Guideline for preparing an Environmental and Social Management Plan

NZ **TRANSPORT** AGENCY
WAKA KOTAHI

New Zealand Government

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More information

If you have further queries, call our contact centre on 0800 699 000 or write to us:

NZ Transport Agency
Private Bag 6995
Wellington 6141

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Document management plan

1) Purpose

This management plan outlines the updating procedures and contact points for the document.

2) Document information

Document name	*Guideline for preparing an Environmental and Social Management Plan*
Document number	SP/M/023
Document availability	This document is located in electronic form on the NZ Transport Agency's website at www.nzta.govt.nz.
Document owner	Craig Redmond, Senior Environmental Specialist
Document sponsor	Rob Hannaby, Environment and Urban Design Manager

3) Amendments and review strategy

All corrective action/improvement requests (CAIRs) suggesting changes will be acknowledged by the document owner.

	Comments	Frequency
Amendments (minor revisions)	Updates incorporated immediately they occur.	As required.
Review (major revisions)	Amendments fundamentally changing the content or structure of the document will be incorporated as soon as practicable. They may require coordinating with the review team timetable.	Three yearly
Notification	All users that have registered their interest by email to environment@nzta.govt.nz will be advised by email of amendments and updates.	Immediately.

4) Other information (at document owner's discretion)

There will be occasions, depending on the subject matter, when amendments will need to be worked through by the review team before the amendment is actioned. This may cause some variations to the above noted time frames.

Record of amendment

Amendment number	Description of change	Effective date	Updated by

Abbreviations

CS VUE	NZTA Consent Compliance Management System
DOC	Department of Conservation
ESMP	Environmental and Social Management Plan
HPT	Historic Places Trust
KRA	Key Result Area
NZTA	New Zealand Transport Agency
RMA	Resource Management Act 1991

Contents

1. Introduction

1.1 Background

The NZ Transport Agency (NZTA) holds a strong regard towards the natural, built and social environment, as demonstrated through the *Environmental and Social Responsibility Policy*. Through this policy the NZTA aims to continuously improve performance in the management of environmental and social impacts, improve the knowledge and understanding of the extent and conditions of New Zealand's environment, and identify and comply with all relevant environmental legislation and regulation. This policy along with the *State Highway Environmental Plan* and the *NZTA State Highway Asset Management Plan* [in the future will be the *NZTA State Highway Activity Management Plan*] are consistent with the requirements of the Land Transport Management Act 2003, Resource Management Act 1991(RMA), and other environmental legislation and regulation.

Figure 1: NZTA Environmental and Social Statutory and Policy Context
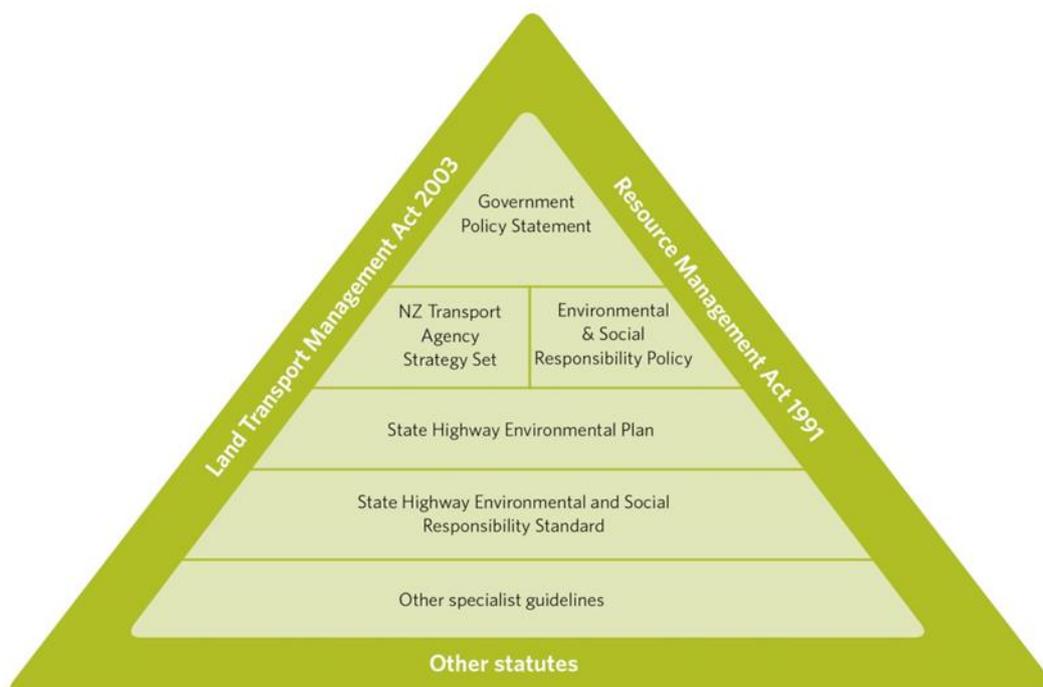
As the NZTA retains the primary responsibility for the environmental performance of its activities, the NZTA is committed to ensuring a successful environmental management system is established through the Environmental and Social Management Plan (ESMP) for all capital works projects, network outcome contracts and bridge management contracts.

1.2 Purpose

This guide sets out the requirements of an ESMP in Section 3 and provides guidance for its use in Section 4 to 7. The guide is primarily aimed to assist state highway project and contract managers and their contractors and consultants on the requirements of an ESMP. The guide sets out the framework for integrating an environmental management system with the overall contract quality system and with the multitude of sub management plans e.g. erosion and sediment control, construction noise, landscaping etc. that are required to ensure steps are in place to meet our legal obligations and manage risk.

1.3 Supporting Guidance

This guide is supported by ESMP templates for capital projects, bridge maintenance contracts, and network outcomes contract, and a growing array of sub management plan guides and templates, all of which are available at http://www.nzta.govt.nz/network/operating/sustainably/plans.html.

2. Environment and Social Management Plan Preparation

The preparation and implementation of an ESMP assists the NZTA in delivering the intended environmental and social outcomes of construction, operation and maintenance activities undertaken by our contractors.

An ESMP needs to be submitted to the NZTA for approval for all construction projects and maintenance/operation contracts, either prior to the works commencing or prior to lodgement with the statutory authority. The Environmental and Urban Design Team [environment@nzta.govt.nz] are able to provide advice on the preparation and implementation of an ESMP and advice to the NZTA project or contract managers on the quality of an ESMP and whether to support recommendations for the approval of an ESMP.

ESMPs should be living documents that evolve over the lifetime of a contract. It is important that changes are communicated with the NZTA.

2.1 Capital Project or Bridge Management Contract

The responsibility to produce an ESMP rests with the physical works contractor, and the professional services consultant ensures the plan is prepared, maintained and recommended as fit for purpose to the NZTA. However, it is becoming common practice for applications lodged with the Environmental Protection Authority for a draft ESMP to be developed by our professional services consultant as part of the consent application. The consenting strategy will determine when an ESMP is lodged with the consent application.

An ESMP provides the framework for how the physical work activities will be managed to ensure any adverse environmental and social effects are appropriately addressed. If no ESMP is lodged at resource consent application stage it will be required prior to construction commencing on-site as a contractual requirement and often as a condition of consent.

2.2 Single Supplier Network Outcomes Contract

An ESMP is required for all single supplier Network Outcomes Contracts. The principal will prepare and maintain the ESMP. The ESMP will be provided to the Transport Agency Contract Manager (with support from the Environment and Urban Design Team) for approval. The performance of the ESMP will form part of the sustainability key result area for the contract

2.3 Considerations

When preparing the ESMP it is important to consider the following points to ensure the plan is fit for purpose:
- The extent of the activity (e.g. network maintenance area, multiple year construction project, small realignment)
- The location and in particular the vicinity to sensitive receiving environments
- Existing management structures
- The extent that environmental issues are incorporated into day-to-day operations
- Cultural needs and aspirations
- Staff availability and expertise
- Limitation of resources
- The correct audience is addressed (i.e. who implements the plan)
- Regulatory context

3. Environment and Social Management Plan Requirements

The NZTA requirements for an ESMP are formed around four components that are based on the requirements of *ISO 14001:2004 Environmental Management Systems*[1]. The four components are;

1. Background
2. Environmental and social management
3. Implementation and operation
4. Monitor and review

Table 1 sets out the requirements of the four components which are to be included in every ESMP. Further guidance to what is required is included in Section 4 to Section 7.

Table 1: Environment and Social Management Plan Requirements

1. Background		
Scope	Description	• a brief project description/network area description
	Location	• setting out the location of the activities within the national, regional and if applicable the project level context
	Management Plan Framework	• identifying how the ESMP and associated sub plans sit within the overall management plan framework for the contract
Environmental Policy		• the NZTA Environmental and Social Responsibility Policy
Environmental Objectives		• the applicable NZTA State Highway environmental plan objectives, key performance indicators and/or key result areas
ESMP Management Structure and Responsibility		• outline the names, roles, responsibilities and authorities of personnel involved in the implementation and operation of the ESMP

2. Environmental and Social Management	
Environmental and Social Impacts	• identify the significant environmental and social impacts
Legislative Requirements	• identify the legal requirements (including consents) applicable to the environmental and social aspects of the contract

[1] Standards New Zealand. (2004). *AS/NZS ISO 14001:2004 Environmental Management Systems – requirements with guidance for use.* Wellington, New Zealand.

3. Implementation and Operation	
Environmental Aspect Management Plans or Maps	• include, where applicable, environmental aspect plans and maps e.g. dust management plan, erosion and sediment control plan, vibration management plan
Operating Procedures	• include operating procedures which control situations where the absence could lead to a deviation away from social and environmental legal requirements, the NZTA objectives and relevant policies, plans, standards, specifications and guidelines. This includes the *Accidental Discovery Protocol (Minimum Standard Z/22).*
Emergency Contacts	• identify the contact person(s) for environmental emergencies that causes or has potential to cause material harm to the environment, including the names and 24 hour contact details, response personnel responsibilities, emergency service contact details, the location of on-site information on hazardous materials, steps to follow to minimise damage and control an environmental emergency, and instructions and contact details for notifying relevant stakeholders
Training	• identify appropriate education, training or experience for personnel performing tasks with potential to cause significant environmental impact(s), including a record of the training which identifies the person, position, type of training, who was facilitating the training, when the training was completed and any refresher training that may be required

4. Monitor and Review	
Monitoring	• include a procedure for how monitoring environmental and social management activities will be undertaken to ensure activities are meeting the requirements of legislation, environmental aspect management plans and/or maps, and the operating procedures
ESMP Audits	• include a procedure detailing how internal audits of the ESMP at planned intervals will be conducted, and how the audit recommendations will be used as an input into a management review of the ESMP
Corrective and Preventive Action	• include a procedure for corrective and preventive action within the ESMP
Management Review	• include a procedure for management reviews of the ESMP

The framework is based upon the requirements of ISO14001, which sets out an internationally recognised and adopted framework for an environmental management system.

Each ESMP is to be submitted for approval to the NZTA prior to works commencing or within the timeframes set out in the contract or prior to lodgement with the statutory authorities. The NZTA Environmental and Urban Design Team (environment@nzta.govt.nz) will review these for the NZTA project and contract managers. This process is important to achieve consistency and forms part of the policy review mechanism. This will establish a culture of best practice.

4. Component One: Background

Component one sets the background factors for the ESMP. It allows the users of the plan to understand the context in which this plan operates within, detailing the scope, policy, objectives and performance measures, and roles and responsibility.

4.1 Scope

The scope of the ESMP is formed through the description, location and management plan framework. This forms the boundaries of the environment and social management system which the plan is documenting.

4.1.1 Scope – Description

A brief description of the project/network (bridge) maintenance area which includes the key activities at a high level is required.

For an individual project that would include:
* The project name (including State highway number)
* Territorial/regional/unitary council(s) who have jurisdiction
* Construction period
* State highway classification
* Nature of the works being undertaken

For a network/bridge management area that would include:
* The network area identified on a map, clearly identifying the boundaries and the state highways, including the State Highway numbers.
* The territorial/regional/unitary council(s) who have jurisdiction
* The State highway classifications
* The key characteristics
* List of future capital works to be constructed and be accepted

4.1.2 Scope – Location

Locality plans are required to provide context to the reader. The plans should demonstrate a cascading level of detail as outlined in Table 2.

Table 2: Cascading level of locality plans

Level	Description	Type of ESMP
National	Location at a national scale	All
Regional	Location at the regional scale	All – this level of map should also provide the state highway numbers for all state highways shown
Local	Local level plan showing the location of the project and key characteristics	Capital project ESMP or an ESMP for an individual SH structure

4.1.3 Scope – Management Plan Framework

The ESMP and the various sub management plans (as required) forms part of the contract management plan framework. In order for the reader to understand this structure and the interactions between the various documents, a schematic like the one in Figure 3 should be provided.

Figure 3: An example schematic identifying the key documents in the management of environmental and social effects for a typical capital project

4.2 Environmental and Social Responsibility Policy

All ESMPs prepared for an NZTA contract are to reference the NZTA *Environmental and Social Responsibility Policy* [http://www.nzta.govt.nz/resources/environmental-and-social-responsibility-manual/docs/environmental-and-social-responsibility-policy.pdf]. Individual contractors or project/network policies can also be included alongside the NZTA policy.

4.3 Environmental Objectives

This section will state the applicable environmental objectives from the *State Highway Environmental Plan* and any contract specific key performance indicators or key result areas. The objectives selected are to support improving performance and shall not be broad policy statements. The Network Outcomes Contract has a standard set of KRAs which are outlined in the Network Outcomes Contract [http://www.nzta.govt.nz/resources/state-highway-maintenance-contract-proforma-manual/docs/SM032-d6.pdf].

4.4 Roles and Responsibility

Assigning ownership and responsibility is an important step in ensuring implementation and accountability of the ESMP.

The structure and responsibility should clearly identify:
- Individuals by name and position
- What their responsibilities are
- Their authorities
- The technical skills and resources they have to support the implementation of their environmental management responsibilities

A structure wire diagram illustrating how the roles and responsibilities are integrated within the delivery team is required. An example of how this could be produced is available in Figure 4.

Figure 4: An example schematic demonstrating the ESMP personnel for a capital project
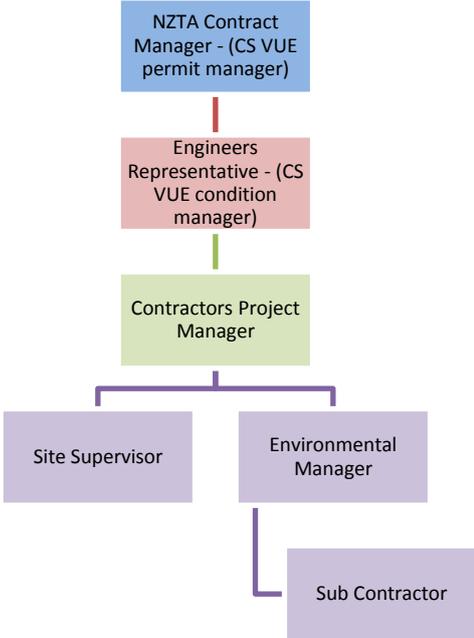
4.4.1 CS VUE Condition Manager

The assigning of accountability is also required within the ESMP to support the requirements of the NZTA Consent and Compliance Management System (CS VUE). CS VUE is a web based consent compliance management system that the NZTA uses to monitor environmental and social compliance. It is the NZTA's contractual requirement that CS VUE is used to 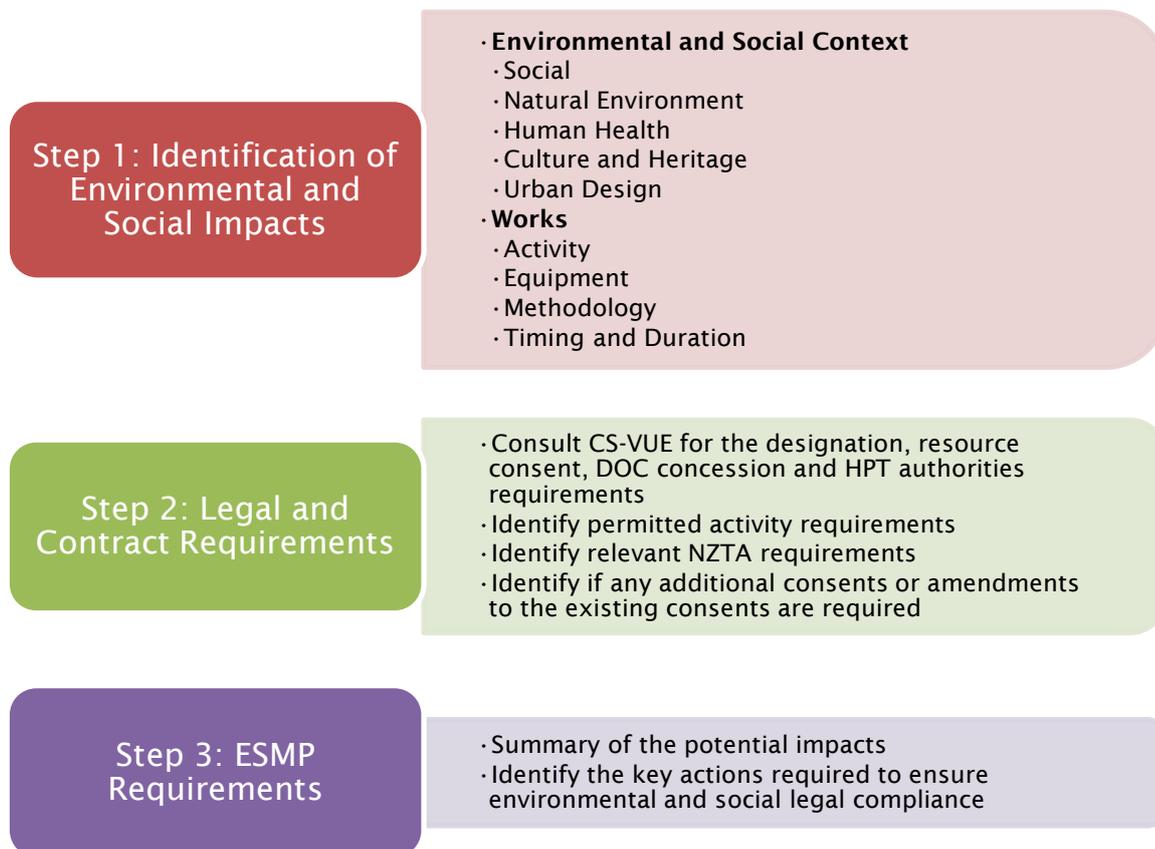track and record the compliance of resource consents, designations, Department of Conservation concessions and Historic Places Trust Authorities. CS VUE matches each consent and condition (or other legal obligation) with a permit manager and condition manager, then automatically sends an email notifying them of compliance requirements. The permit manager is the NZTA project or contract manager who is responsible for overseeing consent compliance management, and the condition manager is the nominated person who is responsible for ensuring day-to-day compliance. Further information is available at
http://www.nzta.govt.nz/network/operating/sustainably/csvue.html

Other representatives can be provided with read only access to CS VUE upon request to the Environment and Urban Design Team at consents@nzta.govt.nz. Read only access allows consents, including all the conditions, and all other documentation uploaded against the consent e.g. regulatory compliance monitoring reports, for their respective project, bridge management or network outcome area to be viewed.

5. Component Two: Environmental and Social Management

Component two of the ESMP is to establish the environmental and social impacts that will require risk management and the identification of key actions required to ensure legal compliance and the ability to sign off compliance with all the conditions of resource consent, designation, DOC concession and HPT authority in CS VUE. Figure 5 demonstrates a potential thought process for achieving this; the end requirement in the plan is a summary table of the impacts and a table outlining the key actions for ensuring environmental and social legal compliance. The result of this will inform component three of the ESMP, in identifying the need for any sub management plans, operating procedures and training required.

Figure 5: Identifying Environmental and Social Impacts and Legal Requirements

Step 1: Identification of Environmental and Social Impacts
- **Environmental and Social Context**
  - Social
  - Natural Environment
  - Human Health
  - Culture and Heritage
  - Urban Design
- **Works**
  - Activity
  - Equipment
  - Methodology
  - Timing and Duration

Step 2: Legal and Contract Requirements
- Consult CS-VUE for the designation, resource consent, DOC concession and HPT authorities requirements
- Identify permitted activity requirements
- Identify relevant NZTA requirements
- Identify if any additional consents or amendments to the existing consents are required

Step 3: ESMP Requirements
- Summary of the potential impacts
- Identify the key actions required to ensure environmental and social legal compliance

The summary of potential impacts related to the works should be provided in a table format. This can either be grouped by environmental aspect or by activity. An element of risk assessment (refer to NZTA Minimum Standard Z/44 http://www.nzta.govt.nz/resources/state-highway-professional-services-contract-proforma-manual/standards/z-series.html) needs to be applied, and with that in mind, operating procedures or management plans required will be identified.

The key actions required to ensure legal compliance are best presented in table form. This will also help assist in managing compliance in CS VUE but will also ensure all the requirements identified in Step 2 are being managed. The table would set out the requirements, where the requirement has originated from, the current status of the requirement and who is responsible for ensuring the compliance. Table 3 is an

example of how this table can be structured. This is not designed to replicate CS VUE but rather operationalise the legal and other requirements. The additional advantage here is that this table will demonstrate to the regulators how the NZTA manages permitted activities that may be subject to conditions.

Table 3: An example template for setting out accountabilities in the ESMP

Requirement	Reference	Current Status	Responsibility
e.g. By the 31 December each year the consent holder shall provide the Canterbury Regional Council (Attention: RMA Compliance and Enforcement Manager), Department of Conservation, New Zealand Fish and Game Council, and Te Runanga O Ngai Tahu with a monitoring report for the preceding 12 month period that includes, but not limited to, the amount of CMA applied, the date of applications and the locations of the applications.	Condition 13, CRC062102.1	To be produced each year until 2017.	Humphrey B Bear, Environmental Manager

6. Component Three: Implementation and Operation

Component three consists of the environmental aspect management plans and maps, operating procedures, emergency contacts and training which are based on the requirements identified in component one and two of the ESMP.

6.1 Environmental Aspect Management Plans and Maps

Specific management plans or maps are often developed during the Assessment of Environmental Effects or are required as part of a designation/resource consent condition. These are useful on-site reference tools and when developed should be included in every ESMP. The overall ESMP should provide a brief description of the intention of the sub management plan.

Common examples for individual projects are;
- Erosion and sediment control plan
- Dust management plan
- Construction noise and vibration management plan

Common examples for a Network Maintenance Area are:
- temporary and permanent stockpile management plan
- collection and disposal of hazardous or contaminated waste management plan
- pest plant management plan
- calcium magnesium acetate management plan

Templates and information on aspect specific management plans is available at
http://www.nzta.govt.nz/network/operating/sustainably/plans.html

6.2 Operating Procedures

Operating procedures need to be established and documented to control situations where the absence could lead to a deviation away from the NZTA *Environmental and Social Responsibility Policy*, Environmental Objectives/Key Performance Indicators and/or Legislative Requirements. The procedures supporting the ESMP will also likely support other contract requirements e.g. Public Engagement Plan, Customer and Stakeholder Management Plan.

Some of the common procedures for all contracts are;
- feedback/complaints procedure
- communication procedure
- reporting procedure
- spill response procedure

6.3 Emergency Contacts

A table of emergency contacts is required. This will be supported by a procedure, but at a minimum the table will include;

- Internal contacts, which includes the name, position title and twenty-four hour contact numbers.

- External contacts, which includes the key response agencies for a particular emergency situation or accident, for example; the fire service, ambulance, police, regional council, territorial authority, and neighbours.

Table 4: Example Table for Internal Environmental Emergency Contact Details

Role	Name	Organisation	Phone	Email
Environmental Manager	J Smith	Smith and Co	024 56 06 09	jsmith@smith.co.nz
Site Supervisor	C Evans	Smith and Co	024 56 07 08	cevans@smith.co.nz
Site Foreman	D Williams	Smith and Co	024 56 03 07	dwilliams@smith.co.nz

Table 5: Example Table for External Environmental Emergency Contact Details

Role	Organisation	Phone	Email
Emergency Services	Fire, Police, Ambulance	111	
Spill Response	Everyday Council Spill Response Hotline	024 789 987	pollution@everydayrc.govt.nz
Regulatory Compliance Manager – M Lush	Everyday Council [Unitary Authority]	02 359 7788	lush@everyday.govt.nz

6.4 Training

The ESMP is required to identify the appropriate education, training or experience for person(s) performing tasks with potential to cause adverse environmental impact(s). This includes all subcontractors as well. A record of the training or experience shall be maintained which identifies the person, position, type of training or experience, who facilitated the training and when it was completed.

Training is an important part of an ESMP as it helps to ensure that users of the ESMP are familiar with the requirements of the ESMP, sub management plans and operating procedures. Most training occurs as part of induction of new personnel however frequent 'refresher' training programmes and toolbox meetings are also important to ensure that staff remain up-to-date with the ESMP.

Table 6: An example training log

Type of Training	Purpose	Convenor	Attendees	Date completed
Erosion and Sediment Control Course	To train the teams awareness of erosion and sediment control on site	R Mitchell	D Greig R Hannaby J Bell	21 12 2012

7. Component Four: Monitor and Review

Component four focuses on the monitoring and review of the ESMP, which is intended to ensure that ESMP provides for continuous improvement and encourages a culture of best practice. The components involve monitoring and audits of the ESMP, a corrective action procedure, and an overall management review.

7.1 Monitoring

Compliance monitoring involves a procedure for how monitoring environmental and social management activities will be undertaken to ensure activities are meeting legislative requirements, environmental aspect management plans and/or maps, and the operating procedures. The procedure will state who has responsibility for the monitoring, the frequency and how the records will be collated, reported and stored.

Sources of compliance monitoring include designations and resource consent requirements. Common examples are;
- The daily inspection of erosion and sediment control practices
- The inspection of stormwater treatment devices following rainfall events greater than 15mm and/or at least every six months.

7.2 Audits

A procedure for internal audits of the ESMP shall be established. The procedure shall detail who is involved in the audit and the frequency of the audits (depending on the project type, length and coverage an audit may only be undertaken once during the project or it may be taken at six monthly intervals). It should also state who is responsible for ensuring audit recommendations are undertaken and used as an input for the management review (section 7.4).

The audits should focus on whether the ESMP has been implemented and maintained. Auditing is a worthwhile process as it can provide assurance of environmental performance, show trends and highlight areas for improvement, identify cost saving options, assist in fostering good relationships and provide a chance to gain a second opinion.

7.3 Corrective and Preventive Action

The responsibility for corrective and preventive action; including actions resulting from compliance monitoring, audits (section 7.1 and 7.2) and external regulatory compliance monitoring, needs to be clearly stated. Any required corrective or preventive actions need to be recorded through the Consultant's Monthly Reports and the results reviewed.

The ESMP should include a form for registering a non-conformance/near misses and the investigation and corrective process.

7.4 Management Review

An overall management review of the ESMP including representatives for the Contractor, relevant consultants and the NZTA shall be undertaken at least annually for plans that are in place for longer than nine months. This helps to assess if it is achieving its current objectives and to identify areas for improvement. The procedure shall detail who will be involved, the frequency and who is responsible for ensuring the management review takes place. This does not require a separate meeting, but can be incorporated into other scheduled meetings.

Appendix A. Requirements checklist template

This checklist is to be used to easily identify to the reviewer of the Environmental and Social Management Plan that the minimum requirements have been complied with.

	Included		Comment
	Yes	No	
1. Background			
ESMP Scope • Description • Location • Management Plan Framework	☐	☐	
Environmental and Social Responsibility Policy	☐	☐	
Environmental Objectives/KPIs/KRAs	☐	☐	
Roles and Responsibility	☐	☐	
2. Environmental and Social Management			
Environmental and Social Impacts	☐	☐	
Legislative Requirements	☐	☐	
3. Implementation and Operation			
Environmental Aspect Management Plans or Maps	☐	☐	
Operating Procedures	☐	☐	
Emergency Contacts	☐	☐	
Training	☐	☐	
4. Monitor and Review			
Monitoring	☐	☐	
Audits	☐	☐	
Corrective and Preventive Action	☐	☐	
Management Review	☐	☐	