end-of-life tyres for reuse and recovery.

There is a risk that if a new regulation is brought in without a concurrent product stewardship scheme for tyres, there may be unintended consequences such as illegal dumping or burying of tyres. A product stewardship scheme would make it easier for those storing tyres to reduce their stores.

Golden Bay Cement

The Government is progressing a number of other initiatives that will complement the proposed NES. Notably, the Waste Minimisation Fund has provided approximately \$15.6m of funding to introduce technology at the Golden Bay Cement plant (in Northland) that will use tyres as a substitute for coal.

The Waste Minimisation Fund grant will help pay for the upgrade of the cement kiln and incorporation of technology to introduce tyre-derived fuel (TDF) into the fuel mix. TDF is used widely in Europe and the United States in cement kilns and is proven as an environmentally sound fuel for the process.

It is expected the new technology will be operational in January/February 2021, ensuring significant ongoing demand for surplus end-of-life tyres across New Zealand.

Summary

There is a range of existing legislation and interventions relating to tyres in New Zealand. This includes regulatory tools through the RMA and by-laws under Local Government Act 2002 (LGA) that are available to councils to address the adverse effects and risks associated with outdoor tyre storage. However, these tools are under-utilised, and anecdotal evidence suggests existing approaches have not been effective and efficient in addressing outdoor tyre storage. There are government interventions underway to improve markets for end-of-life tyres (e.g. through regulated product stewardship) which may help to address the problems associated with outdoor tyre storage. These initiatives are likely to take some time however and do not directly address the storage of tyres.

2.3 What is the policy problem or opportunity?

Outdoor tyre storage can pose risks to the environment, human health and local communities, particularly when stored in large volumes and/or located within or near sensitive receiving environments. The main issues and risks associated with outdoor tyre storage relate to fire, discharge of contaminants, pests, financial liability and visual amenity impacts as set out below.

Fires

Tyre piles create a risk of significant adverse effects from fire. Tyres are not easy to ignite but once this occurs burning tyres can be difficult to extinguish. An individual standard tyre contains about 7.5 litres of fuel (as well as other combustible carbon compounds). A tyre pile can burn for days, weeks or longer depending on the size of the stockpile. The smoke and run-off from tyre fires contains a range of toxic and carcinogenic compounds including dioxins, furans, mercury and lead. These can require evacuation of nearby downwind, residential areas and also contaminate soil and water supplies⁷.

In New Zealand, there has not yet been a tyre fire involving millions of tyres as has been the case overseas. However, there have been significant tyre fires reported in the media in recent summers. This includes a recent tyre fire in Rolleston, Christchurch on 17 May 2020, an arson at a stockpile in rural Amberley, Canterbury, and an accidental tyre fire on a farm in Taranaki. Several years ago, a tyre fire in Hamilton resulted in nearby residents being evacuated and a child being hospitalised.

Leaching

Inappropriate storage of tyres can result in leaching of toxic material into the soil and, occasionally, into groundwater and other water bodies. The concentration of leaching is specific to the storage time and local conditions. The longer a tyre pile is exposed, the more contaminants will be released, particularly in damp conditions. Contaminants that can leach from tyres include cadmium, lead, aluminium, manganese and zinc⁸. Laboratory tests suggest leachate from tyres can be toxic to some fish species (such as rainbow trout), invertebrates and algae⁹.

Pests

Large tyre piles can become a public health risk by creating breeding grounds for mosquito and rodent species, which may spread diseases. Currently, New Zealand has few mosquitoes capable of carrying serious diseases. However, exotic mosquito species capable of carrying serious diseases (like dengue fever) that are known to breed in tyres are discovered near ports reasonably often¹⁰.

Financial liability

Illegal dumping and abandonment of tyre stockpiles can create a large financial liability for removing the tyres and/or cleaning up the site. Removal of illegally dumped tyres can have significant costs for councils and landowners. The costs to remove tyres can range significantly between \$8000 and \$100,000, depending on the amount of tyres and location¹¹.

⁷ Firecone. 2004. *Management of End-Of-Life Tyres*. Wellington.

⁸ Kim, Nick. 2004. *Potential contamination from tires (tyres): PAH leaching update*.

⁹ MWH New Zealand Limited. 2004. *End of Life Tyre Management: Storage Options*. Dunedin.

¹⁰ Firecone. 2004. *Management of End-Of-Life Tyres*. Ministry for the Environment. 2014. *Priority Waste Streams for Product Stewardship Intervention: A discussion document*.

¹¹ Firecone. 2004. *Management of End-Of-Life Tyres*.

Visual and amenity impacts

Large piles of tyres create adverse amenity effects for neighbours and communities in general and can impact on natural visual values.

Underlying cause of the problem

The underlying cause of the problem is a lack of consistent, effective environmental regulation to manage the storage of end-of-life tyres combined with a lack of markets for these tyres. This situation has incentivised some collectors to store and dispose of tyres at the lowest possible cost, for instance by depositing the tyres on leased rural land with a view to recycling or exporting them in the future. In remote areas of New Zealand, there may be only one collection option open to a tyre generator. While there are some initiatives underway to address the lack of end markets, these are likely to take some time. As discussed above, councils have the ability to introduce their own rules to better manage the adverse environmental effects associated with outdoor tyre storage. However, a nationally consistent regulation provides a more cost-effective and certain way to address the problem.

Table 1 below provides a summary of the causes and problems associated with the outdoor storage of tyres.

Table 1: Outdoor tyre storage – causes and problems

Causes	Problems
Market: <ul style="list-style-type: none">Increasing numbers of tyres generated in New ZealandLack of market for end-of-life tyresIncentives to store and dispose of tyres at lowest cost	Increased risk of adverse effects from outdoor storage of tyres to: <ul style="list-style-type: none">EnvironmentHuman healthLocal communities Due to: <ul style="list-style-type: none">Fire riskDischarge through leachingVisual and amenity effectsPests.
Regulatory: <ul style="list-style-type: none">An absence of regional and district rules to manage outdoor storage of tyresNo formal responsibility for tyres from their production to end useVariation in council compliance, monitoring and enforcement of tyre storage and disposal	

Robustness of evidence

As discussed above, there are significant gaps in the evidence on the extent and scale of outdoor tyre storage. This is despite research undertaken to get more detailed information, including surveys of regional councils. Feedback from regional councils indicates that outdoor tyre storage poses a significant issue in four regions (Auckland, Waikato, Bay of Plenty, Canterbury) although the supporting data is largely anecdotal.

2.4 What do stakeholders think about the problem?

The key stakeholders are local authorities who are responsible for managing the environmental effects and risks posed by outdoor storage, and those businesses and operations involved in outdoor tyre storage (tyre sales, retreading, recycling and collecting). There has also been some interest in the problems from district health boards, individuals, Crown entities, and iwi/Māori.

Feedback from stakeholders on the problems has been provided through public consultation in 2017 and 2020 and informal engagement with key stakeholders. While stakeholders have expressed some mixed views, there is general recognition that in appropriate outdoor tyre storage poses risks to the environment and human health and warrants more effective national regulation. This was a key message from submitters on the 2017 NES proposal and feedback from submitters on the 2020 NES proposal confirmed that outdoor tyre storage is still an issue in some regions (although the scale of problem remains poorly understood). Submitters have also highlighted the risks of tyre piles being moved around the country due to different rules in each region and different approaches to undertaking compliance, monitoring and enforcement. In their view, this situation further supports the introduction of nationally consistent regulation.

Stakeholder views on the options to address the identified problems are discussed in Section 3 below.

2.5 What are the objectives sought in relation to the identified problem?

The objectives in relation to the identified problems are to:

- *Ensure the risks of harm to the environment, human health, and local communities from outdoor tyre storage are appropriately managed*
- *Support more consistent management practices across New Zealand, filling gaps in regulatory settings that create perverse incentives to move tyres between regions.*

These objectives are aligned with the purpose of the RMA – to promote the sustainable management of natural and physical resources. These objectives are also appropriate to achieve the purpose of the RMA as they seek to ensure that outdoor tyre storage can be managed in a way that enables people and communities to provide for their social and economic well-being while avoiding and mitigating adverse effects of tyre storage on the environment.

Section 3: Option identification

3.1 What options are available to address the problem?

The identification of options to address the problems dates back to 2017 when the Government consulted on options for national regulation to address outdoor tyre storage. Since that time, there has been further analysis and stakeholder engagement followed by a second round of public consultation on a revised proposal in February 2020. When choosing the options we considered overseas tyre storage regulations, in particular, Basel Convention guidelines and the requirements and guidelines in Australian states, and a recent regulation in Ireland. In Australia, the threshold for obtaining a licence to store tyres varies from between 500 tyres and 5,000.

We also referred to a Fire and Emergency NZ draft guideline for tyre storage (yet to be finalised).

Through this ongoing policy work, the following three options have been identified which are discussed in detail below:

- Option 1 - Status Quo;
- Option 2 - 2017 proposed National Environment Standard (2017 NES); and
- Option 3 - 2020 proposed National Environment Standard (proposed NES).

These three options are mutually exclusive.

Option 1 – Status Quo

The status quo option would involve continuation of the current regulatory framework under the RMA for the outdoor storage of tyres. There would be no national direction under the RMA and regional councils and territorial authorities would continue to manage the adverse effects of the outdoor storage of tyres through plan provisions, the general restrictions and enforcement provisions in the RMA, or via non-regulatory means.

As discussed above, very few councils have developed specific rules to manage outdoor tyre storage. While there are some plans that specifically address outdoor tyre storage¹², this is the exception rather than the norm. In the absence of any national regulations, councils are likely to continue to rely on general outdoor storage rules or the general restrictions and enforcement provisions in the RMA to deal with outdoor storage of tyres. However, the lack of specific rules directly related to the outdoor storage of tyres can create difficulties for councils trying to effectively and efficiently manage this issue and take appropriate enforcement when required.

Based on the available evidence and feedback from councils, the status quo is likely to result in a continued lack of specific provisions in RMA plans to directly deal with the unauthorised storage and disposal of tyres. A lack of specific provisions means that the effectiveness of regulatory approaches will also likely to continue to vary as will the proactiveness and effectiveness of compliance, monitoring and enforcement efforts.

If a regulated product stewardship scheme starts, as expected, this will support good tyre collection practices. However, participation in a scheme may not be required for all

¹² Hastings District Plan and Napier District Plan are the only known examples of plans with rules specifically targeted at outdoor storage of tyres. The Auckland Unitary Plan contains rules for the recycling, recovering, reuse or disposal of tyres in the industrial and trade activities section of the plan (E33).

generators of waste tyres (for instance auto-dismantlers). Furthermore, legacy stockpiles would continue to be an issue. An NES would enable the costs of clearing stockpiles to fall on the responsible business and/or landowner through the enforcement action. A tyre stewardship scheme may be able to create a pool of funds to help clear up abandoned or dumped tyre piles (depending on the design of the scheme), but the costs would fall on consumers of new tyres, and the fund would need to have strict criteria to avoid creating an adverse incentive to abandon tyres.

Option 2: 2017 NES

In 2017, the Government consulted on a proposed National Environment Standard for Outdoor Tyre Storage. National Environment Standards are regulations prepared under Part 5 of the RMA. An NES can provide certainty and consistency by setting out national requirements and conditions for particular activities (e.g. land use, water take, discharges). An NES takes effect without the need for council plan changes and prevails over regional and district plan rules, except where the NES expressly states that plan rules can be more stringent or lenient.

The key features of the 2017 NES are as follows:

- Territorial authorities would be responsible for implementation and enforcement
- Tyre storage of 200m³ and above would require a resource consent for a discretionary activity
- No controls on tyre storage under 200m³.
- Plan rules could be more stringent
- It would not apply to existing tyre piles where these can meet the tests for existing use rights under section 10 of the RMA (including being lawfully established when the NES comes into force).

Feedback from stakeholders on the 2017 NES was broadly supportive of the introduction of an NES in principle, although submitters expressed mixed views on specific aspects of the proposal. For example, a large number of submitters considered the 200m³ threshold to be too high and that more stringent requirements were needed for sensitive environments. There was also some concern that the 2017 NES could have the unintended consequence of permitting tyre storage up to the 200m³ threshold. Another issue raised was that the consultation document stated the NES would not impact on existing stockpiles due to existing use rights.

Option 3: Proposed NES

The proposed NES builds on the 2017 NES following further consideration of submissions, research and analysis of different options to address the problem. Public consultation on the proposed NES was undertaken from 25 February to 8 April 2020 and feedback from submitters led to further refinements of the proposal. A summary of submissions and detailed analysis can be found in the report on submissions and recommended amendments prepared by the Ministry for the Environment (as required under section 46A(4)(c) of the RMA)¹³

The key features of the proposed NES (compared to the 2017 NES) are as follows:

- Regional councils would be responsible for implementation and enforcement

¹³ Link to report

- Tyre storage of 100m³ and above would require a resource consent for a discretionary activity
- Introduction of permitted activity rule and conditions for tyre storage of 20m³
- Ability for regional councils to make more stringent plan rules
- Two exemptions from the discretionary activity rule (but not the permitted activity rule and conditions):
 - New and retreaded tyres and tyre casings stored on sites where the primary business is the supply and service of new and retread tyres;
 - Farm silage tyres stored immediately adjacent to areas and pits used regularly for silage production and storage, in quantities no larger than needed to cover the silage in a single layer.

The proposed NES also clarified and confirmed a number of aspects of the proposal, including:

- The volume thresholds apply per site rather than per tyre pile
- It applies to tyres stored in all states – whole, chipped or shredded, baled
- It does not apply to tyres stored indoors
- It does not apply to tyres being re-used for specific purposes (eg as buffers in equestrian areas and raceways).
- Territorial authorities will still be able to address amenity and visual effects that are not addressed in the NES in accordance with section 43A(5)(b) of the RMA¹⁴.

Feedback from submitters on these aspects of the proposal are discussed in detail in the report on submissions (section 46A(4)(c) report). While there were some mixed views in submissions, the majority of submitters continued to support the general intent of NES to provide a clear, nationally consistent regulatory framework to manage the adverse effects of outdoor tyre storage. Submitters were also broadly supportive of the changes in the proposed NES (compared to the 2017 NES) as follows:

- **Regional council responsibility** – 73% of submitters supported this change primarily on the basis that the NES is better aligned with regional council RMA functions.
- **Discretionary consent threshold** – 58% of submitters supported a smaller threshold of 100m³; 16% of submitters supported a larger threshold of 200m³ or 360m³ (a further 26% of submitters were neutral).
- **Permitted activity rule** – 83% of submitters supported the introduction of the permitted activity rule, although there were a number of issues raised with the clarity and robustness of the permitted activity conditions.

Other issues raised in submissions include concerns about the impact of the proposed NES on certain businesses, and potential implementation issues

¹⁴ Section 43A(5)(b) enables plan rules to deal with effects of an activity that are different from those addressed in a NES.

associated with the volume thresholds and permitted activity conditions. This has led to some changes to the proposal, including a lower permitted activity rule threshold, refinements to the permitted activity conditions, and exemptions to the discretionary activity rule.

3.2 What criteria, in addition to monetary costs and benefits have been used to assess the likely impacts of the options under consideration?

The criteria that have been used to assess the options are:

- **Effectiveness (key criterion)** – will ensure the risks of adverse effects to the environment and communities from outdoor storage of tyres are appropriately managed;
- **Consistency** – will ensure outdoor storage of tyres is consistently managed across New Zealand;
- **Level of direction** - provides clear direction to assist responsible regulator address the identified issue and to carry out their statutory functions;
- **Acceptability** - is consistent with stakeholder outcomes, has an acceptable level of uncertainty and risk, and will not result in unjustifiably high costs; and
- **Feasibility** – is able to be achieved within the powers, skills and resources of responsible regulator.

Within these criteria there are inevitably a number of trade-offs to consider. For example, one option may be highly effective to manage the risks of adverse effects (effectiveness) but this may impose undue compliance costs on councils and businesses (acceptability).

3.3 What other options have been ruled out of scope, or not considered, and why?

This impact statement has not given further consideration to other national direction instruments under the RMA, such as a national policy statement or through the National Planning Standards. Since 2017, an NES has been identified by the Government and stakeholders as the preferred regulatory option. An NES is considered the most suitable instrument to address the identified problem as it can be implemented in a timely, cost-effective, and nationally consistent manner and allows for a relatively simple regulatory solution that commensurate with the problem it seeks to address.

A non-regulatory option was also not given further consideration as a standalone option. Non-statutory guidance has already been published by the Ministry in 2004¹⁵ and by a local government group in 2017 '*Guidance for the Storage and Stockpiling of End of Life*

¹⁵ Ministry for the Environment (2004), *Enforcement Action under the Resource Management Act 1991 to Deal with Unauthorised Storage, Dumping and Disposal of End-of-Life Tyres*, refer: <https://www.mfe.govt.nz/sites/default/files/tyre-storage-enforcement-action.pdf>

*Tyres for Local Government*¹⁶. The 2017 guidance was prepared in response to the current absence of national regulation on storage of tyres and to help address the risks tyre storage and disposal present to the environment and communities. However, this guideline was envisaged as an interim solution until more specific national regulation is introduced to provide a long-term sustainable solution.

As discussed further below, non-statutory guidance is also proposed to support either NES option to assist with interpretation and ensure effective implementation.

Following the change of Government in 2017 and the Coalition Agreement to establish a tyre stewardship fund, the Ministry for the Environment provided advice on the best way to address the waste tyre problem in New Zealand. The Ministry advised that an environmental regulation was still needed and that an NES was the best available tool to do this. The Ministry also recommended developing policy for a potential regulated product stewardship for tyres.

¹⁶ Waikato Regional Council (2017), refer: <https://www.waikatoregion.govt.nz/assets/WRC/Services/regional-services/Waste-hazardous-substances/Solid-waste/tyres/5629-End-of-life-tyres-guideline-doc-WR.pdf>

Section 4: Impact Analysis

Marginal impact: How does each of the options identified in section 3.1 compare with taking no action under each of the criteria set out in section 3.2? *Add or subtract columns and rows as necessary.*

	Option 1: Status Quo	Option 2: 2017 NES	Option 3: Proposed NES
Effectiveness	0	+ Enables adverse effects of larger volumes of outdoor tyre storage to be more readily addressed through conditions and enforcement	++ Addresses adverse effects of smaller volumes of tyre storage located in sensitive areas, enables adverse effects of larger volumes of outdoor tyre storage to be more readily addressed
Consistency	0	+ Nationally consistent regulation of large volumes of outdoor tyres storage	++ Nationally consistent regulation of small and large volumes of outdoor tyre storage
Level of direction	0	0 Discretionary rule provides limited direction, would need supporting guidance	+ Provides consistent conditions for smaller tyre storage, discretionary rule and exemptions provide limited direction and need supporting guidance
Acceptability	0	+ A straightforward regulatory solution with limited uncertainty and risk	+ A relatively straightforward regulatory solution with limited uncertainty and risk, although permitted rule and conditions increase complexity
Feasibility		+ A straightforward rule for territorial authorities to implement and enforce	+ Regional councils have more capability to implement and enforce the NES, although permitted activity conditions will require more proactive monitoring
Overall assessment		+ Better than status quo	+ Better than status quo

Key:

- ++** much better than doing nothing/the status quo
- +** better than doing nothing/the status quo
- 0** about the same as doing nothing/the status quo
- worse than doing nothing/the status quo
- much worse than doing nothing/the status quo

Section 5: Conclusions

5.1 What option, or combination of options is likely to best address the problem, meet the policy objectives and deliver the highest net benefits?

Option 3 – proposed NES is the preferred option for the following reasons:

- It addresses a gap in the regulatory framework for tyres through a nationally consistent regulation to manage outdoor tyre storage above 20m³, which is more cost-effective than councils developing their own rules
- It provides a more targeted approach than the 2017 NES and will be more effective to manage the adverse effects and risks of small and large volumes of tyres
- The reduced threshold for the discretionary activity ensures that regional council actions can be focused on non-compliant tyre piles before they become unmanageable
- The exemptions make the NES targeted to end-of-life tyres and reduce unnecessary compliance costs
- The change of responsibility to regional councils:
 - Aligns with regional council RMA functions to manage discharge of contaminants and control land use for the purposes of water quality
 - Will ensure legacy stockpiles are subject to the NES
 - Will also help ensure that the regulator has the capability and capacity to implement and enforce the NES
- It provides a relatively straightforward regulatory solution that is commensurate with the problem it seeks to address.

The main point of disagreement was the threshold. Submitters opposed to a reduced threshold for consent argued that the increased costs and administration would not outweigh the environmental gain, and that the stockpiles that have caused problems in New Zealand have been far above the 200m³ threshold. We acknowledge that the lower threshold will make it more likely that some businesses that may already be managing risks may need to obtain a resource consent or adapt their business to remain under the threshold volume (for instance by arranging more frequent transportation of tyres to or from their site). However, we think this would affect low numbers, since the most affected industry group, tyre collectors, would likely be above the 200m³ threshold already.

In response to concerns by businesses that have large, industry-specific tyres on-site, we have recommended an exemption for these tyres from the maximum height requirement. The recommended exemption for retreading sites will indirectly reduce costs for industries that use large retread tyres.

The cost of compliance with a resource consent is a concern for industry. We intend publishing implementation guidance alongside the NES so that industry and council stakeholders can see what sorts of conditions may be recommended to address effects and which ones would not be (for instance, soil tests would not be necessary).

Of the tyre processing and recycling businesses, some of these would already have a resource consent (eg discharge or land use consent). If the storage of tyres is expressly authorised through the resource consent(s) as part of the overall activity, then the business would not need to get a consent under the NES until such time as that consent(s) expires.

The number of tyre collectors, processors and end-of-life tyre recyclers in New Zealand is estimated to be no more than 77. There are an estimated 800 dedicated tyre retailers in NZ along with about 1100 mechanical repair, auto shops and tyre related service bays that have revenue heavily derived from tyre sales and servicing.

5.2 Summary table of costs and benefits of the preferred approach

Affected parties (identify)	Comment: nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks	Impact \$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts	Evidence certainty (High, medium or low)
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Additional costs of proposed approach compared to taking no action

Regulated parties	<p>End of life tyre collector, recycler or processor</p> <p>Will likely require discretionary activity resource consent. Costs to comply with consent conditions imposed by councils.</p> <p>Actual number of consents required is unknown</p>	<p>Medium</p> <p>Council consent processing fee approx. \$1,200 - \$3,800¹⁷. Potentially costs to comply with conditions of consent.</p>	Low
	<p>Tyre retailers and retreaders</p> <p>Costs to comply with permitted activity conditions. These costs are expected to be low overall as existing business are generally expected to be located away from sensitive areas.</p> <p>Limited resource consent costs due to exemption for new and retread tyres from the discretionary rule.</p>	Low	Low

¹⁷ Ministry for the Environment (2020), 'Trends in Resource Management Act implementation: National Monitoring System 2014/15 to 2018/19', Wellington.

	<p>Farmers</p> <p>Costs to comply with permitted activity conditions. Likely to be limited as conditions are largely consistent with existing silage rules in regional plans and good practice.</p> <p>Limited resource consent costs due to exemption for farm silage tyres.</p>	Low	Low
Regulators	<p>Regional council</p> <p>Ongoing responsibility to observe and enforce the NES. This will include processing resource consent applications, compliance monitoring and enforcement action where necessary. Consent processing and monitoring costs are recoverable from applicant. The NES will also empower councils to charge for monitoring activities that are permitted under NES.</p> <p>The exact number of consents required under the NES is expected to be low and primarily limited to the four regions where tyre storage is an issue. Similarly, the frequency of compliance monitoring required under NES is expected to be limited and focused on known tyre piles.</p> <p>Regional councils have one-off costs to remove plan rules that duplicate or conflict with NES, but this will be very limited given lack of specific rules on tyre storage.</p>	Low	Low
Wider government	<p>Central government</p> <p>One-off costs to develop implementation guidance (approx. \$30k).</p> <p>Ongoing costs to monitor the implementation and effectiveness of the proposed NES through</p>	Low	Medium

	informal engagement with councils and industry representatives.		
Other parties			
Total Monetised Cost	N/A	N/A	N/A
Non-monetised costs		Low	Low

Expected benefits of proposed approach compared to taking no action

Regulated parties	<p>Accessible, consistent, and easily understood rules enable greater operational certainty for regulated parties. The proposed NES will allow them to predict compliance costs and prevent non-complaint behaviours that would result in liability and unbudgeted penalties.</p> <p>Better regulation will diminish the risk of fire and discharges of contaminants which might affect property owned or used by regulated parties</p>		
Regulators	<p>Regional councils</p> <p>NES will enable more efficient and effective monitoring and enforcement of outdoor tyre storage compared to relying on general restrictions in the RMA.</p> <p>Greater consistency in the management of outdoor tyre storage.</p> <p>Reduced risk of cost of cleaning up abandoned stockpiles.</p>	Low	Low
Wider government	<p>Territorial authorities</p> <p>Will benefit from greater consistency in the management of outdoor tyre storage and reduction in the need to monitor and intervene in outdoor tyre storage.</p>		

Wider government	Central government Greater consistency in the management of outdoor tyre storage.	Low	Low
Other parties	Community at-large Reduced risks to the community of fire, discharge through leaching, adverse visual and amenity effects, and pests from the outdoor storage of tyres.	Low	Low
Total Monetised Benefit	N/A	N/A	N/A
Non-monetised benefits		Low	Low

5.3 What other impacts is this approach likely to have?

Affected parties will want to see if they can manage their end-of-life tyres in a way that avoids having to seek a resource consent. Some businesses may be able to make changes such that they can keep the volume of tyres on site within the threshold. If they require a resource consent, there is no limit to the quantity of tyres that can be stored so long as the conditions of the resource consent are met, which may address either fire risk or leachate risk. Businesses that have a regular turnover of tyres will not need conditions to address leachates (there will be implementation guidance on this).

Some tyre shops may be in scope of the 20m³ threshold for permitted activity conditions, especially those in remote areas where a collection service may be less frequent. The average car-only tyre shop in New Zealand is estimated to have 15.5m³ of outdoor tyre storage. If tyre shops are unable to meet the conditions they will need to seek a resource consent. We expect the majority will be compliant without needing to make any changes.

People with large stockpiles in uncontrolled settings will likely look to remove tyres from their site. Some tyres, particularly contaminated ones, may need to be put in a landfill and while this is not ideal it is a legitimate disposal option.

Others may divert tyres to indoor warehouses. Buildings storing tyres should have a sprinkler system, but there have been cases where tyres have been stored inappropriately and caused a problem.

There is a risk that excess tyres may be disposed of unlawfully by being dumped, buried or end up in farm dumps. To avoid these outcomes, affected parties will need to be given sufficient time to find alternative disposal options, and there will need to be a feasible disposal option available. When the Golden Bay Cement plant starts using end-of-life tyres, this will increase the demand for end-of-life tyres in the North Island. In the

South Island, the main option currently is the export of tyre-derived-fuel. When regulated tyre stewardship takes effect, this will be incentivise new options for end-of-life tyres.

Section 6: Implementation and operation

6.1 How will the new arrangements work in practice?

The proposed NES would be implemented by regional councils in accordance with the RMA. Section 44A of the RMA requires councils to observe (i.e. implement) NESs within their functions and enforce that observation to the extent that their powers enable them to do so. In practice, this will require regional councils to process resource consents required under the proposed NES, and undertake compliance monitoring and enforcement action as necessary to ensure compliance with the NES. Under section 44A of the RMA, councils are also required to remove rules in their plan that duplicate or conflict with a provision in the NES, although such changes are expected to be limited given the lack of regional plan rules specifically dealing with outdoor tyre storage.

Once approved by the Executive Council, the regulations (proposed NES) will be printed, published and notified in the *New Zealand Gazette*. There would then be a three-month period before the NES comes into force and prevails over regional plan rules. This will allow time for businesses with tyre storage to comply with the NES or prepare a resource consent application. Section 20A of the RMA also provides limited existing use rights for business that will require a resource consent under the NES (as a regional rule). Effectively, they will have six months after the NES comes into force to apply for resource consent. This further minimises the potential impacts on business and helps them transition to the NES regime.

Implementation guidance will be prepared and published alongside the NES before it comes into force. This will provide guidance to councils on how to implement and enforce the NES, including cost-effective approaches to compliance monitoring and appropriate consent conditions to manage site-specific risks. Ministry for the Environment will involve other key stakeholders in the preparation of the implementation guidance to ensure it is fit-for-purpose, including regional councils and Fire and Emergency New Zealand.

6.2 What are the implementation risks?

There are no significant implementation risks associated with the preferred option. The main risks relate to inconsistent implementation and enforcement of the NES and undue compliance costs for legitimate tyre businesses (e.g. resource consent costs, onerous consent conditions). This will be mitigated through clear implementation guidance and specific exemptions in the proposed NES for legitimate businesses and uses of tyres (e.g. farm silage tyres). Feedback through consultation did not identify any significant implementation risks and confirmed that regional councils have the capabilities to implement and enforce the proposed NES.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

The impacts of the proposed NES will be monitored through the National Monitoring System (NMS) for the RMA. The NMS collects information from councils on RMA implementation across their planning, consenting and enforcement functions. This will help to identify any council plan changes to recognise the proposed NES in accordance with section 44A of the RMA (although this is expected to be limited), resource consents required under the NES, and formal enforcement under the NES. A qualitative research programme may also be undertaken to understand the implementation of the NES in more detail.

Section 24(f) of the RMA requires the Minister for the Environment to monitor national direction. The Ministry for the Environment will monitor the implementation and effectiveness of the proposed NES through informal engagement with councils and industry representatives. A formal evaluation could be done as part of a wider evaluation including the impact of regulated product stewardship.

7.2 When and how will the new arrangements be reviewed?

No formal review of the proposed NES is planned. However, as noted above, data on the implementation of the proposed NES will be collected through the NMS and informal engagement with stakeholders. If this monitoring identifies that the proposed NES is not achieving the desired outcomes a formal review will be initiated.