

SM012 State Highway Control Manual

Part 8 - Consolidated Environmental Sections

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Guidelines for State Highways within or adjacent to National Parks, Reserves and Conservation Areas

Purpose

This guideline has been prepared by the New Zealand Transport Agency (NZTA) and Department of Conservation (DOC) to ensure both agencies' statutory objectives are met when planning, constructing, and maintaining state highways within or adjoining national parks, reserves and conservation areas.

The guideline attempts to prevent any potential for conflict between the efficient operation of the State highway network and potential detrimental effects on national parks, reserves and conservation areas managed by DOC.

Other documents

Any State highway work within or adjoining national parks must address the General Policy for National Parks (2005) and the relevant National Park Management Plan (NPMP). State highway work within any reserves or conservation areas must address the Conservation General Policy (2005) and any relevant conservation management strategy (CMS) and conservation management plan (CMP).

The State Highway Asset Management Plan, Planning Policy Manual, Environmental Plan and Corridor Management Plans (where applicable) must also be addressed.

In this Section

In the sections below the following topics are covered:

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State Highway Proposals Affecting National Parks, Reserves and Conservation Areas

Early engagement

For any work within, through or adjoining a national park, reserve or conservation area (collectively, public conservation lands) early discussion or ongoing consultation and involvement in decision-making is required between NZTA and DOC.

Planning

When planning new State highway works (whether construction, improvement or maintenance), both agencies should work together to ensure statutory objectives are met. The objectives of each agency are outlined in the NZTA/DOC Memorandum of Understanding (see section 5.5.1-5.5.3 of the MOU).

To ensure a partnership approach is maintained, there should be early consultation on any proposed works between both parties. This is to ensure the planned State highway development or improvement is consistent with the:

- Resource Management Act 1991;
- Land Transport Management Act 2003;
- Government Roothing Powers Act 1989;
- National Parks Act 1980;
- Conservation Act 1987;
- Reserves Act 1977; and
- policies and plans [and Standard Operating Procedures] prepared under these Acts by either party.

Early consultation is to seek agreement in line with the needs of business cases and any existing scheme assessment reports or other relevant reporting. This includes consultation required by any public and/or statutory process, for any proposed works, and consultation in respect of State highway provisions within CMS, CMP and NPMP.

Environmental effects

New or upgraded State highways will be planned, designed, constructed and maintained to ensure works and activities avoid, remedy, or mitigate effects on natural character, historic values or landscape features and on public use and recreational facilities (e.g. tracks, structures). This includes but is not limited to:

- avoidance of fragmentation of habitats and ecosystems where possible, including culvert replacements allowing unimpeded fish passage;
- rehabilitation of surfaces of earthworks;
- avoiding pest plant and weed introduction and providing weed control; and
- collecting and treating stormwater run-off beyond statutory requirements if deemed necessary by NZTA and DOC staff.

Where possible, DOC will also assist NZTA by identifying suitable pest and weed-free sources of road materials in NPMP/CMP/CMS, within public conservation land.

Environmental effects of construction or improvement (including maintenance works) of any state highway shall be assessed in line with the Agency's environmental and social responsibility standard (see <https://www.nzta.govt.nz/roads-and-rail/highways->

[information-portal/technical-disciplines/environment-and-social-responsibility/national-standards-guidelines-and-specifications/esr-standard](https://www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/environment-and-social-responsibility/national-standards-guidelines-and-specifications/esr-standard/)).

An Assessment of Environmental Effects (AEE) is required for all projects in line with the Resource Management Act 1991 (RMA) and/or Conservation and National Parks Act (1987 and 1980) requirements. The coverage and detail of the AEE will reflect the scale of the project / works. In addition to the statutory requirements, the AEE should outline any objectives and functions of the state highway. Probable effects shall be assessed and addressed in line with the NZTA's environmental policy and planning documents, guides, standards and specifications (see <https://www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/>). Particular focus will be on:-

- Ecological quality and processes;
- Landscape values;
- Cultural and historic values; and
- Character and values of national parks, reserves and conservation areas.

The AEE should address the statutory purpose for which the land is held and the relevant provisions of any NPMP, CMP or CMS guides and standards provided by DOC on assessing animal and plant conservation values (see <https://www.doc.govt.nz/Documents/science-and-technical/sfc327entire.pdf>).

The NZTA requirements for environmental and social management plans (ESMP's) applies to all projects scaled to the issues (see <https://www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/environment-and-social-responsibility/management-plans/>). Where projects are considered high risk and or traverse areas of particularly high natural and cultural values a specific environmental management plan covering controls to be used shall be developed and agreed between that parties.

State highway operation standards

Standards adopted for State highway improvements within or adjoining public conservation lands must be commensurate with the qualities of the park, reserve or area through which the State highway passes and with its transportation function.

To maintain adequate transport capacity and safety, the road corridor cross-sections adopted must allow for seal widths to normal standards used elsewhere on rural State highways, except where significant natural, historic, landscape or recreational values need to be preserved. In these cases a smaller width may be acceptable provided safety is not compromised.

To ensure these issues are addressed an assessment of the character of the affected area shall be undertaken to identify any special needs for corridor management that addresses high values (e.g. vegetation or habitats). Controls (non-standard) can include tailored vegetation clearance through the corridor with specific controls for unique plants and habitats, and extra controls in dealing with pest plant / organism issues (e.g. material handling and disposal including equipment cleaning). Controls for historic, landscape or recreational values may include assess management, avoidance of certain activities or implementation of multi modal transport systems.

Land to provide shoulder and drainage for the operation of the State highway will be sought as well as additional width on corners for seal widening. Extra width may be sought due to the environmental conditions that affect the State highway.

Signage

All signs should be placed to meet safety requirements for road users on the State highway and should not obstruct scenic views. The design, placement and appearance of official signs within the State highway reserve are subject to standards and rules. NZTA is obligated to provide official signs under the Land Transport Rule: Traffic Control Devices and by virtue of its role under the Land Transport Management Act 2003.

The NZTA Manual of Traffic Signs And Markings (MOTSAM), the Traffic Control Devices Manual, the Variable Message Signs Guideline and the State Highway Control Manual, all provide guidance on design, size and location of official signs, whilst third party signs, including advertising signs are controlled by the New Zealand Transport Agency (Signs on State Highways) Bylaw 2010 and amendments

(<https://www.nzta.govt.nz/assets/resources/Bylaws-state-highway/Bylaw-2010-New-Zealand-Transport-Agency-Signs-on-State-Highways-Bylaw-July-2010.pdf>).

Additional policy and guidance can be found in the Planning Policy Manual (See <https://www.nzta.govt.nz/resources/planning-policy-manual/>). DOC also has guidance on appropriate signage on public conservation land.

Consultation between DOC and NZTA should occur where the following is proposed:

- DOC signage is to be placed on public conservation land near to a State highway;
- NZTA signage on State highway land, other than for road safety (such as general information signs), to be placed adjacent to public conservation land;
- Non-NZTA signage (e.g. fish and game signs) placed on State highway land, and which requires approval by NZTA; or
- Third party information or advertising signage, to be placed on public conservation land visible from a State highway.

The purpose of this consultation is to avoid conflict between public conservation land values, State highway user safety and visual quality.

Authorisation for use of Public Conservation Land

Where capital projects or maintenance works need to be undertaken on public conservation land, unless specified within agreed management plans, NZTA will need appropriate authorisation from DOC to undertake the work. Examples of some of the types of works which may require authorisation are:

- Realignment or road widening;
 - Disposal of cut-to-waste material from a seal widening;
 - River bank protection;
 - Clearance and management of accumulated snow and ice;
 - Stockpiling;
 - Erection of snow fences;
 - Culvert extensions;
 - Management of pest organisms; and
 - Geotechnical borehole drilling.
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Basic Design Criteria for State Highways through National Parks, Reserves and Conservation Areas

General

In all aspects of planning, design and construction of State highways through public conservation land, NZTA's State Highway Professional Services Contract Proforma Manual (SM030) and State Highway Construction Proforma Manual (SM031) should be complied with. The NZTA's environmental standards, guides and specifications will be used as the basis of management controls.

The location of the State highway, its alignment and profile, the cross-section design and other related features shall avoid, remedy or mitigate any adverse effects on environmental values, including waterways, and on public use and public conservation land.

Special attention must also be given to the impact of the State highway on the natural character and landscape and to the highway's visual appearance. Where possible, multipurpose landscaping should be used, as identified in the NZTA landscape guides and specifications.

Pre-Works Project Liaison

Where proposed works are to be undertaken on public conservation land, NZTA and its consultant should meet with the appropriate DOC conservancy teams as part of business cases processes and preparation for authorisations when designs are considered and being developed. The purpose of these meetings is to identify any specific constraints (e.g. whether it is a sensitive ecological area) which should be avoided, remedied or mitigated.

Prior to any construction activities being undertaken, a pre-works on site meeting between DOC, the Contractor, NZTA and/or consultant should take place. The purpose of the meeting is to discuss construction practices and re-affirm specific issues discussed at the design stage that the contractor needs to be aware of in undertaking the work.

Design speed

The design speed shall be carefully chosen, as it is the key element that directly fixes standards for the horizontal alignment and profile of the State highway. As a result, this can influence the manner in which the location of the state highway avoids environmental damage, including historic sites so that it blends into the landscape.

Alignment

The general alignment and profile of the highway must fit the character of the area traversed, to ensure that excavation and embankment will be reduced to a minimum while meeting NZTA's statutory objective. Geometric design should follow a curvilinear horizontal alignment and have a gently rolling profile, which will result in a more pleasing appearance.

Native vegetation

Particular attention must be paid to preserving as much existing native vegetation as possible. The project environmental management plan (s) will guide vegetation management processes including restoration planting. The use of native species found in the area is a key element of this work, preferably raised from seed taken from public conservation land, in consultation with DOC.

If species can be sourced from the area, low growth native forms should be used to reduce maintenance costs. Approved low maintenance species are identified in NZTA's landscape guidelines and specifications. In some cases, special methods of restoration may be required in accordance with a monitored revegetation plan.

Structures

Structures should be located and designed to maintain or improve visual quality where possible, having due regard to suitability and compatibility with surroundings. Designs of structures should take into consideration reducing environmental effects through construction and maintenance activities.

Stopping places

Rest areas, viewing points, utility points and points to appreciate historical and cultural places should be designed, established and managed in appropriate locations in consultation with DOC. These sites should be maintained to the standards agreed with DOC and in line with NZTA's policies and requirements for rest areas and stopping places and any NPMP/CMP/CMS requirements or goals.

Maintenance and Operational Criteria for State Highways through National Parks, Reserves and Conservation Areas

General

Maintenance work is essential to ensure NZTA meets its statutory objective. Work should be carried out in accordance with NZTA's State Highway Maintenance Contract Proforma Manual (SM032), and NOC environment and social management plan which will cover all necessary resource consents issues and areas agreed with DOC.

In respect to drainage, maintenance staff are to carry out their normal tasks within the area specified in the NOC on either side of the carriageway, including culvert inlet and outlet channels, provided this does not cause adverse environmental effects or significant changes to drainage, and any area specified in environmental management plans.

Sensitivity

Maintenance activities must be consistent with the NOC environmental and social management plan and have regard to the relevant NPMP, CMP or CMS. In particular, maintenance must ensure visual quality and ecological values are maintained. Unless specified otherwise within the NOC environmental management plan attention to the following is required:

1. Vegetation adjoining State highways shall be trimmed back to meet the needs for safe passage of all State highway users while maintaining the ecological function and visual quality of the area as far as practicable.
 2. For guidance on the disposal of trimmed vegetation and the application of chemical control refer to the NZTA landscape guidelines and specification P39. (See <https://www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/urban-design-and-landscaping/>)
 3. Stockpiles of materials shall not be in the direct eye of the passing public and if within public conservation land will require authorisation from DOC.
 4. Both parties will work together to ensure biosecurity responsibilities are met and endeavour to source weed free (plant and seed) materials for NZTA to use on construction or improvement works. If weed infestation does occur on State highway sites, NZTA will remedy any adverse effects.
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Emergencies

DOC will aim to provide to NZTA with locations of known significant natural or historic sites within public conservation lands for inclusion in new project and networks management contract ESMP's to ensure staff and contractors staff and contractors are aware of these.

Emergency maintenance works to re-establish state highway links should ensure that natural and historic sites are protected, while providing for the safety of State highway users and emergency workers.

Special attention must also be paid to tidy-up and reinstatement works following reopening of a State highway.

NZTA approved on-road activities on state highways

When NZTA is considering approving on-road activities (for example, filming) on State highways through Public Conservation Land, NZTA will advise the applicant to discuss their application with DOC so they can obtain any other necessary approvals.

Similarly, if DOC is approving an activity that may affect the operation of the State highway, DOC will advise the applicant to discuss their application with NZTA.

Glossary

Term	Definition
<p>General Policy for National Parks 2005</p>	<p>The General Policy for National Parks (General Policy) gives both direction and guidance to conservation managers and to communities on how to preserve these special areas and public use within them. In particular, the purpose of this General Policy is to implement the National Parks Act 1980 and to provide consistent national direction for the administration of national parks through conservation management strategies and national park management plans. The three types of planning documents have a hierarchy that derives from linked requirements in the National Parks Act 1980 and the Conservation Act 1987. Specifically:</p> <ul style="list-style-type: none"> • General Policy implements and cannot derogate (i.e. detract) from legislation; • Conservation management strategies implement general policies approved under the National Parks Act 1980 and other Acts; and • National park management plans cannot derogate from any relevant conservation management strategy. <p>The effect of these requirements is that the National Park Management Plan for a national park has to be consistent with the General Policy for National Parks.</p> <p>https://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/statutory-plan-publications/national-park-management/general-policy-for-national-parks/</p>
<p>General Policy for Conservation Areas 2005</p>	<p>The Conservation General Policy is a statutory policy that addresses the conservation of natural and historic resources in New Zealand. This statement of General Policy covers the following Acts:</p> <ul style="list-style-type: none"> • The Conservation Act 1987 • The Wildlife Act 1953 • The Marine Reserves Act 1971 • The Reserves Act 1977 • The Wild Animal Control Act 1977 • The Marine Mammals Protection Act 1978. <p>The policy set out in the Conservation General Policy 2005, together with the General Policy for National Parks 2005, guides conservation management for the next decade or more.</p> <p>In particular, the Policy will shape a new round of conservation management strategies, conservation management, plans and national park management plans. The scope of the policies is broad, reflecting the wide spectrum of conservation areas administered under the legislation and the many conservation tasks to be performed.</p> <p>https://www.doc.govt.nz/about-us/our-policies-and-plans/conservation-general-policy/</p>

Term	Definition
National Park Management Plan	<p>The purpose of a National Park Management Plan is to provide for the management of the Park in accordance with the National Parks Act 1980, the Conservation General Policy 2005, the General Policy for National Parks (2005) and Conservation Management Strategies.</p> <p>The plan will guide and direct the work of the Department and its decision-making responsibilities in the Park for ten years. The plan seeks to give clear directions for management, while remaining flexible enough to allow for changing circumstances within the ten-year time frame.</p> <p>https://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/national-park-management-plans/</p>
Conservation Management Plan	<p>Conservation management plans are 10-year statutory plans. The purpose of a conservation management plan is to implement the conservation management strategies and to establish detailed objectives for the integrated management of natural and historic resources and public use within a particular area.</p> <p>Conservation management plans will only be developed for areas where there is a high level of activity or a complexity of issues that cannot be satisfactorily dealt with in the Conservation Management Strategy; or where required through a Treaty of Waitangi settlement agreement.</p> <p>As with national park management plans, they have to be developed in accordance with relevant legislation, the Conservation General Policy 2005 and the relevant conservation management strategy.</p> <p>https://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/conservation-management-plans/</p>
Conservation Management Strategies	<p>Conservation management strategies are required under the Conservation Act 1987 and are developed in accordance with the legislation under which DOC operates.</p> <p>Conservation management strategies are 10-year strategies that provide an overview of conservation issues and give direction for the management of public conservation land and waters, and species for which DOC has responsibility. They indicate what DOC intends to do and how it can respond to requests to use the natural and historic resources it manages.</p> <p>Their purpose is to implement general policies and establish objectives for the integrated management of natural and historic resources, and for recreation, tourism, and any other conservation purposes both on and off the lands DOC manages.</p> <p>https://www.doc.govt.nz/about-us/our-policies-and-plans/statutory-plans/conservation-management-strategies/</p>
Standard Operating Procedures	<p>These are DOC procedures for how to operate on public conservation land. When discussing a potential activity to be undertaken on public conservation land the DOC conservancy can advise if a Standard Operating procedure needs to be followed. An example of a Standard Operating Procedure is historical heritage protection procedure.</p>

Term	Definition
DOC 1994 Outdoor Sign Manual	<p>The DOC Outdoor Sign Manual applies to:</p> <ul style="list-style-type: none"> • outdoor signs erected by DOC; • signs on departmental buildings; • marine reserve markers; • signs associated with historic or cultural sites; and • features on land managed by DOC. <p>Special care is required to avoid compromising the integrity of historic or cultural sites or features.</p>
Concessions	<p>This is one DOC procedure to obtain authorisation to work on public conservation land. It may be in the form of a lease, licence, permit or easement.</p> <p>https://www.doc.govt.nz/about-us/statutory-and-advisory-bodies/nz-conservation-authority/publications/docs-statutory-planning-processes/information-about-concessions/</p>
Environmental Plan	<p>NZTA’s Environmental Plan (included in the Environmental Policy Manual) establishes an environmental policy for State highways and outlines specific actions to improve NZTA's performance including:</p> <ul style="list-style-type: none"> • mitigating traffic noise and vibration • managing effects on air quality • addressing impacts on water quality • using resources efficiently • protecting cultural and heritage features • improving the visual appearance of highways • protecting biodiversity. <p>The Environmental Plan enables NZTA to integrate environmental and social considerations into all aspects of State highway planning, construction and maintenance.</p> <p>http://www.nzta.govt.nz/resources/environment-policy-manual/index</p>
SP/M001 Planning Policy Manual	<p>NZTA’s Environmental Policy Manual (2005) has been updated to reflect NZTA's approach to integrating land use and transport planning under the Land Transport Management Act 2003.</p> <p>The new Environmental Policy Manual contains a “toolbox” of techniques that will be implemented by NZTA, when undertaking network planning, and when working with developers and councils. The toolbox includes a range of model planning policies and design standards that NZTA will seek, as well as criteria for more context-sensitive planning.</p> <p>http://www.nzta.govt.nz/resources/environment-policy-manual/index</p>

Term	Definition
SM030 State Highway Professional Services Contract Proforma Manual	<p>A manual for use by NZTA when preparing tender documents for professional services contracts. It contains all NZTA's proforma professional services contract tender documents in a standard format.</p> <p>http://www.nzta.govt.nz/resources/state-highway-professional-services-contract-proforma-manual/index</p>
SM031 Construction Contract Proforma Manual	<p>A manual for use by consultants when preparing tender documents for traditional, design and construct, lump sum, alliancing and minor works and physical works construction contracts.</p> <p>http://www.nzta.govt.nz/resources/state-highway-construction-contract-proforma-manual/index</p>
SM032 State Highway Maintenance Contract Proforma Manual	<p>A manual for use by consultants when preparing tender documents for maintenance contracts. It contains all of NZTA's physical works maintenance tender documents in a standard format.</p> <p>http://www.nzta.govt.nz/resources/state-highway-maintenance-contract-proforma-manual/index</p>
Scoping Report	<p>A scoping report is delivered as part of the requirements of NZTA's <i>SM030 State Highway Professional Services Contract Proforma Manual</i>. It is a planning document designed to identify, investigate and report on all potential options and alternatives for delivering a State highway project. For example, identifying the appropriate route, size and scale of the State highway.</p>
Scheme Assessment Report	<p>The Scheme Assessment Report is delivered as part of the requirements of NZTA's <i>SM030 State Highway Professional Services Contract Proforma Manual</i>. The purpose of this report is to investigate all potential options and alternatives identified in the early stages of the project development cycle and recommend a preferred option for the project. The preferred option is then advanced to the Design and Project Development phase, which is where necessary statutory approvals are obtained.</p>
Vegetation Control	<p>The NOC specification sets out the requirements for vegetation control for the lengths of road and other areas scheduled in the specific contract requirements. This is included in the maintenance contract proforma that is part of the State Highway Maintenance Contract Proforma Manual.</p> <p>http://www.nzta.govt.nz/resources/state-highway-maintenance-contract-proforma-manual/index</p>
Landscape Guidelines	<p>The <i>Landscape Guidelines 1st edition (Guidelines)</i> set NZTA's expectations for highway landscaping, and provide information on how to achieve these expectations through landscape (vegetation and earthworks) protection and enhancement of new and existing sections of the State highway network.</p> <p>The <i>Guidelines</i> aim to ensure all highway landscaping activities achieve NZTA's statutory responsibilities, strategic objectives and expectations for State highway landscaping.</p> <p>http://www.nzta.govt.nz/resources/guidelines-highway-landscaping/index</p>

Term	Definition
Native low growth vegetation	These are native species, which grow to a low ultimate height and require minimal ongoing maintenance. They are defined in NZTA’s low growth vegetation guideline housed in the <i>Guidelines for Highway Landscaping</i> .
Manual of Traffic Signs and Markings (MOTSAM) & Traffic Control Devices Manual (TCDM)	<p>MOTSAM contains the policy and location requirements for traffic signs, which must be used in conjunction with Part II: Markings. Its use is mandatory on State highways and recommended on other road controlling authority roads, to ensure consistent traffic signing nationally. MOTSAM is progressively being replaced by the TCDM.</p> <p>Details are given for approved sign legends, approved sign symbols and sign layouts generally. Guidance is also given on sign size selection and the location / positioning of signs.</p> <p>http://www.nzta.govt.nz/resources/motsam/index</p> <p>http://www.nzta.govt.nz/resources/traffic-control-devices-manual/index.html</p>
SP/M/026 Variable Message Signs	<p>The purpose of this document is provide a guide, and in most instances a foundation set of specifications for the design and procurement of electronic VMS signage including site selection parameters, for motorway, urban and rural situations on the State highway network and local roads where NZTA has a responsibility to provide driver information.</p> <p>The specifications for VMS and other signage found in this document including references to communications and external standards are to be regarded as mandatory when any part of this document is referenced as part of any related procurement process.</p> <p>http://www.nzta.govt.nz/technical/manuals.jsp</p>
New Zealand Transport Agency Bylaw Regulating Signs on State Highways	The New Zealand Transport Agency (Signs on State Highways) Bylaw 2010, made under section 61(3) of the Government Roding Powers Act 1989, regulates signs on State highway reserve.
SM012 State Highway Control Manual	This is a guideline, which contains a mix of NZTA's functions, policies and procedures. It is a living document, subject to amendment as situations change and best practices are refined.

DOC North Island Operations Structure

Last Updated: 9/04/2019

Region	Position -Check	Based in...
Northern North Island	Director Operations	Whangarei
	Statutory Manager	Whangarei
	Operations Manager Kaitaia	Kaitaia
	Operations Manager Bay of Islands	Kerikeri
	Operations Manager Kauri Coast	Dargaville
	Operations Manager	Whangarei
Auckland	Director Operations	Auckland
	Statutory Manager	Auckland
	Operations Manager Auckland Inner Islands	Auckland
	Operations Manager Great Barrier/Aotea	Great Barrier
	Operations Manager Tamaki Makaurau/Auckland	Auckland
Hauraki Waikato Taranaki	Director Operations	Hamilton
	Statutory Manager	Whitianga
	Operations Manager Whitianga	Whitianga
	Operations Manager Hauraki	Hamilton
	Operations Manager Waikato	Hamilton
	Operations Manager King Country	Te Kuiti
	Operations Manager New Plymouth	New Plymouth
Central North Island	Director Operations	Taupo
	Statutory Manager	Tauranga
	Operations Manager Tauranga	Tauranga
	Operations Manager Whakatane	Whakatane
	Operations Manager Te Urewera	Whakatane
	Operations Manager Taupo	Turangi
	Operations Manager Turangi	Turangi
	Operations Manager Tongariro	Ohakune
	Operations Manager Whanganui	Whanganui
Lower North Island	Director Operations	National Office
	Statutory Manager	Gisborne
	Operations Manager East Coast	Gisborne
	Operations Manager Hawkes Bay	Napier
	Operations Manager Manawatu	Palmerston North
	Operations Manager Wairarapa	Masterton
	Operations Manager Wellington	Kapiti
	Operations Manager Chatham Island	Chatham Island

Resource Management Act, 1991

Introduction

The Board is required to use the processes of the Resource Management Act for State highway activities. The Act is a comprehensive document of which only the major clauses affecting work on the State highway have been listed below.

Major Clauses used by the Board

Nº	Function	Reference
1	Purpose of Act promoting sustainable management	s5
2	Recognition of matters of national importance and certain existing uses protected	ss6-8
3	Restriction on land use and protection of certain land use, certain uses and works allowed	ss9-10B
4	Restriction in use of coastal marine area and beds of lakes etc.	ss12-13
5	Discharge of contaminants into environment	ss15-15C
6	Duty to avoid, remedy, or mitigate adverse effects including noise	ss16-17
7	Matters to be considered by Regional Council	ss61-62
8	Rules about discharges including greenhouses gases	ss70-70B
9	District plans	ss72-77D
10	Resource consents, type, how to apply, notification	ss87-92B and 95-95G
11	Conditions of recourse consents	s108
12	Decisions on resource consents, applications and rights to appeal	ss113-121
13	Requiring Authority (NZTA is by Order in Council dated 7/12/92, Gazette Notice 10/12/1992 No.201, 3/3/94 No.20978)	s167
14	Notice of requirement to Territorial Authority	s168
15	Designation to be provided for in district plan and effect of designation	ss175-176
16	Land subject to existing delegation or heritage order	s177
17	Alteration of designation	s181
18	Lapsing of delegation	s184

19	Subdivision, applications, consents, conditions	ss218 and s220
20	Completion certificates	s222
21	Restriction upon deposit of survey plan	s224
22	Restriction on issue of Certificate of Title	s226
23	Vesting of roads	s238
24	Environment Court Appeals etc.	ss247-307
25	Court of Appeal	s308
26	Emergency works	ss330-330B

Biosecurity Act, 1993

Introduction

The NZTA as a land owner must meet its obligations to control pests set under the Biosecurity Act (1993) and associated Regional Pest Management Plan's. These obligations will vary throughout the country in terms of pest being controlled and methods used. An essential part of the successful delivery of these obligations is having strong collaborative relationships with the Ministry of Primary Industries, regional councils and neighbouring properties. This collaboration is particularly important with DOC within or adjoining national parks, reserves and conservation areas.

Areas of Control

NZTA shall manage pest plants in accordance with regional pest management strategies and any of its own biosecurity strategies, standards and guidance. Pest control shall be undertaken on all projects (capital works or network maintenance projects) on NZTA Agency owned/managed land and includes, but is not limited to: :

- a. rest and stopping place areas;
 - b. motorway reserves;
 - c. weigh pit and stockpile sites;
 - d. other isolated areas of road reserve, where safety, economic or environmental values are compromised
 - e. State highway reserves adjacent to land that is free of plant pests;
 - f. State highway reserves adjacent to land where a good neighbour rule applies to the pest plant species present
 - g. NZTA land adjoining the road reserve as defined below.
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Road reserve

The State highway reserve under control is defined as the road reserve bounded by existing fences or road reserve boundaries, whichever is closest to the highway centreline. Where the road reserve boundary is unknown it shall be taken as 10 metres from the highway centreline.

The above clause eliminates the requirement of expensive boundary definition surveys and ensures any reserve being leased is maintained by the lessee and not NZTA. The Transport Agency's biosecurity responsibilities may extend beyond the road reserve boundary should the adjoining land also be owned by the Transport Agency.

Adjacent land owners

Should an adjacent land occupier object to the method of pest plant control being undertaken by NZTA, alternative means of control shall be investigated and potentially negotiated with the adjacent land owner.

Under the Resource Management Act the application of agrichemicals including herbicides requires public notification. The Transport Agency should seek to reduce the use of agrichemicals and encourage alternative methods. Should an herbicide be used, it shall be applied by a certified handler. The correct chemical and method shall be used for the pest species being targeted and time of year.

Pests under Regional Pest Management Strategies

The NZTA should make every effort to ensure nuisance plants that interfere with highway operation, such as gorse, broom, etc. are termed as pests under each of the regional pest management strategies (RPMS's).

It is important that the RPMS's are not solely focused on agricultural pests.

Pest Management Levy

The NZTA has agreed to pay a levy for the administration of RPMS based on the land the NZTA occupies within a region. This proportion is to be calculated based on three hectares of land per kilometre of road.

Beneficiaries and Exacerbators in RPMS's

The NZTA does not consider itself to be either a beneficiary or an exacerbator of plant pests, and does not therefore accept responsibility for plant pest control, where:

- the adjacent land is not clear of plant pests and the landowner is not undertaking pest control; and
 - access to the subject site is via that property.
-

Backlog of Pests

The NZTA does not consider that it should fund the clearance of any backlog of pests that should have been controlled previously by the adjacent landowner. In this situation the NZTA advocates that the responsibility for clearance of the backlog remains with the owner of the adjacent land or is undertaken by the relevant regional council or territorial authority or that a levy is imposed on the owner of the adjacent land to pay the NZTA to clear the backlog of pests.

Area Controls for Unwanted Organisms

The Ministry of Agriculture and Forestry have been considering their responsibilities to manage the possible incursion of an unwanted organism, such as foot and mouth disease, and their rights to put in place area controls and to set up cordons and road blocks. Their mechanisms to put these in place are cumbersome and time consuming as they must apply to the courts for permission. It is expected that given the likely economic impacts the Government would require that any such need for control would be supported by all other departments and agencies as necessary. The NZTA has these powers already in place for its roads and will co-operate with any reasonable request for temporary road closures and to provide resources where possible to man cordons. Such requests may come from either the Ministry or the Police and should be given the utmost support with urgency and should be treated as any other emergency response. Note that the Act does give the Ministry the right to direct persons to take appropriate actions, but it should not be necessary for them to invoke such powers.

Planning Under the Resource Management Act

Overview

The RMA (see pages 16 and 17) has significant implications for management and enhancement of the roading network throughout New Zealand.

It obliges councils, through their district plans or other planning instruments, to ensure that the adverse effects caused by the roading network are mitigated, remedied or avoided.

Importance of planning

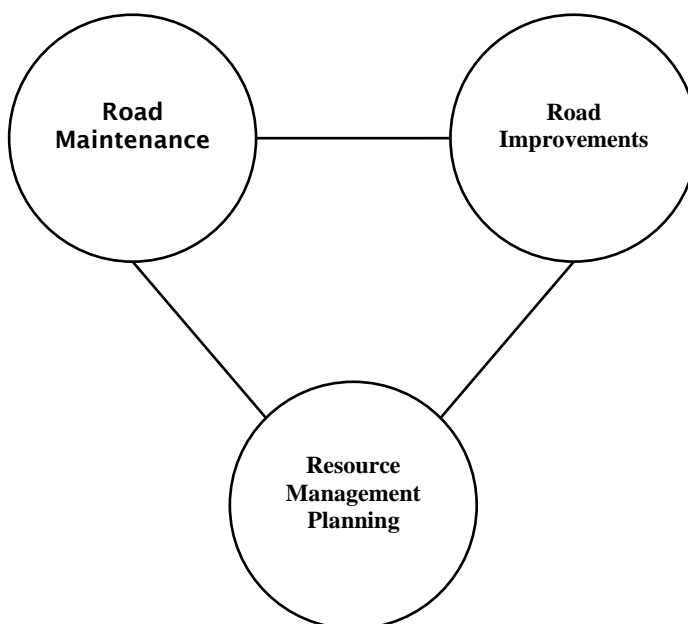
The NZTA's resource management planning role is part of an overall NZTA philosophy of efficiently and appropriately using all available tools for State highway management. State highway management is a vital component of resource management planning.

There is a risk of undervaluing the opportunity for effective and efficient strategic management of the State highway network. The risk arises from perceived difficulties with the resource management planning component. These difficulties may result in a sense of “can't do it”.

For this reason, the NZTA is committed to allocating sufficient resources to planning as an integral component of its highway management philosophy. The NZTA recognises that without appropriate investment and integration the overall management of the road resource will suffer.

Planning elements

The State highway network is a significant physical resource. To be effective, the NZTA's management of this resource integrates the following components:



A safe, efficient and sustainable State highway network cannot be attained when one element is considered in isolation from the others.

Definition of planning elements

The following definitions of planning elements are used in the context of planning under the RMA.

- A. *Road maintenance*: normal care of the existing facilities excluding improvements;
 - B. *Road improvements*: construction and safety projects;
-

-
- C. *Resource management planning*: limiting the adverse effects of activities which affect roads so that maintenance is effective and efficient, and the need for road improvements minimised.
-

Highway management philosophy

The management philosophy of State highways will involve the following:

- A. Recognition of the need for environmental sensitivity.
 - B. Recognition of the planning and environmental context of the road.
 - C. Sustainable management.
 - D. Doing the right thing at the right time.
-

NZTA response

This philosophy will be supported by NZTA through the following response:

- A. Establishing partnerships with local authorities to ensure the purposes of the GRP Act, the LTM Act and the RM Act are realised.
 - B. Promoting policies and actions that avoid or limit the adverse effects of adjacent land use activities on the road resource.
 - C. Fully utilising the procedures of the RMA to achieve its objective.
 - D. Allocating sufficient resources to each component.
-

Outcomes

The outcomes of this response are consistent with NZTA's overall management philosophy which includes:

- A. Promoting bold and innovative solutions to problems.
 - B. Encouraging consultation.
 - C. Optimising flexibility.
 - D. Allocating available funds in the best interests of all road users.
-

Implementation

Implementation of this philosophy requires System Managers or Managers System Design to take the following actions:

- A. Prepare Corridor Management Plans which include:
 - h. proper recognition of the role of resource management planning, and
 - i. identification of opportunities for taking a pro-active stance in relation to land use activities and effects on roads.
 - B. Incorporate the provisions of the NZTA Planning Policy Manual in district plans.
 - C. Actively participate in the preparation of Regional Policy Statements and Regional Plans to achieve proper recognition of NZTA's interests.
 - D. Actively evaluate peripheral development proposals against:
 - a. the PPM,
 - b. Corridor Management Plans,
 - c. Regional Land Transport Strategy,
 - d. Regional/district plans and policies; and
 - e. Take appropriate action.
-

E. Use of the submission, appeal, abatement or enforcement provisions when appropriate with the approval of the National Manager System Design, following consultation with the Legal Team.

Planning Practice Guidelines

NZTA has developed a compendium *best practice* for the use of NZTA and its consultants involved in planning and resource management activities, called the *Planning Practice Guidelines Manual* (PPGM)

Miscellaneous Policies

Salt as ice control

NZTA holds no approval to use salt on roads.

Rural selling places

Guidance on rural selling places is contained in:

- A. RTS3: Guidelines for Establishing Rural Selling Places, MOT/Transit.
 - B. Planning Policy Manual.
-

Roadside landscaping and vegetation

Roadside planting shall be in accordance with the NZTA's *Landscape Guidelines 1st edition*.

A schedule of landscape areas maintained by the NZTA shall be kept by the Network Consultants and regional offices.

All specified NZTA maintained landscape areas shall be maintained to a standard agreed to that situation and specified in the any resource consents included within project management documents.

Provisional Vibration Policy

About this policy

This policy sets out the New Zealand Transport Agency's (NZTA's) provisional vibration policy for dealing with the vibration complaints received. The effects which are addressed by this policy are:

- nuisance to people
 - damage to structures
 - traffic induced vibration
 - acoustical disturbance from wall vibration (resonance).
-

Status of this policy

This provisional policy will be reassessed for wider application once experience has been gained as to its effectiveness, and cost implications.

Application of this policy

This provisional policy applies when vibration affects:

- buildings occupied by humans
- historic heritage buildings

All actions arising from this policy:

- are subject to funding availability
- will need to meet all programming requirements for such works to be included in annual maintenance plans.

Note: Nothing in this policy shall be read as superseding the requirements in the NZTA's *Risk Management Manual*.

Basis of this policy

The actions in this policy are based on the following:

- that the NZTA's remedial action shall be confined to work on its own infrastructure
- that the NZTA has obtained legal advice that, as a highways agency, it is unlikely that the NZTA would be held to be liable for any damage occurring as a result of traffic-induced vibration, but each case would need to be determined on its own facts.

If, notwithstanding the above, it is considered that there may be reasons to carry out repairs on on-NZTA property, the NZTA shall:

- refer the case to the Chief Executive for consideration of further action
 - keep our insurance and risk management advisers informed of our intentions.
-

In this policy

This policy is divided into the following topics:

Section	Page
How to deal with vibration related complaints	Page 25
How to decide the next course of action	Page 27
How to deal with vibration measurements	Page 29
How to interpret vibration measurements	Page 30
Nuisance-level thresholds	Page 31
How to determine whether resonance is a problem	Page 32
How to decide on appropriate remedial action	Page 33
How to conclude NZTA's action	Page 34

How to deal with vibration related complaints

Follow the steps below when a complaint is received about vibration effects adjacent to a State highway:

Note: The logic in this policy is designed to process all complaints irrespective of whether they allege damage or are nuisance related only. Therefore, the steps below are for both damage allegations and nuisance complaints.

Step	Action
1	Carry out the procedure under <i>Claims Handling – Initial Steps</i> in the section on <i>Management of Third Party Claims</i> in NZTA’s <i>Risk Management Manual: Insurance</i> . *
2	Investigate the damage or nuisance complaint.
3	Arrange to inspect the site with the complainant.
4	Attempt to establish the cause of the vibration.
5	Attempt to establish who is responsible for any alleged damage.
6	Estimate the cost of repairing any alleged damage both on and off NZTA property.

Step	Action	
7	IF the complaint . . .	THEN . . .
	(a) could lead to claims being made against NZTA	<ul style="list-style-type: none"> carry out the procedure under <i>Notification of Claims</i> in the section on <i>Management of Third-Party Claims</i> in NZTA's <i>Risk Management Manual: Insurance</i>. *
	(b) is unlikely to lead to claims being made against NZTA	<ul style="list-style-type: none"> go to step 8.
8	(a) It can be established that a NZTA contractor, a NZTA consultant, or a third party is responsible for any alleged vibration damage	<ul style="list-style-type: none"> refer the complaint to the relevant entity advise the complainant monitor progress carry out the procedure How to conclude NZTA's action, 5.5.13
	(b) The estimated cost to NZTA of repairing any alleged vibration damage is greater than NZTA's deductible	<ul style="list-style-type: none"> seek NZTA's insurance and risk management advisers' guidance before proceeding to step 9 (NZTA's deductible is \$10,000 for both its public liability and personal indemnity insurance)
	(c) NZTA's insurance and risk management advisers recommend that NZTA handle the complaint internally	<ul style="list-style-type: none"> refer to the section <i>Handling Claims Internally</i> in NZTA's <i>Risk Management Manual: Insurance</i>
	(d) None of the above apply	<ul style="list-style-type: none"> go to step 9
9	Carry out the procedure How to decide the next course of action, 5.5.7.	

How to decide the next course of action

Follow the steps below if the NZTA’s insurance and risk management advisers recommend that a vibration related complaint is handled internally:

Step	Action		
1	IF ...	THEN ...	
	(a) there is an obvious road surface deficiency	go to step 2	
	(b) there is no obvious road surface deficiency	go to step 3	
2	If there is an obvious road surface deficiency* that would be ...	AND the proposed remedial work ...	THEN ...
	(a) low cost to correct	Meets the appropriate funding criteria	<ul style="list-style-type: none"> correct the deficiency carry out the procedure How to conclude NZTA's action 5.5.13
	(b) low cost to correct	Does not meet the appropriate funding criteria	<ul style="list-style-type: none"> go to step 4
	(c) expensive to correct	N/A	<ul style="list-style-type: none"> go to step 5
<p>*A road surface deficiency may be:</p> <p><i>Example:</i></p> <ul style="list-style-type: none"> a dig out repair that does not meet NZTA's normal service level requirements a bump at a bridge abutment that does not meet NZTA's normal service level requirements. 			
3	IF there is no obvious road surface deficiency AND on inspecting the site with the complainant ...		THEN ...
	(a) the vibrations are barely perceptible AND no damage has been alleged		<ul style="list-style-type: none"> go to step 4
	(b) vibrations are easily perceptible, or the complainant alleges damage		<ul style="list-style-type: none"> go to step 5

Step	Action		
4	If the complaint alleges that . . .	(a) THEN	(b) ELSE
	Traffic induced vibration has become a problem since NZTA carried out a modification to the adjacent State highway AND NZTA agrees that the vibration problem may be linked to the modification	<ul style="list-style-type: none"> NZTA is obliged to be more responsive in this situation that if it had not modified the State highway. Hence every effort should be made to suggest a possible solution** If no solution can be suggested then carry out the procedure How to conclude NZTA's action, 5.5.13 	Carry out the procedure How to conclude NZTA's action, 5.5.13
5	Traffic induced vibration has become a problem since NZTA carried out a modification to the adjacent state highway AND NZTA agrees that the vibration problem may be linked to the modification	<ul style="list-style-type: none"> NZTA is obliged to be more responsive in this situation than if it had not modified the State highway. Hence every effort should be made to suggest a possible solution** even if measured vibrations turn out to be less than the nuisance level threshold. Measure the vibration (see How to measure vibration, 5.5.8) 	Measure the vibration (see How to measure vibration, 5.5.8).

** an example of a solution might be to suggest that a speed camera be installed if nuisance-level vibrations are only caused when vehicles exceed the speed limit.

How to deal with vibration measurements

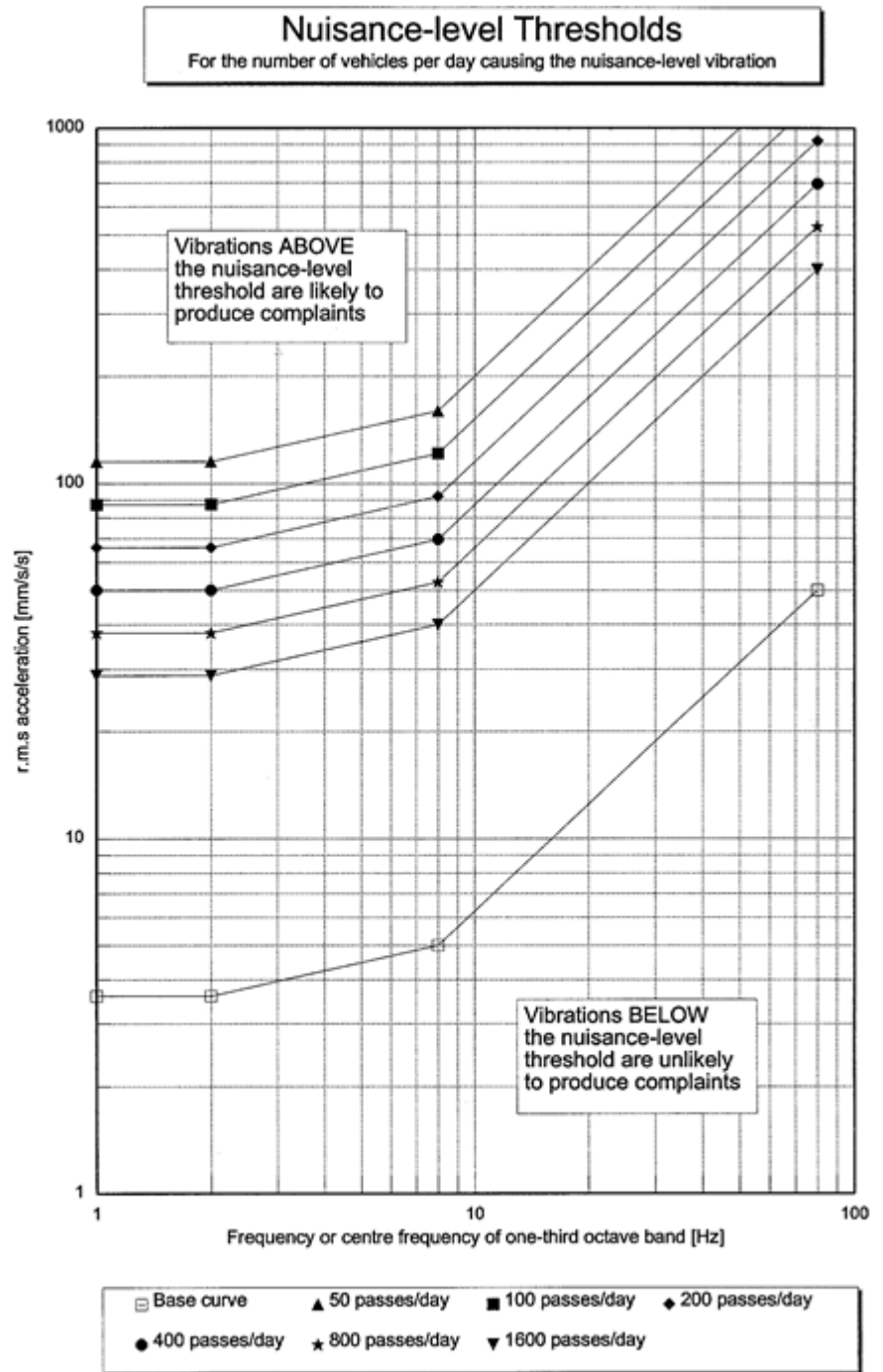
Follow the steps below to undertake vibration measurements:

Step	Action
1	<p>Make arrangements for a vibration trial. That is:</p> <ul style="list-style-type: none"> • Commission a suitably qualified person to undertake the measurements (the Institute of Geological and Nuclear Sciences Ltd, Gracefield Research Centre, Lower Hutt, is a good starting point) • Arrange a suitable time for the trial in consultation with the complainant • Arrange for a test vehicle to be available to generate the vibrations (the type of vehicle can be chosen by the complainant, but it must be a type of vehicle which typically uses that particular section of State highway, and be legally loaded) • Set up any traffic management requirements for the trial and discuss the plans with the police if necessary.
2	<p>Discuss with the person undertaking the measurements what parameters need to be measured and how the recorded information will be used (see How to interpret vibration measurements, 5.5.9).</p>
3	<p>For the trial, set up the measuring apparatus on a stable surface outdoors (e.g. on a concrete path or driveway), and not closer to the source of the vibration than the nearest part of the building where the complainant claims the vibration is being felt.</p>
4	<p>The person undertaking the measurements should record the vibration trace, as he or she sees fit, as the test vehicle passes the site at a steady known speed (see notes 1 and 2 below).</p>
5	<p>Conduct a range of tests to determine the worst-case scenario. For example:</p> <ul style="list-style-type: none"> • Tests at different speeds (see notes 1 and 2 below). • Tests with the test vehicle being driven in different lanes, if the particular section of State highway is multi-lane. • Combinations of the above as necessary.
6	<p>Decide what is the worst-case scenario and repeat that test to confirm the first result (within $\pm 20\%$ is acceptable).</p>
7	<p>Sometime after the trial, carry out the procedure How to interpret vibration measurements, 5.5.9.</p>
Note 1	<p>While it is useful for a vibration trial to determine whether the level of vibration is speed related, only vibrations that are generated by a vehicle travelling within the legal speed limit shall be used for determining whether remedial action should be undertaken.</p>
Note 2	<p>If any tests are to be carried out with the test vehicle exceeding the speed limit, then permission for this must be obtained from the police.</p>

How to interpret vibration measurements

Step	Action	
1	Request hard copies of the following results for each test from the person who undertook the measurements: <ul style="list-style-type: none"> • acceleration time history plots and maximum and minimum accelerations in the three Cartesian coordinates, i.e. <ul style="list-style-type: none"> • vertical accelerations (in the z axis direction) • accelerations in the x-y plane, perpendicular to the road • accelerations in the x-y plane, parallel with the road • plots of the Fourier amplitude spectrum of vertical acceleration (graphs of spectral amplitude versus frequency) 	
2	If necessary, request assistance from the person who undertook the measurements or the Senior Manager Maintenance and Operations at NZTA Wellington Office for steps 3 to 6 below.	
3	For the worst-case test, in terms of peak acceleration, identify from the Fourier amplitude spectrum of vertical acceleration, predominant frequency (the highest peak).	
4	Convert the largest absolute peak acceleration, for the worst-case test to an r.m.s. acceleration by dividing it by $\sqrt{2}$	
5	Plot the “frequency” from step 3 versus the “r.m.s. acceleration” from step 4 on the graph of Nuisance-level thresholds, 5.5.10.	
6	IF the point plotted in step 5 . . .	THEN the nuisance-level threshold has . . .
	(a) Is <i>below</i> the curve corresponding to the number of passes per day of the vehicle type causing the vibration	<ul style="list-style-type: none"> • Not been exceeded • Carry out the procedure How to determine whether resonance is a problem, 5.5.11
	(b) Is <i>above</i> the curve corresponding to the number of passes per day of the vehicle type causing the vibration	<ul style="list-style-type: none"> • Been exceeded • Carry out the procedure How to decide on appropriate remedial action, 5.5.12
	<i>Example:</i> peak acceleration r.m.s. acceleration dominant frequency passes/day of vehicle type conclusion	= 70 mm/s ² = 70 ÷ $\sqrt{2}$ = 50 mm/s ² = 9 Hz = 800 passes per day = threshold not exceeded

Nuisance-level thresholds



Source: ISO 2631-2 : 1989 (E) *Evaluation of human exposure to whole-body vibration.*

How to determine whether resonance is a problem

Follow the steps below to determine whether undesired acoustical disturbances (resonance) is a problem:

Step	Action	AND undesired acoustical disturbances...	THEN the criteria for determining whether resonance is a problem...
1	(a) Greater than 30 Hertz	Have been observed	<ul style="list-style-type: none"> • Have been met • Carry out the procedure How to decide on appropriate remedial action, 5.5.12
	(b) Greater than 30 Hertz	Have not been observed	<ul style="list-style-type: none"> • Have not been met • Carry out the procedure How to conclude NZTA's action, 5.5.13
	(c) Less than 30 Hertz	N/A	<ul style="list-style-type: none"> • Have not been met • Carry out the procedure How to conclude NZTA's action, 5.5.13

How to decide on appropriate remedial action

If the policy has determined that the NZTA should investigate remedial action to reduce vibration levels, then follow the steps below to decide on appropriate remedial action:

Step	Action		
1	IF pavement smoothing or rehabilitation...	AND the System Manager ...	THEN, after obtaining the complainant's agreement ...
	(a) Would reduce vibrations AND meets the appropriate funding criteria	Thinks it is appropriate to proceed	Carry out pavement smoothing or rehabilitation Carry out the procedure How to conclude NZTA's action, 5.5.13
		Does not think it appropriate to proceed	go to step 2
	(b) Does not meet the appropriate finding criteria	N/A	go to step 2
(c) Would not reduce vibrations	N/A	go to step 2	
2	Investigate other remedial actions		
3	(a) A solution which NZTA could undertake, which would reduce vibrations, that has a fundable benefit cost ratio	Thinks it is appropriate to proceed	Request funding and include the solution in the work programme Carry out the procedure How to conclude NZTA's action, 5.5.13
		Does not think it appropriate to proceed	Carry out the procedure How to conclude NZTA's action, 5.5.13
	(b) Either no solution or no solution with a fundable benefit cost ratio	N/A	Carry out the procedure How to conclude NZTA's action, 5.5.13

**How to conclude
NZTA's action**

If the policy has determined that the NZTA should investigate remedial action to reduce vibration levels, then follow the steps below to decide on appropriate remedial action:

Step	Action	
1	IF the complaint that initiated this process ...	THEN
	(a) Has been satisfactorily dealt with	<ul style="list-style-type: none">• Report to the Senior Manager Maintenance and Operations on the outcome of any claims• Report to NZTA's insurance and risk management advisers on the outcome of any claim• Complete the claims register
	(b) Has not been satisfactorily dealt with	<ul style="list-style-type: none">• Refer the case to the National Manager Maintenance and Operations for consideration of further action
2	Report back to the complainant.	

Spills Arising from Transport Incidents on the State Highway Network

When to use

This operating procedure is to be used in planning responses to crashes that spill harmful substances as a result of a transport incident.

Justification

The objective is to streamline the response to spills on the highway by having effective response plans already in place and agreed with the emergency services as an aid to the co-ordinated incident management system.

Procedure

The procedure is set out below on pages 36 to 67.

Operating Procedure Response to Spills Arising from Transport Incidents on the State Highway Network

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Abbreviations

AIS	Accident Investigation System
AREC	Amateur Radio Emergency Communications
CDEM	Civil Defence Emergency Management Act (2002)
CoP	Codes of Practice
CVIU	Commercial Vehicle Investigation Unit
EGV	Environmental Guideline Value
ESCC	Emergency Services Co-ordinating Committee
FENZA	Fire and Emergency New Zealand Act (2017)
HSNO	Hazardous Substances and New Organisms Act (1996)
HSTLC	Hazardous Substance Technical Liaison Committees
LPG	Liquid Petroleum Gas
LTA	Land Transport Act (1998)
LTSA	Land Transport Safety Authority
MCDEM	Ministry of Civil Defence Emergency Management
NRL	National Radiation Laboratory
FENZ	Fire and Emergency New Zealand
NZP	New Zealand Police
NZTA	New Zealand Transport Agency
NZTM	New Zealand Transverse Mercator co-ordinate system
NZQA	New Zealand Qualifications Authority
RAMM	Road Asset Maintenance Management
RMA	Resource Management Act (1991)
SOP	Standard Operating Procedure
TDI	Tolerable Daily Intake

Chapter 1 - Introduction

NZ Transport Agency (NZTA) is responsible for the ongoing maintenance, operation and improvement of our State highway system. Specifically, NZTA's role includes the following areas:

- State Highway Maintenance and Construction;
- State Highway Operation, including safety; and
- Development of policy in relation to State highways

It is noted that State highway traffic management is partially a NZ Police responsibility.

The NZTA employs a range of consultants and contractors who maintain the State highway network on their behalf. This is done through 22 'sub networks' around the country, known as 'Network Operations Contract Areas'. Contracts for State highway maintenance work specify 'levels of service' that must be achieved. These include response times to events, such as emergencies arising from road accidents and transport spillages through containment loss.

Activities arising from spillages are subject to the provisions of the Resource Management Act 1991, the Health & Safety in Employment Act 1992 and the Hazardous Substances and New Organisms Act 1996. The NZTA therefore aims to have in place a contingency plan for response to any spillage that occurs on or from State highways. This is to ensure that so far as practicable the risk to people and the environment is reduced and the spillage can be immediately and effectively contained.

1.1 Scope

This purpose of this Standard Operating Procedure (SOP) is to guide the NZTA in planning its response to spill incidents within the State highway network. This SOP is intended to provide direction to the NZTA regional sub-networks, their consultants and contractors. The roles and responsibilities of other agencies that may be involved in the response to spill incidents are outlined to provide a context for NZTA responses.

1.2 Objectives

This SOP is required for compliance with Section 10.2 of the NZTA Quality Standard TQS1:2005. The objectives of this document are to:

- Establish procedures, with respect to spills of hazardous and environmentally harmful substances on the State highway network;
- Establish a rating of severity of transport spill incidents;
- Clarify the roles and responsibilities of the NZTA, its sub-networks, consultants and contractors in relation to spill responses;
- Provide linkages to other agencies and their roles;
- Provide methods for hazard identification;
- Describe the expectations for NZTA contractors' spill response; and
- Describe the mechanism through which the NZTA will respond to and record spill response.

By assisting all parts of the NZTA State highway sector management to understand the systems, processes and roles required in response to a spill incident, activation of a spill response plan will allow for:

- rapid, timely, co-ordinated and effective action; and
- in the event of an incident, the return to normal State highway operations as soon as practicable.

This SOP provides procedures for spillage response following road accidents and transport spillages through containment loss. It excludes responses to spillages arising from NZTA maintenance and construction activities as these are controlled under planning consent conditions.

Chapter 2 - Background

2.1 Legislative Controls

Incidents involving spills of hazardous substances are subject to a response under the emergency provisions of the Hazardous Substances and New Organisms Act 1996, and depending on severity, may trigger a response under the Fire Services Act 1975 or the Civil Defence Emergency Management Act 2002.

2.1.1 Hazardous Substances and New Organisms Act 1996 (HSNO)

Under S135 of this act, an emergency means

- (a) Actual or imminent danger to human health or safety ; or
- (b) A danger to the environment or chattels so significant that immediate action is required to remove the danger, arising from a hazardous substance or new organism

This section also defines an enforcement officer to include any member of the Police, and any Chief Fire Officer or person exercising the powers of a Chief Fire Officer under section 28 or section 28A or section 29 of the Fire Service Act 1975.

Under section 136 HSNO an enforcement officer may declare an emergency to protect human health and safety and the environment. Such an emergency shall lapse:

- after 48 hours, or
- when a state of emergency is declared under the Civil Defence Emergency Management Act 2002, the emergency is treated by a Chief Fire Officer as an emergency under the Fire Service Act 1975, or an emergency is declared under section [144](#) of the Biosecurity Act 1993;

whichever is sooner.

Under S97(1)(c) of HSNO, the NZTA may enforce the provisions of that Act in or on any motor vehicle and on any road.

Under S97(1)(d) of HSNO, the Commissioner of Police (after consultation with the NZTA) shall ensure that the provisions of that Act are enforced in or on any motor vehicle or on any road.

Under S144(1) of HSNO, every person in charge of a substance involved in an incident resulting in serious harm to any person or serious environmental damage is required to report that incident to an enforcement officer.

2.1.2 Fire and Emergency New Zealand Act 2017 (FENZA)

Under section 28(3A) FENZA, the Fire **and Emergency** New Zealand (FENZ) personnel are empowered to endeavour by all practicable means to cause the stabilising or rendering safe of any hazardous substance emergency, and save lives and property in danger. A hazardous substances emergency under the FENZA “means the release or potential accidental release of any hazardous substance from any building or other premises, or from any container or pipe, or from any means of transport (whether motorised or not)” (s6 FENZA)

The authorised FENZ person responding to the emergency shall have the powers of an enforcement officer under the HSNO relating to a hazardous substances emergency until a HSNO enforcement officer arrives (s39(2) FENZA) and under sections 136 and 137 of the HSNO Act may declare an emergency and exercise emergency powers. The declared emergency will cease when the emergency is treated by FENZ personnel.

2.1.3 Civil Defence Emergency Management Act 2002 (CDEM Act)

The Royal Commission of Inquiry into a chemical incident in Parnell in 1973 recommended setting up formal meetings between the emergency services within regions. This resulted in the establishment of regional emergency services co-ordinating committees (ESCCs). Under the CDEM Act, these committees are responsible for the planning and provision of civil defence emergency management within their district. The purpose of the ESCC is to maintain/develop relationships between those organisations that will be required to respond to multi-agency emergencies. The NZ Police are responsible for coordinating quarterly meetings of the ESCC Committee. The composition of the committees include:

- NZ Police (chair);
- NZ Fire Service;
- The Territorial Local Authority;
- Community Public Health;
- St John Ambulance;
- Ministry of Civil Defence & Emergency Management;
- The regional Council;
- Telecommunications;
- Electricity supply;
- Amateur Radio Emergency Communications (AREC);
- Others as appropriate.

As the ESCC lack technical knowledge about chemicals Hazardous Substances Technical Liaison Committees (HSTLC) were established as a sub-committee to co-ordinate certain actions in respect to chemical emergencies. The Fire Service acts as convener of the HSTLC in all areas (Appendix B). Generally the organisations include:

- Fire Service;
- Ambulance;
- Ministry of Health;
- Department of Labour (hazardous substances);
- Police;
- Technical expert in chemistry (varies according to local expertise, e.g., University, Crown Research Institute);
- Industry specialists (Chemical Industry Council members, where available);
- Media representative or liaison; and
- Local/Territorial authority (water, electricity, environmental, hazardous substances)

The participation of enforcement agencies in HSTLCs has been relatively informal.

The initial response to a hazardous substance spill incident will follow regional Civil Defence Emergency Group Management Plans,

Civil Defence Emergency Group Management Regional Plans generally categorise incidents as follows:

Level 1: Local Incident that can be dealt with by Emergency Services and/or **Territorial** Authority;

Level 2: Incident that may extend beyond locality and may require regional support;

Level 3: Emergency that is regionally significant and requires regional support; and

Level 4: Emergency that nationally significant and requires national support

Level 3 and Level 4 incidents are **generally** declared to be civil defence emergencies. Level 3 incidents are managed regionally under the Civil Defence Emergency Management (CDEM) Group. Level 4 emergencies are managed nationally under the Ministry of Civil Defence Emergency Management (MCDEM).

Spills involving hazardous substances will trigger a response from emergency services with the police, initially assuming the role of incident response management. For major incidents, territorial authorities or regional councils may assume control

2.1.4 Resource Management Act 1991 (RMA)

The RMA is New Zealand’s overarching environmental legislation. Its purpose, outlined in Section 5, is to “promote the sustainable management of natural and physical resources”. Under the RMA, the definition of contaminant is sufficiently wide to include organic material like milk, stock effluent and other materials not controlled as hazardous substances under HSNO and/or as dangerous goods under the Land Transport Rule: Dangerous Goods 2005 (see below). Regional Councils have statutory powers under the RMA to establish regulatory controls on activities which may affect the environment through rules within their regional plans. Territorial Authorities have statutory powers under the RMA to establish regulatory controls on land use through rules within their district plans. Most Regional Councils maintain 24 hour hotlines for reporting pollution incidents and, if required, regional councils attend incident scenes as soon as practicable.

Section 330 RMA provides for network utility operators approved as requiring authorities to undertake emergency works, preventive and remedial action without first obtaining consents that would normally be required under regional or district plan rules. Section 330A RMA requires the network utility operator to notify the appropriate consent authority within 7 days that such emergency activity has been undertaken. Where the adverse effects of the emergency activity continue, an application to the consent authority for a resource consent is required within 20 days of the notification.

The same regime applies to activities undertaken by a person exercising emergency powers during a state of emergency declared under the CDEM Act 2002 (section 330B RMA).

2.1.5 Land Transport Act 1998 (LTA)

Among other things the LTA contains provisions, provides for a system of Rules, governing road user behaviour.. Section 9 of the LTA states that a person operating a motor vehicle on a road, and any person loading that vehicle, must ensure that any load carried in or on the vehicle (or in or on a vehicle being towed), is secured and contained in such a manner that it cannot fall or escape from the vehicle.

2.1.6 Land Transport Rule: Dangerous Goods 2005

The Land Transport Rule: Dangerous Goods 2005 sets out the requirements for the safe transport of dangerous goods on land in New Zealand.

The Rule covers the packaging, identification and documentation of dangerous goods; the segregation of incompatible goods; transport procedures and the training and responsibilities of those involved in the transport of dangerous goods. The Rule’s requirements are applied according to the nature, quantity and use of the goods.

The consignor must supply emergency response information for the dangerous goods being transported unless the driver or operator of the vehicle indicates that he or she already has that information.

The carrier must:

- Carry emergency response information for all the dangerous goods on the vehicle; and
- Keep the emergency response information in the driver’s cab in an accessible position; and

Be aware of:

- the hazards that the dangerous goods present; and
- the procedures for their safe loading, handling and storage on the vehicle; and
- the emergency procedures stated in the emergency response information.
- The Commercial Vehicle Investigation Unit (CVIU) of the New Zealand Police is a nationally managed unit with responsibilities under this Land Transport Rule. These responsibilities include:
 - The safe carriage of dangerous goods and hazardous substances;
 - Specialist investigation of serious commercial vehicle crashes;
 - Load security; and

- WorkSafe (Health and Safety at Work Act 2015) investigations focusing on driver workplace safety and vehicle fitness

2.1.7 Land Transport Management Act 2003

The Land Transport Management Act 2003 sets out the requirements and processes for local authorities to obtain funding for roading construction and maintenance, and for the funding of Police on-road enforcement. As amended in 2008 it is also the Act that establishes the NZTA.

Under this Act, the NZTA's functions include:

- Promoting an affordable, integrated, safe, responsive, and sustainable land transport system;
- Investigating and reviewing accidents and incidents involving transport on land; and
- Managing the State highway system, including planning, funding, design, supervision, construction, and maintenance and operations, in accordance with the Land Transport Management Act and the Government Roothing Powers Act 1989:

2.1.8 Radiation Protection Act 1965

The National Radiation Laboratory (NRL) is a specialist business unit within the Ministry of Health. The NRL:

- Administers and enforces current radiation protection legislation; and
- Advises key agencies on radiation risks, and the application of radiation safety principles to reduce the potential for radiation incidents in its role as a regulatory body through the tracking of radioactive sources, compliance monitoring and other processes and initiatives.

The NRL will provide expert advice and technical support to the emergency and health services, who are likely to attend any ionising radiation incident. In relation to all incidents involving ionising radiation, the NRL will:

- Provide expert advice and assistance (including specifying appropriate control measures) for the purposes of minimising the radiation dose to workers and the public, and damage to the environment;
- Provide laboratory support and on-site measurement capability;
- Secure radioactive material and remove it to a place of safety, and/or advise on the securing and evacuation of affected areas;
- Provide radiation dose assessments;
- Assist in the mass screening of people for external radioactive contamination; and
- Provide expert advice and assistance in the development and implementation of remediation plans.

2.2 Transport Spill Incidents

Spills from road transport occur regularly and can result in safety and environmental risks, costly clean-up and traffic disruption. Such spills are not limited to hazardous substances as spills bulk materials such as milk, tallow and soils can create hazardous road conditions and create environmental problems. They may occur when a vehicle carrying a load lacks adequate containment or when a vehicle accident causes breach of the containment system. Smaller spills of fuel from vehicles often occur as a result of a crash loss of load containment. The spill may result in an impact to the receiving environment or human health, particularly if inappropriately managed.

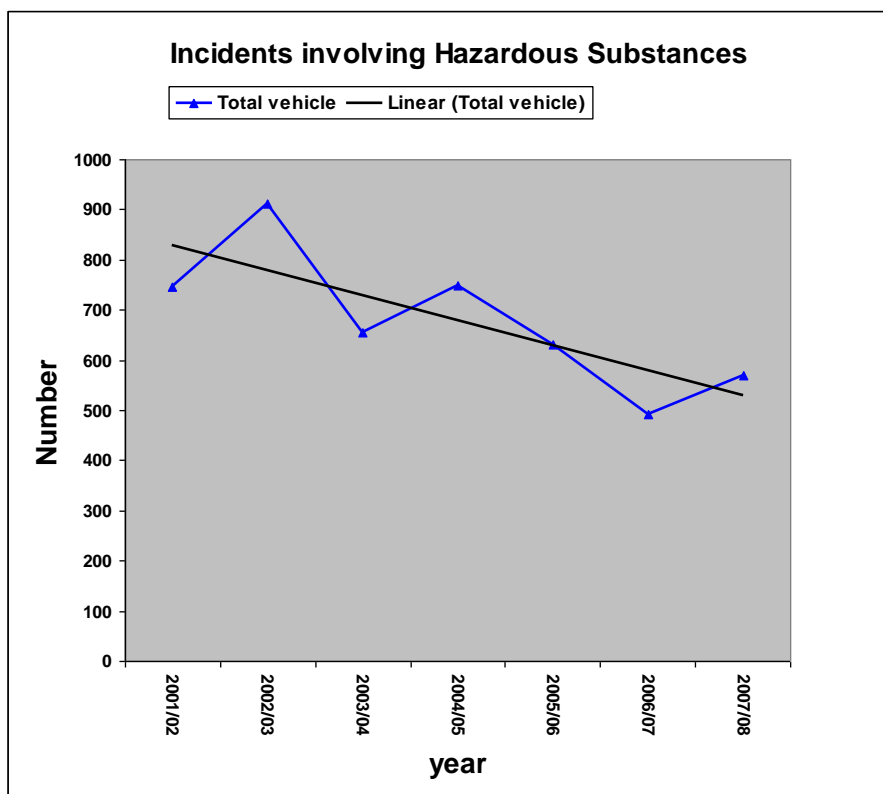
The Environmental Protection Agency (formerly ERMA New Zealand) has categorised spill incidents involving hazardous substances into the levels shown in Table 1.

Table 1: The Environmental Protection Agency (formerly ERMA New Zealand) Incident Categories

Minimal (Level 1)	Little discernible effect on people or the environment, minor effect on property or some social disruption, existing environmental and public health controls are adequate
Minor (Level 2)	Localised, short term, minor effect on people or the environment, property damage, some social disruption to surrounding area, existing environmental and public health controls are adequate
Moderate (Level 3)	Significant longer term damage to people, property or the environment, one death, disruption to surrounding community, controls appear adequate but may require follow-up
Major (Level 4)	Significant irreversible damage to people, property and the environment, more than one death, major social disruption, a system/control failure or lack of adequate controls, public and political interest
Massive (Level 5)	Major damage to property, communities and the ecosystem, including species loss, multiple deaths, significant economic effect, substantial system/control failure resulting in public and political outrage

While not directly aligned with the CDEM levels (Section 2.3) they are similar, with increasing support from governmental agencies and other organisations required as the incident category rises.

FENZ data, reported by The Environmental Protection Agency (formerly ERMA New Zealand) for the period 2002 – 2008 is illustrated in Figure 1.¹



¹ Environmental Risk Management Authority Monitoring Report, April 2009

Figure 1: Vehicle incidents involving hazardous substances reported by the New Zealand Fire Service

The Environmental Protection Agency (formerly ERMA New Zealand) records for the year 2008 – 2009 indicate that approximately 85% of incidents were level 1 with the remaining being level 2. No higher level incidents were reported². Nationwide the most common substances associated with incidents were liquid petroleum Gas (LPG), ammonia, petrol, diesel and acids.

Many other spill incidents arise from insecure loads and may not attract an immediate response from emergency services. For example, leaking fluids from stock trucks and tank wagons may remain undetected until the vehicle from which the leak is coming is well removed from the scene.

2.2.1 Inter-agency Emergency Response Roles

A number of agencies and organisations are involved directly or indirectly with the management of hazardous substances and dangerous goods and the investigation of chemical incidents and other spills (see section 2.1.3). Good communication links between key agencies are important. These should be established or reinforced, and regularly maintained to allow for efficient and effective dissemination of information and resolution of issues.

2.2.2 Initial response

By virtue of their day-to-day role as co-ordinators of emergency situations and their 24-hour availability, New Zealand Police and the New Zealand Fire Service, acting under the authority vested in them under S97 of HSNO and the FSA, will generally take the initial responsibility for co-ordination of an emergency. The St John Ambulance Service, and others, provide life support for accident victims. This initial response will mainly involve life support and the control of accident scenes. Life support includes victim evacuation and scene controls include road safety, human health, safety and environmental issues. This response captures the spillage of hazardous substances and dangerous goods from road accidents and point source spills, but is unlikely to capture diffuse leaks from vehicles that occur over long distances, where road safety issues are not immediately apparent. Diffuse leak incidents are more likely to be reported by road users.

2.2.3 Fire and Emergency New Zealand

Fire **and** Emergency New Zealand personnel (FENZ) attend over 70,000 emergency incidents, including road accidents, annually. Their role is to:

- Manage the scene;
- Contain and manage any released hazardous substance; and
- Working, in co-operation with the Ambulance Service, for decontamination of individuals at the scene,

Each incident requires that the officer in charge record the important features of the incident. These records become part of a database used in developing community safety programmes. To assist in this role, Fire **and** Emergency New Zealand maintains a centralised hazardous substances spill response database. In 2005 the New Zealand Fire Service signed the National Hazardous Substance Technical Liaison Committees (HSTLC) Terms of Reference and copies were distributed to 22 HSTLC Groups (Appendix B). The HSTLC role is to advise and support Fire **and** Emergency New Zealand when it is dealing with hazardous-chemical incidents. Generally, the committees' expertise is in dealing with spills of chemicals from a transport vehicle or at an industrial site.

2.2.4 New Zealand Police

The Police role is to:

² Environmental Risk Management Authority Annual Report 2009

- Act as the Incident Controller;
- Secure and manage the scene;
- Investigate the incident to determine if it is the result of a criminal or terrorist act; and
- Secure evidence for any resulting prosecution.

They have responsibility for accessing the Emergency Service Co-ordination Committees (see section 2.1.3), including advising the regional councils and territorial authorities and NZTA sub network contractors of the incident. The responsibility for subsequent action, if any, is transferred to the appropriate lead agency once that agency is ready.

2.2.5 CDEM Groups

In the event of a major incident (CDEM Levels 3 and 4, Section 2.3 this report), the initial response will follow regional Civil Defence Emergency Management Plans and be controlled by a Civil Defence Emergency Management Groups (CDEM Groups) (see section 2.1.3). Their role of these Groups is to:

- Integrate and co-ordinate civil defence emergency management planning and activity; and
- Respond to and manage the adverse effects of emergencies in their areas.

They are controlled by the Director of Civil Defence Emergency Management or the National Controller appointed under the CDEM Act during a state of national emergency.

2.2.6 Regional Council Pollution Response

Regional councils generally receive reports of pollution via a 24-hour Pollution hotline, with every call investigated by a pollution response officer. If this officer finds a pollution problem, regional councils aim to:

- Stop any discharge to the environment immediately;
- Ensure that residual pollutants are cleaned up as far as practicable;
- Collect evidence of the pollution incident;
- Advise the responsible party (the spiller) on appropriate actions to prevent the problem from reoccurring;
- Ensure that the responsible party is adequately prepared to deal with future leaks or spills by having a Spill Response Plan;
- Assess other activities/operations in order to identify any other problems that may be causing actual or potential water pollution;
- Consider the legal liability of each person and/or entity involved and potential enforcement options; and
- Where possible, seek to recover all reasonable costs associated with pollution events so that the region's ratepayers do not have to bear the cost - the polluter pays!

2.2.7 The NZTA Role

The sub networks and their position within the NZTA structure are identified in Appendix A. Contracts for State highway maintenance work managed by the sub networks specify 'levels of service' that must be achieved and include response times to events, such as emergencies arising from spillages. During an emergency situation, it is the responsibility of the contractor to carry out the physical repairs and reopen the road to the traffic as soon as practicable.

The NZTA State Highway Asset Management Manual includes a proposal for the development, extension and maintenance of a crash reporting network³ to obtain information relating to safety on the state highway network. These contacts forming part of this network are to provide details of crashes and incidents to supplement details provided by police and

³ Section 3.4, Chapter 2; The State Highway Asset Management Manual, SM020 TNZ, Aug 2000

maintenance contractors. This network would be important in remote areas where crashes may not be attended or recorded by police. Appropriate personnel for inclusion in the crash reporting network include:

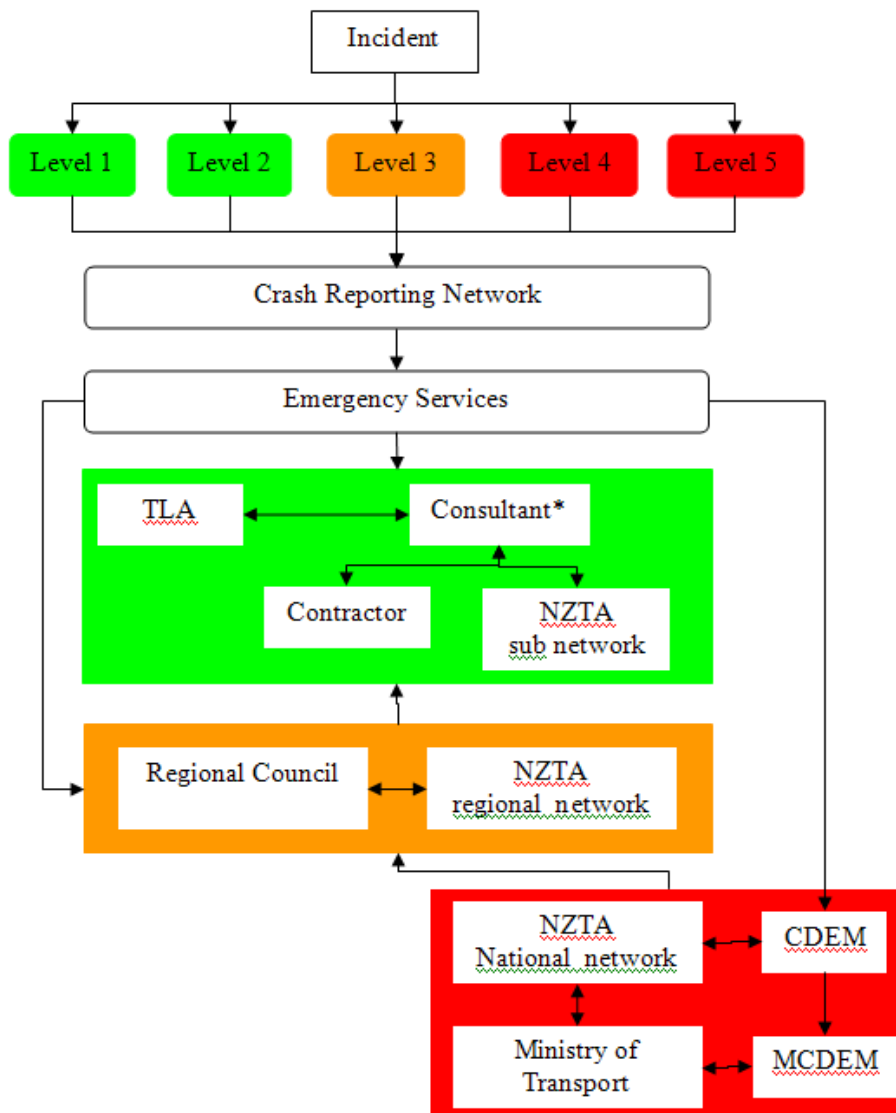
- NZ Police;
- Emergency services such as ambulance services and Fire **and Emergency** NZ;
- Service stations;
- Crash recovery and tow truck operators;
- Utilities such as telecommunications companies;
- Territorial authorities and regional councils;
- Transport companies; and
- Local residents

Crash data is generally collected by consultants who report to road controlling authorities for entry into the NZTA Accident Investigation System (AIS).

Initial notification of an incident may arise from the New Zealand Police or from the local crash reporting network contacting the New Zealand Police.

Although this process is primarily targeting crash incidents, it would also captures many incidents where environmentally damaging spills may result. For minimal incidents (Level 1, Table 1), the incident may not present a threat to the environment and no clean up response is required. For level 2 incidents, where environmental discharges or risks to human health arise, regional councils will become involved and the NZTA may be required to undertake environmental remediation. Environmental remediation are likely to be required following higher level 3 - 5 emergencies.

The interaction between the NZTA and other parties involved in emergency/spill response is illustrated in Figure 2.



* The consultants relationship and role is described in Section 3.1 – 7

Figure 2: Control of response to incident/emergency

2.2.8 Transport Operators

Transport operators, through industry associations, may have developed Codes of Practice (CoP) or Standard Operating Procedures (SOP) for guidance on dealing with spills. For example, the fertiliser industry has a CoP that includes the following:

- *In the event of any spillage of fertiliser products, the driver must take immediate steps to prevent any further loss, risk to other people and/or any contamination of land or waterways. The driver must:*
 - *Notify the appropriate authority (call 111) if there is a large spill*
 - *Minimise any hazard to other road users, and*

- *Ensure that no residual product remains that could pose any immediate or future threat to the environment.*
- *At the earliest opportunity, the regional authority must be advised of any spillage risks to waterways, ponds, lakes or ground water.*

An example of an SOP for the transport dangerous goods is the Tier 1 Oil Spill Response Plan required under the marine protection rules of the Maritime Transport Act 1994 for tank truck operations in port areas.

2.3 Identification of Spill Hazard

Dangerous Goods and Hazardous Substances are terms that are often used interchangeably. This is not strictly correct. Dangerous Goods are defined under the Land Transport Rule: Dangerous Goods 2005 (Part 2.1.5, this document) and include infectious and radioactive substances. Hazardous substances are defined under the HSNO and the Hazardous Substances Regulations 2001. Infectious diseases are controlled under the Health Act 1956 and radioactive substances are controlled under the Radiation Protection Act 1965, but not under the HSNO Act. Where the term dangerous goods is used in this SOP, it refers to dangerous goods as defined in the Land Transport Rule and NZS:5433: The Transport of Dangerous Goods on Land. Where the term hazardous substance is used, it refers to hazardous substances as defined in HSNO.

2.3.1 Carriage of Dangerous Goods

The carriage of Dangerous Goods on Land is regulated under the Land Transport Rule: Dangerous Goods 2005. This rule incorporates, by reference, some of the controls in NZS:5433:2007 *Transport of Dangerous Goods on Land*.

The Rule refers to classes of dangerous goods and requires that general commercial vehicles carrying hazardous substances must carry a Dangerous Goods Declaration. The classes are;

Table 2: Classes of Dangerous Goods

Class 1	Explosives
Class 2.1	Flammable gases
Class 2.2	Non-flammable and non-toxic gases
Class 2.3	Toxic gases
Class 3	Flammable liquids
Class 4.1	Flammable solids
Class 4.2	Substances liable to spontaneous combustion
Class 4.3	Substances which on contact with water emit flammable gases
Class 5.1	oxidising substances
Class 5.2	organic peroxides
Class 6.1	toxic substances
Class 6.2	infectious substances
Class 7	Radioactive material
Class 8	Corrosive substances
Class 9	Miscellaneous dangerous substances

The placarding of many vehicles carrying dangerous goods is also required under these controls. These placards contain pictograms identifying the class of dangerous goods carried. For bulk carriers, an emergency information panel is also

required. The emergency information panel (Figure 3) identifies the hazardous classification and emergency response details of the dangerous goods be carried on the vehicle.

Class 6.2, infectious substances classification, captures the carriage of portable toilet waste, septic tank effluent, grease trap waste and animal effluent under the identifier UN3373, Biological Substances Category B. Class 9, miscellaneous dangerous substances, captures environmentally hazardous substances. These substances include liquids or solids that are pollutants to the aquatic environment and solutions and mixtures of such substances (such as preparations and wastes). HSNO Class 9.1 substances (for example pesticides, herbicides, and insecticides) are included in this dangerous goods classification.



Figure 3: Dangerous Goods Placard Example⁴

This information provides detail required by the emergency services to identify the hazardous properties of the material carried and the response required in dealing with spillages. The pictogram gives the hazardous substance classification. The emergency information gives the UN No. identifier, contact details and the HAZCHEM Emergency Code (2R in Figure 3). The HAZCHEM code advises on:

- Firefighting media;
- Personal protection requirements;
- Risk of violent reaction;
- Spillage handling; and
- Evacuation consideration

The code interpretation, given in Figure 4, provides immediate information that emergency services should carry out firefighting with fine spray and use liquid tight chemical suits with breathing apparatus, and that washing to drain with large quantities of water is a suitable initial response. Note that any placards containing the letters W, X, Y or Z in the HAZCHEM code refer to dangerous goods which require containment by any means possible to prevent discharge into drains or water courses.

This information is used by Fire **and Emergency** New Zealand in their initial response to transport accidents involving the carriage of dangerous goods and in reporting spills of hazardous substances to EPA . It is also reported to the NZTA contractors to inform them on what remedial action may be required to seek to ensure environmental protection after an incident.

⁴ From SNZ HB76:2008 Dangerous Goods initial Emergency Response Guide.

Hazchem Emergency Action Code

- 1 COARSE SPRAY
- 2 FINE SPRAY
- 3 FOAM
- 4 DRY AGENT

P	V	LTS	DILUTE
R			
S	V	BA & FIRE KIT	
T			
W	V	LTS	CONTAIN
X			
Y	V	BA & FIRE KIT	
Z			

E PUBLIC SAFETY HAZARD

Notes

Dry Agent
Water **must not** be allowed to come into contact with the substance at risk.

V
Substance can be violently or even explosively reactive, including combustion.

LTS
Liquid-Tight chemical protective Suit with BA.

Dilute
May be washed to drain with large quantities of water.

Contain
Prevent, by any means available, spillage from entering drains or water course.

E
People should be warned to stay indoors with all doors and windows closed but evacuation may need to be considered. Consult Control, Police, and product expert.

Figure 4: HAZCHEM Code: Interpretation of Emergency Action⁵

NZS 5433 incorporates by reference the SNZ HB76: 2008 *Dangerous Goods Emergency Response Guide*. This guide provides initial emergency response guidance and requires that the NZ Police and Fire **and Emergency NZ** be contacted for spills involving dangerous goods. A template contact form provided in this guide is included in Appendix F to this SOP.

2.3.2 Carriage of Other Goods

Substances we usually consider harmless, for instance food, building materials, fertilisers and even clean top soil can have disastrous and deadly effects on delicately balanced ecological systems. For example, aquatic species can be threatened by spills of:

- Fine silty materials, such as sands and soils, that increase sediment deposition in water bodies;
- Cement related products that can make receiving water alkaline;
- Milk that can reduce the oxygen content of water; and
- Fertilisers and stock effluent that can increase the level of nutrients in water, promoting aquatic weed growth;

The crash reporting network will capture most spillages of this nature and the NZTA sub-network will respond accordingly

2.4 Transport Leaks

Faulty valves and access ports, and poorly secured containers, on commercial vehicles frequently result in material being spread over many kilometres of road. The Commercial Vehicle Investigation Unit (CVIU) of the New Zealand Police has reported load security offences being identified in up to 8% of roadside commercial vehicle inspections over the period

⁵ From SNZ HB76:2008 Dangerous Goods initial Emergency Response Guide

2004 – 2008⁶, but the CVIU data provides no detail of the type of load being carried. Many such incidents remain unreported and do not trigger an immediate spill response. Material damage and health impacts can be severe.

Other incidents, such as spills of effluent from stock trucks, although generally not permitted under regional plans, also remain difficult to control.

2.5 Spills recorded

The New Zealand Fire service road transport incident records for the period 2003 – 2008⁷ are summarised in Tables 3 and 4.

Table 3: Freight - Road Transport Fire Incidents

	07/08	06/07	05/06	04/05	03/04
Truck: One tonne and over	123	87	90	109	92
Light truck: Under one tonne	80	77	76	76	79
Semitrailer	37	17	25	22	41
Tanker: Non-flammable goods	4	6	-	7	-
Tanker: Flammable combustible goods	5	6	3	6	3
Car trailer	23	14	16	13	22
Freight road transport vehicle - not classified above	15	9	16	19	10
Freight - Road Transport Total Fire incidents	287	216	226	252	247
Waste container, Bin, Compacter, Dumper	4	9	2	7	7

Table 4: Freight - Road Transport Non-fire Incidents Involving Hazardous Substance Spills

	07/08	06/07	05/06	04/05	03/04
Gas, Liquid spill: Vehicle accident	237	250	274	315	338
Gas, Liquid spill: No vehicle accident	193	177	129	155	157
Gas, liquid spill: Incorrect vehicle loading	12	18	13	18	20
Chemical spill: Vehicle accident	13	13	15	21	15
Chemical spill: Incorrect vehicle loading	4	11	10	6	14
Mobile property hazardous incident - not classified above	15	21	37	42	42
Total hazardous spill incidents	474	490	478	557	586
Mobile property accident: No hazardous substance spill	1713	1,624	1,323	1,353	1,612

⁶ 2009/2010 Road Policing Programme, NZ Police

⁷ Emergency Incident Statistics 2007 – 2008, New Zealand Fire Service 2009 (ISSN 1171-638X)

Chapter 3 - Spill Response

3.1 Spill Control

Under Section 330 RMA the NZTA may undertake emergency works, preventive and remedial action without first obtaining consents that would normally be required under regional or district plan rules. (Section 2.1.4).

The potential causes of spills arising from the transport of hazardous substances on the state highway network include:

- **Insecure loads:** Insecure loads can result in the rupture of containers by their toppling or striking infrastructure such as bridges and retaining walls;
- **Handling incidents:** Handling incidents include spills from material transfer and impact damage resulting in the rupture of containers (e.g. dropping, puncturing with lifting gear);
- **Unstable containment:** Spills may arise from leaking transfer lines, insecure seals and uncovered loads;
- **Chemical reaction:** Incompatible substances mixed in transport containers can result in fires, explosions and pressure damage to seals and transfer lines;
- **Vandalism;**
- **Fire;**
- **Road Crashes; and**
- **Natural hazards (earthquakes, major storms etc.):** Natural hazards can result in many of the potential spill sources and risks listed above.

3.2 Incident types

Any spill (of solid or liquid product) that has, or may have, entered, or is at risk of entering, the ground and/or groundwater, a stormwater system, a waterway, or coastal water must be notified to the regional council (the environmental regulator).

There are three categories of spill:

- A spill that can be contained within a confined area and cleaned up by the spiller and initial response team;
- A spill that cannot be contained in a confined area by the initial response team, but can still be controlled and cleaned up with the assistance of the NZTA sub-network contractors; and
- A spill that cannot be contained in a confined area, and cannot be cleaned up without significant external resources. Such spills may pose threats to personnel and local resources and require regional and/or central government control.

The incident controller (generally the NZ Police or Fire **and Emergency NZ**) must assume responsibility for assessing the need for outside assistance in dealing with spills. The environmental regulator can provide guidance on this requirement. Pollution hot lines for Regional Councils are given in Appendix C.

3.3 Discovery and first response

The intention is that the person who discovers a crash or incident involving spills on the State highway network will notify the crash reporting network, who in turn will call in the required emergency services. The initial responder to such incidents, generally emergency services of the police and FENZ, will attend to their personnel, crash victims and community health and safety as a priority.

The NZP provide communications, traffic control and diversions, coordination of victim evacuation and vehicle recovery for road crash incidents. Serious accidents require a detailed scene examination to assist with a reconstruction of events leading up to the accident, which can result in significant traffic disruption.

The identification information required to be carried on vehicles carrying dangerous goods (Section 2.4.1) provides FENZ with information as to the appropriate immediate response actions. This is backed up by a centralised FENZ hazardous substances database that allows rapid confirmation of the identity of chemicals, the hazards posed by them, and appropriate

health and safety protection for FENZ personnel and provides information on containment and clean-up. In the event of material spillage from a crash incident, FENZ will:

- Identify the type of substance spilled;
- If safe to do so, take immediate steps to contain the spillage and protect stormwater by:
 - blocking access to stormwater systems or unpaved ground using drain covers, sandbags, booms or other materials as appropriate for the spill;
 - containing liquid spills with suitable material so they cannot spread; and
 - covering powder spills to stop them blowing around, or dampen them where it is safe to do so.
- Report the spill to their control base.

Climatic and geographic conditions may have a significant effect on the initial response.

3.4 Material recovery

Bulk spill material can usually be contained at the point of spillage for recovery by the spiller or by contractors with equipment ranging from hand tools to vacuum tankers. For example:

- Oil spills to water bodies may be able to be recovered by pumping the oil/water mix to an oil water separator;
- Solid materials such as fertilisers spilt to land can often simply be recovered by excavation and placing in a contained system; and
- Insoluble solid materials such as sand spilt to water bodies may be able to be recovered by dredging;

Spills of soluble substances to water bodies are not easily recoverable. If they can be contained by barriers in a ditch or drain, the contaminated water may be able to be recovered by vacuum tanker for treatment and disposal at a consented disposal system.

3.5 Residual contamination

Any residues that cannot readily be recovered can harm land and water by soaking into the ground and slowly seeping or being washed by rain into a nearby water body or the coastal marine area. At this stage, the NZTA, through their sub-network contractors, will normally have assumed control of any clean up and remedial action required to mitigate any adverse environmental effects from the spill. However, under section 341(2) RMA, the spiller may wish to assume this responsibility in order to establish one element of the defence to a prosecution by demonstrating that their actions have adequately mitigated or remedied the adverse effects of the spill event.

3.6 Risk Assessment

FENZ has resources for hazard identification and risk management for immediate response to spills of dangerous goods (Part 2.4). However, residual risks are likely to remain at the spill scene once the initial response is completed and site reinstatement is generally undertaken by the NZTA. These residual risks arise from soils and surface waters contaminated with hazardous substances and environmentally harmful substances, and their potential toxic and eco-toxic effects on human health and ecosystems.

The principal modes of human exposure to contaminants are ingestion, inhalation and skin contact. These can occur through:

- Ingestion of contaminated soil;
- Ingestion of contaminated water;
- Inhalation of gaseous and dust-borne contaminants; and
- Skin absorption through contact with soil.
- Ecosystem exposure arises in:

- The aquatic environment;
- The soil (subsurface) environment; and
- The terrestrial (surface) environment.

Contaminants vary greatly in their ability to cause health effects, from those that are highly toxic to those with no known health effects, making contaminant specific risk assessment beyond the scope of this SOP.

The risk of exposure to residual contaminants after a spill of hazardous substances can be addressed by reference to environmental guideline values (EGV). These guideline values have been derived in a number of jurisdictions and in New Zealand are provided in the Ministry for the Environment's *Contaminated Land Management Guideline No.2: Hierarchy and Application in New Zealand of Environmental Guideline Values* (2007).

Risk based human health guideline values for hazardous substances and dangerous goods have been derived from tolerable daily intakes (TDI) or cancer risk for contaminants. For cancer, a risk level of 1×10^{-5} is used. This risk level indicates that exposure to contaminant concentrations at the guideline value may result in one additional cancer in 100,000 people. EGVs are in place for a range of land uses for both human health and ecological receptors. From these risk based EGVs, the level of contamination can be assessed and appropriate management controls put in place under the resource consent requirements in regional and district plans to protect human health and the environment. Any assessment and management of the risk must also include assessment and management of the risks to road maintenance workers.

Substances that are not classified as hazardous substances or dangerous goods can also pose environmental hazards. Soluble foods and fertilisers can pollute waterways by increasing nutrient levels, promoting aquatic weed growth and modifying aquatic environments. Sediments arising from building materials (sand) and wastes (excess soils) also adversely modify aquatic environments.

Chapter 4 - Procedures for residual spill clean-up

4.1 Crash Scenes and Point Source Loss of Containment

The NZP will advise the NZTA sub-networks of road crashes and point source losses of containment of materials, where a “point source loss” is the discharge of the consignment in a limited area. NZTA contractors will respond by assisting the initial emergency service response and ensuring that the affected area (the asset) is restoring the to a safe and sustainable condition. The following process will be followed:

- The crash will be reported to the emergency service providers (the NZP and FENZ)
- The FENZ will determine if the crash;
 - involves hazardous substances;
 - involves environmentally harmful substances; or
 - does not involve either of the above
- If hazardous substances are involved the HSTLC can provide:
 - Advice on hazardous substance emergency response; and
 - Contacts for other agency and network response under Civil Defence Emergency management
- The NZP will contact call out services of the NZTA, territorial authorities and regional councils;
- The FENZ will take immediate steps to contain spilt material;
- NZTA network contractors will supply immediate support (machines, vacuum tankers, back up spill control equipment), in consultation with the territorial authority, the regional council and, in significant incidents, the HSTLC, to the FENZ;
- If no hazardous or environmentally harmful substances are involved, the NZTA contractor will start any actions required to ensure restoration of the asset;
- If further clean-up is required after the initial response to a spill of hazardous or environmentally harmful substances, and the NZTA is undertaking the clean-up:
 - the NZTA’s contractor will submit a clean-up plan to the territorial authority and regional council for their approval before commencing any clean-up work;
- If earthworks are required, sediment control will be required in the clean-up plan and territorial authorities and regional councils must be consulted on any resource consent issues relating to earthworks and the discharge of contaminants;
- On resolution of any consent requirements and approval of the clean-up plan, the NZTA contractor shall commence restoration of the asset;
- On completion of the restoration, a report validating the clean-up action shall be submitted to the regional council.
- On acceptance of the site restoration by the regional council, the NZTA shall conduct a review of the incident, including the sub-network, their consultant and contractor and centrally record the results to provide data from which future responses can be refined.
- If the incident that results in a requirement for clean-up can be assigned to a fault of a known party, the NZTA may seek to recover the costs, including any consenting costs, from that party

A flow diagram for crash and point source spill response is given in Appendix D.

4.2 Diffuse Loss of Containment

Diffuse loss of containment of a consignment can spill material over wide areas. Such spills are less likely to be reported by the mechanisms described in Section 3.1. However, they are likely to become apparent to territorial authorities and

regional councils from community reporting and to the NZTA by contractor reporting. Transport operator reporting, while required for hazardous substances under land transport rules, is unlikely to report diffuse spillages of environmentally harmful substances. The NZTA response to such spills will generally be reactive to territorial authority and regional council notification.

The following process will be followed:

- The pollution control team of the regional council or Health Protection unit of the territorial authority will respond to incident reporting from the community, road maintenance contractors and/or transport operators and brief the NZTA;
- The NZTA will identify whether there spill involves hazardous substances or dangerous goods and whether any environmental harm has been caused by the spill;
- If no hazardous substances, dangerous goods or environmentally harmful substances are involved, the NZTA contractor will start any actions required to restore the asset;
- If hazardous substances, dangerous goods or environmentally harmful substances are involved further clean-up is required after the initial response to any spill. Such clean-up will be subject to compliance with district and regional plan contaminated land rules and consents may be required. The NZTA's contractor will submit a clean-up plan to the territorial authority and regional council for their approval and apply for any consents required before commencing any clean-up work;
- For widely dispersed spills, contaminant concentrations in soils and water will be lower than for point source spills. Earthworks are less likely to be required for clean-up.
- On approval of the clean-up plan, the NZTA contractor shall commence restoration of the asset;
- On completion of the restoration, a report validating the clean-up action shall be submitted to the regional council.
- On acceptance of the site restoration by the regional council, the NZTA shall conduct a review of the incident, including the sub-network, their consultant and contractor and centrally record the results to provide data from which future responses can be refined.

A flow diagram for diffuse source spill response is given in Appendix E.

4.3 Consent Issues

The NZTA response to spill incidents is required to address any consenting issues arising from provisions of regional and district plan rules. The NZTA will consult with the regional council and territorial authority to establish whether any clean-up activities require consent under the regional or district plan..

If the NZTA response requires ground disturbance, district plan rules may require land use consents for vegetation alteration or removal, earthworks, the creation of impermeable surfaces, and works to affected buildings. Regional plan rules may require consent for earthworks, vegetation alteration or removal, and discharges arising during clean up. The details required for applications for consent for earthworks generally include the volume of earthworks, number of vehicle movements, duration of works and erosion and sediment control methods. Illegal earthworks (i.e. earthworks undertaken without resource consent where a resource consent should have been obtained) can result in a prosecution under the RMA.

4.4 Spill Clean-up Plan

The site clean-up plan will be site specific and prepared by the NZTA contractor or their consultant. The content of the plan may be subject to rules contained in district and regional plans.

The plan should generally include the following elements:

- Identification of the spill site, including:
- Road name;
- Land title; and
- Map grid (NZTM)

- Summary details of the spill incident including the identification of the spilt material and any hazardous, dangerous or environmentally harmful properties;
- An estimate of the amount of material spilt and the amount of residual contamination in soil and water;
- Procedures for cleaning up or containing the residual contamination to mitigate any ongoing contaminant discharge to waterways, groundwater or coastal water;
- Target contamination levels for any contaminant levels remaining in soils and water following clean-up;
- A requirement to provide a record of the disposal of contaminated material to treatment/disposal sites that are consented to accept them;
- A requirement to provide a report validating the effectiveness of the clean-up; and
- The provision of a review template with instructions for completion and forwarding to central record keeping.

Depending on the severity of the spill, technical input may be required to determine the contaminant risk by quantifying contaminant concentrations in soil and water samples and assessing these against accepted human health and environmental protection criteria. Territorial authorities and regional councils will provide advice on the need for such input.

The Ministry for the Environment has also prepared a Contaminated Land Management Guideline Series.

4.5 Review and recording

This SOP seeks to meet the targets set out in *Part 1.2: Objectives*. Monitoring and reviewing the effectiveness of the NZTA in achieving these targets and the SOP as a whole is necessary to determine if its objectives are being met.

Monitoring and reviewing will occur at the following levels:

- Completion of spill response records by the NZTA contractor linked to the Land Transport Safety Authorities Crash Analysis System and Road Asset Maintenance Management (RAMM) system⁸;
- Reporting to the NZTA Chief Executive on progress being made on achieving targets; and
- Updating of the SOP as required, addressing deficiencies or gaps to ensure that relevant matters are covered and unintended consequences are addressed.

A template for sub-network spill response records is provided in Appendix F.

4.6 Preparedness

Other measures include advance preparation in case of emergency – such as :

- Where practicable and affordable the provision of sustainably designed stormwater controls – swales, wetlands, detention ponds and other treatment devices to provide in place treatment and containment systems if a spill occurs;
- A maintenance programme for these devices with specific attention to their ability to mitigate the impact of spill events;
- Repair or replacement of these devices if they are severely impacted by spill incidents;
- Spill response equipment being stored on or near critical routes, particularly where they intersect with sensitive waterway areas;
- Maintenance of communication links with other agencies – the HSTLCs provide an existing nationwide network to achieve this (Appendix B);
- Participation in Civil Defence exercises – again the HSTLC provides good links for achieving this.

⁸ Section 7.3, Chapter 1; The State Highway Asset Management Manual, SM020 TNZ, Aug 2000

These measures should be proportional to any potential risk and common sense suggests that emergency response experience would give guidance in achieving sustainable outcomes.

4.7 Training

Regional councils, under their CDEM, provide training for civil defence purposes. Training content and delivery will be consistent with Ministry courses or meet relevant tertiary or New Zealand Qualifications Authority (NZQA) standards. Training content will wherever possible be multi-agency and multidisciplinary. Exercises also play an important role in moulding and adjusting readiness activities and will be undertaken on a regular basis. Exercises also allow plans and SOPs to be tested and potential gaps and overlaps to be identified. Exercises will involve all CDEM Group members and will include Strategic Stakeholders (see Section 2.1.3) where and when opportunities arise. The benefits of joint exercises involving a multi-agency, multi-disciplinary approach will be realised wherever possible. The NZTA shall develop links with the regional CDEM and require that their contractors participate in available training and exercises as required.

The NZTA contractor's role in data recording of road crashes is described in Section 3 of the SMO20 TNZ⁹. The contract staff must be suitably trained, competent and experienced to undertake safety inspections, audit and crash analyses. There is no requirement for the contractor to have competence in dangerous goods, hazardous substances or spillages.

⁹ The State Highway Asset Management Manual, SM020 TNZ, Aug 2000

NZTA State Highway sub-networks

Regional Hazardous Substances' Technical Liaison Committees

This list can be updated through the NZ Fire Service. The contact at the date of this report is Dick Thornton-Grimes, (09) 302 5173; 0274 404 424.

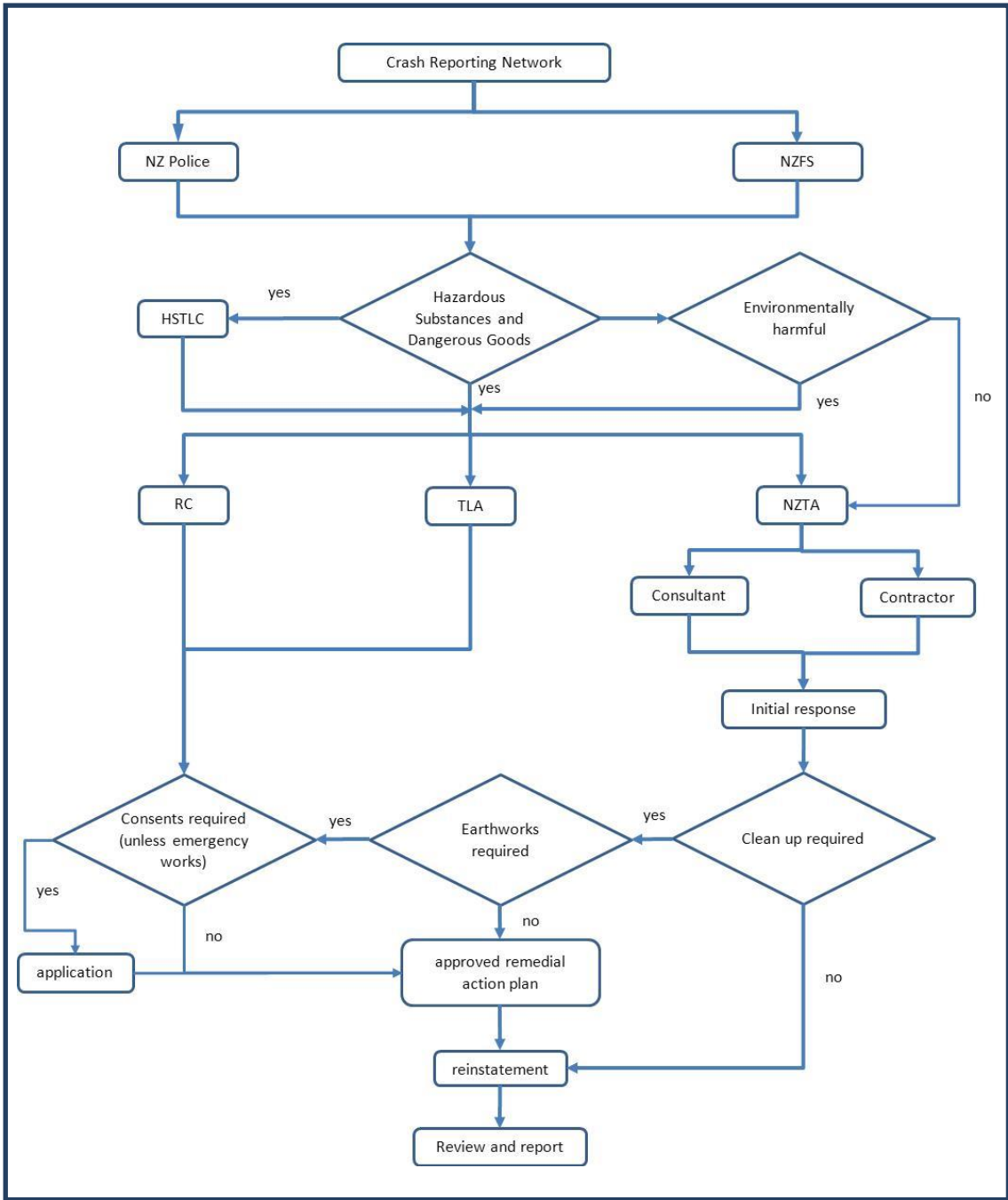
Location	Meeting frequency	Fire and Emergency New Zealand representative
Gisborne	Reforming	Stu Law
Dunedin (with satellite groups in Oamaru, Queenstown, Alexandra and Balclutha, Invercargill)	Two-monthly	Dave Seque Peter Burtonwood Barry Gibson
Whangarei		Craig Bain
Auckland	Three-monthly	Dick Thornton-Grimes
Napier/Hastings	Six-monthly	Ray Brown
Horizons Region Council (Ruapehu, Rangitikei, Wanganui, Manawatu, Palmerston North, Horowhenua, Tararua)	Six-weekly	Mitch Brown
Taranaki	2–3 months	Pat Fitzell
Wellington region	Three or four times a year	Peter Dempsey
Wairarapa/Masterton	Twice year (EMG)	Henry Stechman
Marlborough	Twice a year	Rob Dalton
Nelson/Tasman	Twice a year	Graeme Daikee/Brian Lucas
Canterbury South Canterbury (Timaru) Greymouth	Annually	Steve Barclay Artie Lind/Kevin Collins Dave Hyde/Mark Thomas
Rotorua	Twice yearly	Wayne Bedford
Tauranga/Kawerau	Quarterly	Ron Devlin
Waikato	Irregularly	Roy Breeze
Thames	Irregularly	Martin Berryman
Taupo		Charlie Turei

Agency	Coverage	Contact name	Telephone
National Poisons Centre	National		0800 764 766
National Radiation laboratory	National		03 366 5059
NZCIC CHEMCALL Emergency Response	National		0800 243 622
New Zealand Police	National	Superintendent Steve Christian	(04) 463 4432

Agency	Coverage	Contact name	Telephone
Fire and Emergency New Zealand	National	Bryan Davey Jim Stuart-Black	(04) 496 3600
Regional Councils	Northland Regional Council		0800 504 639
	Auckland Regional Council		09 377 3107
	Environment Waikato		0800 800 401 (not a pollution hotline)
	Environment Bay of Plenty		0800 73 83 93
	Taranaki Regional Council		0800 736 222
	Gisborne		
	Hawkes Bay Regional Council		0800 108 838
	Horizons Regional Council		Freephone 0508 800 800 and ask for Pollution Hotline
	Greater Wellington Regional Council		04 384 5708
	Tasman		No 24 line listed on web site. Call local office for connection
	Marlborough		None specifically listed
	Environment Canterbury		03 366 4663
	West Coast Regional Council		03 768 0466 (not a pollution hotline)
	Otago Regional Council		0800 800 033
Environment Southland		(03) 211 5225	
Chatham Islands		03 305-0033 or 03 305-0034 (not a pollution hotline). After hours: 03 305 0149 (not an pollution hotline)	

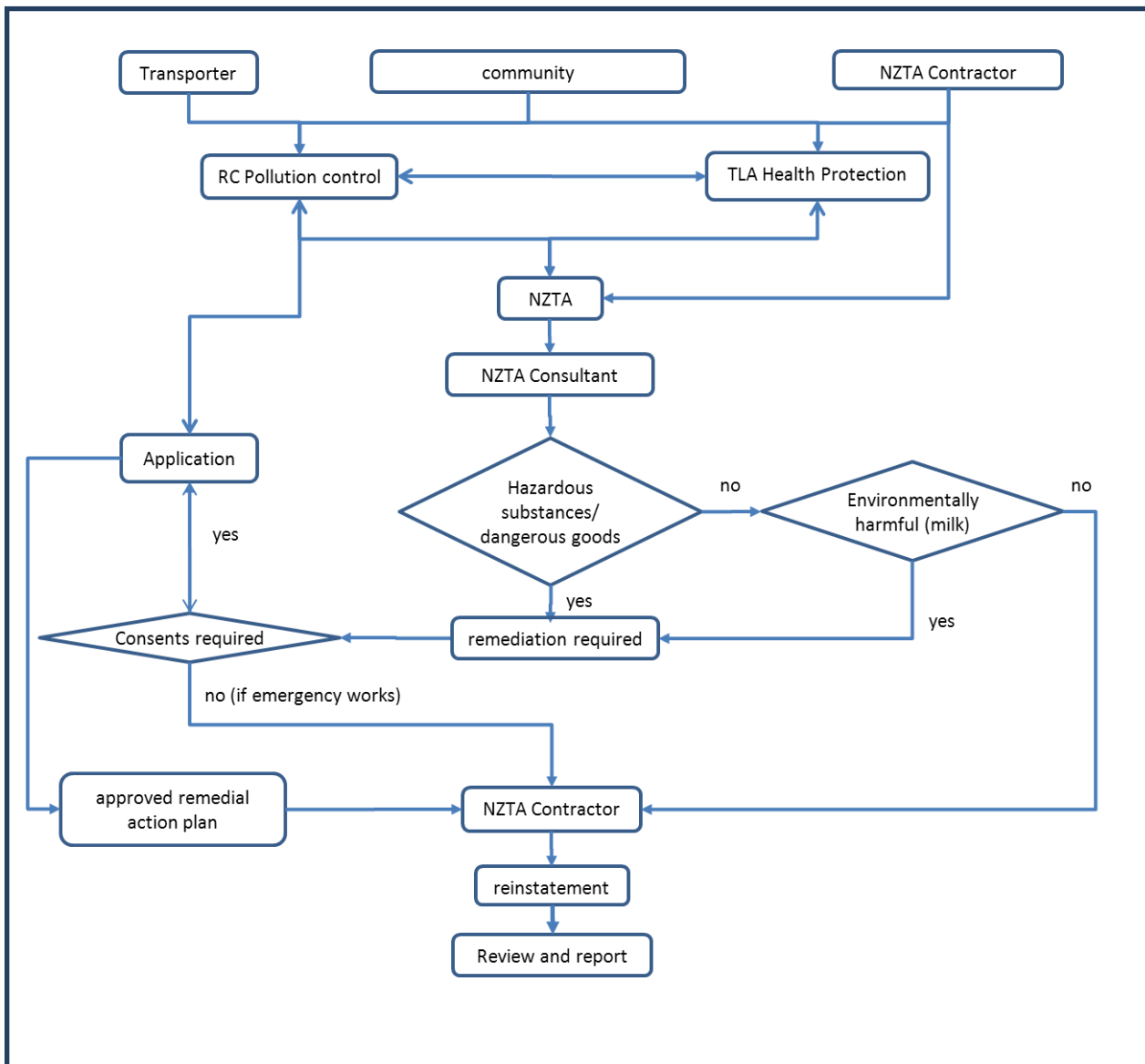
Spill clean-up: Procedural flow diagram for crash and point source response

To be read with reference to Section 3.1



Spill clean-up: Procedural flow diagram for diffuse source response

To be read with reference to Section 3.2.



Chapter 5 - Forms

Initial incident response form (from SNZ HB76: 2008 *Dangerous Goods Emergency Response Guide*)

Dangerous Goods Incident Report Form

This form is to be filled out for ANY hazardous substance spill or leak and to be sent to the relevant enforcement agency

Location

Date

- Leak/Spill in transit Leak/Spill during loading Leak/Spill during unloading

PRODUCT NAME

CLASS

UN NO.

PACK SIZE

PACK TYPE

QUANTITY

INCIDENT DESCRIPTION

.....

.....

.....

WHO IS AT THE SCENE

	At Scene	Called	ETA	Contact Name
Fire Brigade	<input type="checkbox"/>	<input type="checkbox"/>
Police	<input type="checkbox"/>	<input type="checkbox"/>
Ambulance	<input type="checkbox"/>	<input type="checkbox"/>
District Health Board	<input type="checkbox"/>	<input type="checkbox"/>
Department of Labour Inspector	<input type="checkbox"/>	<input type="checkbox"/>
Clean-Up Contractor	<input type="checkbox"/>	<input type="checkbox"/>

Name

Signature

Spill response record

Response and debriefing record

FROM:

TO:

DATE:

SUBJECT:

REPORT

Date of event:

Location of spill:

Point source or diffuse

Climatic conditions at time of spill

Materials spilt

Amount(s) spilt

Cause of spill

Did any material escape off site? If yes, where to?

What environmental or other effects resulted?

Action taken:

Who detected the spill and what did they do?

Who else on the staff was notified and what did they do?

Other agency response

Were there any other agencies involved in the event? If yes, please list and describe their role.

Fire and Emergency NZ

NZ Police

Territorial Local Authority

Regional Council

Towing company

other	
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Injury report

Were there any injuries? Yes/no (please circle one)

Cross reference to:

Costs report

Estimate costs of staff down time for clean-up and other response:

External clean-up costs:

Disposal costs:

Any other costs (e.g. Value of lost product):

Incident review

What was done well?

What wasn't done that should have been done?

What was done wrong or could have been done better?

What non-compliance caused the incident?

Prevention

Discuss any changes needed to prevent similar incidents in future:

Spill emission procedures

Equipment

Staff training

Drains or structures

Housekeeping practices

Site management systems

Standard operating procedures

Other things to prevent a similar event

FUTURE RESPONSE

Have spill control and safety supplies been topped up?

Have staff been debriefed, and if necessary, re-trained?

Other recommendations

Further action

Actions, timing, responsibility, budget, completion, review

Sustainability Rating Scheme Policy

Policy

The approved *Sustainability Rating Scheme Policy* requires the following:

- All capital projects and programmes over \$15 million capital value shall consider the merits of ISC certification.
 - All projects over \$100 million are required to complete ISC certification unless:
 - Alignment with the objectives, non-monetised and monetised benefits and a strong value for money case demonstrates that it is not practical; and
 - The sustainability objectives of Waka Kotahi such as: reducing GHG emissions, reducing environmental harm and improving public health can be implemented in an agreed alternative way.
 - The assessment of the merits of ISC certification for all capital projects will be evaluated during the early business case stage and at subsequent project stages. This evaluation shall be in the context of broader sustainability outcomes outlined in our relevant policy and strategy documents, including Toitū Te Taiao, the Environmental Social Responsibility Policy and the Resource Efficiency Policy.
 - The assessment of the merits for completing ISC certification shall be completed in accordance with requirements and processes outlined in the Environmental and Social Responsibility Standard (Z19) and EPMO - SM011.
 - Requirements and processes for contractors completing the ISC certification during tender, design and construction phase are outlined in the *Sustainability Rating Scheme Specification (P49)*.
 - Any project not required to complete ISC certification shall be required to implement and demonstrate achievement of the broader sustainability outcomes outlined in our relevant policies and strategic documents, including Toitū Te Taiao, the Environmental Social Responsibility Policy and the Resource Efficiency Policy.
 - Projects that are part funded by Waka Kotahi and meet the policy thresholds of \$15 million shall also consider the merits of using the ISC - IS rating scheme. At a minimum these projects shall apply the principles outlined in Toitū Te Taiao, the Resource Efficiency Policy and other relevant Government policies driving broader sustainability outcomes.
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