



Environmental Management Strategy

SILVERTON WIND FARM CONNECTION WORKS

MAY 2017





Project Title:

Silverton Wind Farm Transmission
Line

Project Contractor: TransGrid

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ACRONYMS AND ABBREVIATIONS

SWDPL	Silverton Wind Farm Developments Pty Ltd (Proponent)
CoA	Project Conditions of Approval
CEMP	Construction Environmental Management Plan
DP&E	(NSW) Department of Planning and Environment
EEC	Endangered ecological community
EMS	Environmental Management Strategy
EIS	Environmental Impact Statement
EPA	Environment Protection Authority (Previously DECCW and/or OEH)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cwth)
ERSED	Erosion and Sediment
ESR	Environmental Site Representative (TransGrid Environmental Officer)
EWMS	Environmental Work Methods Statement
ESCP	Erosion and Sediment Control
FM Act	Fisheries Management Act 1994 (NSW)
HMP	Heritage Management Plan
NSW	New South Wales
MP	Management Plan
OEMS	Overview Environmental Management Strategy
SWQMP	Soil and Water Management Plan
SoC	Statement of Commitment
The Principal	AGL project representatives
The Project	Silverton Wind Farm Connection Works
TMP	Traffic Management Plan

1 INTRODUCTION

1.1 PURPOSE AND OBJECTIVES

This Environmental Management Strategy (EMS) has been prepared to comply with the Environmental Assessment (EA) and Project Approval (Schedule 4) of the Silverton Wind Farm. The EMS has been prepared using the Guideline for the Preparation of Environmental Management Plans (DIRNP, 2004) and AS/NZS ISO 14001 as a guide in its preparation. This EMS has been prepared only for the construction component of the project, and will be updated to incorporate the operational aspects of the connection infrastructure following construction.

The purpose of this EMS is to provide a framework for the management of environmental issues during construction of the Silverton Wind Farm Connection Works (Project). Implementing this EMS will ensure that the project team meets the Project Conditions of Approval (COA), regulatory and policy requirements in a systematic manner and continually improves its performance. The EMS ensures requirements of the EA are met.

In particular, this EMS:

- Provides the strategic framework for environmental management of the project.
- Provides general mechanisms for compliance with applicable policies, approvals, licences, permits, consultation agreements and legislation.
- Describes the environmental management related roles and responsibilities of all key personnel involved.
- States objectives and targets for issues that are important to the environmental performance of the Project.
- Outlines a monitoring regime to check the adequacy of controls as they are implemented during construction.

This EMS is the overarching document in the environmental management system for the Project that includes a number of management documents. These are described in Section 4.2. It is applicable to all staff and sub-contractors associated with the construction of the Project.

The scope of works for the Project includes all works necessary to design, construct, test, commission, energise and train staff in the operation of a 220/33kV substation including a 25km 220kV transmission line connected to Broken Hill 220/22kV Substation and associated secondary systems to support the connection of the windfarm to the existing electricity grid.

- a) Construction, testing and commissioning of a 25km 220kV transmission line including establishment of communications links to the new substation via new OPGW between Broken Hill 220/22kV Substation and Silverton 220/33kV Substation.
- b) Construction, testing and commissioning of the new Silverton 220/33kV Substation.
- c) Construction, testing and commissioning of a 220kV switchbay at Broken Hill 220kV Substation for the new transmission line to Silverton Wind Farm.

The AGL Overview Environmental Management Strategy (OEMS) (Section 2.1 and 2.2 of Appendix A4) details the relationships between all organisations associated with the entire Silverton Wind Farm project and details the separable portions of works required to complete the project.

1.2 ENVIRONMENTAL MANAGEMENT STRATEGIC FRAMEWORK

Below is a flow chart outlining the overall strategic framework for environmental management in delivering TransGrid's scope for construction of the works for the Silverton Wind Farm.



1.3 ENVIRONMENTAL POLICY

The environmental policy describes TransGrid's commitment to continual improvement of its environmental performance and ability to achieve compliance with applicable legal requirements.

The environmental policy is displayed at the site office, and communicated to staff and other interested parties via inductions and ongoing awareness programs.

A copy of the environmental policy is provided at Appendix A2.

1.4 CONTINUAL IMPROVEMENT

Management reviews are undertaken as part of the continual improvement process. The review process is detailed in the Construction Environmental Management Plan (CEMP).

Communication is also key for continual improvement as discussed in Section 4.4. with environmental management documents also going through the continual improvement process.

2 PLANNING

2.1 LEGISLATIVE AND OTHER ENVIRONMENTAL MANAGEMENT REQUIREMENTS

A register of legal and other requirements for the Project is contained in Appendix A1. This register is maintained as a checklist. This register will be reviewed at regular intervals e.g. during management reviews, and updated with any applicable changes. Any changes made to the legal requirements register will be communicated to the wider team where necessary through toolbox talks, specific training and other methods detailed in Section 4.3.

2.2 ENVIRONMENTAL OBJECTIVES AND TARGETS

As a means of assessing environmental performance during construction of the Project, environmental objectives and targets have been established. These objectives and targets have been developed with consideration of key issues identified through the environmental assessment and risk assessment process. The objectives and targets are consistent with Transgrids Environmental Policy and will assist in monitoring whether the commitments of the policy are being met.

The targets are incorporated into relevant environmental management sub-plans.

The performance of the Project against the objectives and targets will be documented in the Project construction compliance reports and at least on an annual basis as part of the management review.

Environmental objectives and targets for the Project are provided in Table 2-1 below.

Table 2-1 Environmental objectives and targets

Objective	Target	Measurement Tool
Construction of the Project in accordance with environmental approvals and relevant licences.	<ul style="list-style-type: none"> Compliance with statutory approvals 	<ul style="list-style-type: none"> Audits, construction compliance reporting, management review
Construction of the Project in accordance with approved environmental management plans	<ul style="list-style-type: none"> Compliance with CES, CEMP and associated Sub-plans Compliance with relevant environmental procedures 	<ul style="list-style-type: none"> Audits, construction compliance reporting, management review
Compliance with all legal requirements	<ul style="list-style-type: none"> No regulatory infringements (PINs or prosecutions) No formal regulatory warning 	<ul style="list-style-type: none"> Audits, construction compliance reporting, management review
Implement rigorous and comprehensive EMS that meets the requirements of AS/NZS ISO 14001	<ul style="list-style-type: none"> Address non-conformances and corrective actions within specific timeframes 	<ul style="list-style-type: none"> Audits, management review
Engage with the effected and broader community, minimise complaints and respond to any complaints	<ul style="list-style-type: none"> Disseminate regular Project updates and other information through the Project website and other tools identified by the Construction Consultation Liaison Plan 	<ul style="list-style-type: none"> Review complaints register, construction compliance report, audits

Objective	Target	Measurement Tool
within a suitable timeframe	(CCLP) <ul style="list-style-type: none"> Record and respond to complaints within the timeframe specified in the CCLP 	
Continuously improve environmental performance	<ul style="list-style-type: none"> Develop and maintain a program of ongoing environmental training Capture lessons learnt from environmental incidents to minimise repeat issues Encourage and reward innovation and effort throughout the works force. 	<ul style="list-style-type: none"> Construction compliance report, management review, audits

2.3 CONDITION OF APPROVAL

Preparation of an EMS, prior to the commencement of construction is a requirement of Schedule 4, condition 1 of the CoA. This strategy meets this requirement. Each of the requirements of this condition, and where they are addressed are detailed in Table 2-2 below.

Table 2-2 Requirement of Condition 1 of Schedule 4 of the Conditions of approval, and where they have been addressed within the Environmental Management Strategy.

Condition	Relevant Section of EMS
(a) provide the strategic framework for environmental management of the project	Section 1.2, Environmental Management Strategic Framework
(b) identify the statutory approvals that apply to the project	Appendix A1, Environmental Legislation
(c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project	Section 4.1, Structure and Responsibility
(d) describe the procedures that would be implemented to: <ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the project; receive, handle, respond to, and record complaints; resolve any disputes that may arise; 	Section 4.4 Section 3.1 of the AGL Overview EMS that includes maintaining a project website, and a dedicated Community Relations Manager for the Silverton Wind Farm who will coordinate and respond to any project enquiries. Phone and e-mail details are available on the project website. AGL will liaise directly with TransGrid in relation to resolution of issues Non-compliance issues
<ul style="list-style-type: none"> respond to any non-compliance; respond to emergencies; 	Sections 4.7 and 5.3
(e) include <ul style="list-style-type: none"> copies of any strategies, plans and programs approved under the conditions of this approval; and a clear plan depicting all the monitoring to be carried out in relation to the project, including a table summarising all the monitoring and reporting obligations under the conditions of this approval. 	The CEMS is the overarching document that includes framework for the management of environmental issues during construction. Environmental plans prepared as part of this strategy are detailed in section 4.2. A plan depicting all the monitoring to be carried out in relation to the project, and a table summarising all the monitoring and reporting obligations is included in 5.2

3 RISK MANAGEMENT

3.1 IDENTIFICATION OF ENVIRONMENTAL HAZARDS AND RISKS

A risk management approach will be used to determine the severity and likelihood of an activity's impact on the environment and to prioritise its significance. This process considers potential regulatory and legal risks also taking into consideration the concerns of community and other stakeholders.

The objectives of risk assessment are to:

- Identify activities, events or outcomes that have the potential to adversely affect the local environment and/or human health/property.
- Qualitatively evaluate and categorise each risk item.
- Assess whether risk issues can be managed by environmental protection measures
- Qualitatively evaluate residual risk with implementation of measures

Risk assessments for the Project are based on AS/NZS 4360:1999, the Australian standard for risk assessments.

Specific Hazards and risks will be identified in the preparation of the CEMP, sub-plans and the Environmental Work Method Statement's (EWMS's).

4 IMPLEMENTATION AND OPERATION

4.1 STRUCTURE AND RESPONSIBILITY

Roles and responsibilities of TransGrid project construction team are identified and described in the table below.

Table 4-1 Roles and Responsibilities

Role	Responsibility	Authority	Accountability
Works Delivery Project Manager	<ul style="list-style-type: none"> Ensure resources are made available to enable works to comply with EMS and CEMP and other environmental management requirements. Ensure that all procedures are followed adequately. Ensure appropriate licences are held by waste contractors where necessary. Responsible for ensuring that all staff or contractors under their control are aware of environmental compliance issues and environmental controls listed in this CEMP. Oversee project implementation Ensure all appropriate approvals have been obtained 	<ul style="list-style-type: none"> Order Stop-work for an activity that may cause environmental harm. Release of environmental hold points, if required. 	<p>Ariel Obrero</p> <p>Email: Ariel.Obrero@transgrid.com.au</p> <p>Phone: 02 9620 0524</p>
Environment Manager	<p>The Environment Manager is responsible for:</p> <ul style="list-style-type: none"> Maintaining a register of all environmental management documents for the Contract; Identifying where environmental 	<ul style="list-style-type: none"> Order Stop-work for an activity that may cause environmental harm. Release of environmental hold points, if required. 	<p>David Donehue</p> <p>Email: David.Donehue@transgrid.com.au</p> <p>Phone: 02 6922 0257</p>

Role	Responsibility	Authority	Accountability
	<p>measures are not meeting the targets and where improvements can be achieved;</p> <ul style="list-style-type: none"> • Project reporting for compliance with the CoAs describing the Project's environmental performance; • Implementation and compliance with environmental permits and approvals – e.g. Fisheries Permit and S57 Approval; • Reviewing Project environmental documents such as management plans and EWMS; and • Monitoring compliance of works being carried out under the contract. • Immediately notify principal's representative of any Environmental incident. 		
<p>Works Delivery Site Construction Co-ordinator</p>	<ul style="list-style-type: none"> • Responsible for the induction of staff and contractors, if required under the environmental approval. • Responsible for all aspects of the worksite including the coordination and management of all staff and contractors. • Ensure all works are carried out in accordance with the requirements set-out in this CEMP. • Undertake daily site inspection during construction activities to ensure compliance with 	<ul style="list-style-type: none"> • Order Stop-work if any items in the CEMP are in danger of breach. • Approve and accept waste disposal methods requested by staff or contractors. • Approve minor changes to environmental sub-plans, including Erosion and Sediment Control Plans (ESCP). 	<p>Michael Howard</p> <p>Email: Michael.Howard@transgrid.com.au</p> <p>Phone: 02 6922 0257</p>

Role	Responsibility	Authority	Accountability
	<p>EMS and CEMP.</p> <ul style="list-style-type: none"> Receiving plant, materials and chemicals and ensuring all items are appropriately stored. Responsible for addressing corrective actions arising from Environmental Inspections. 		
ESR (TransGrid Environmental Officer)	<ul style="list-style-type: none"> Preparing the environmental aspects of the site induction presentation. Ensuring that all staff are appropriately trained in the project's environmental requirements and responsibilities as set out in this EMS and CEMP. Reviewing and actioning environmental inspection and audit findings. Monitoring the environmental aspects of the work, particularly in relation to waste management, construction and access works, and soil management. The timely and proper response to requests for information and environmental issues raised by regulatory bodies. 	<ul style="list-style-type: none"> Order Stop-work for an activity that may cause environmental harm. Approve material changes to environmental sub-plans, including Erosion and Sediment Control Plans (ESCP), but excluding the sub-plans requiring approval from the Secretary of the DP&E; <ul style="list-style-type: none"> Traffic Management Plan Heritage Management Plan Biodiversity Management Plan. Monitor compliance with Environmental Protection Licence (EPL) for Silverton Wind Farm and responding to Pollution Incident Response Management Plan (PIRMP) as required. 	<p>Bradley Parker</p> <p>Email: Bradley.Parker@transgrid.com.au</p> <p>Phone: 02 6226 9610</p>
All TransGrid staff and contractors	<ul style="list-style-type: none"> Work in accordance with the EMS and EMPs. Report and raise 	<ul style="list-style-type: none"> Report any issues that may have the potential to 	<p><u>TransGrid staff</u></p> <p>Ariel Obrero</p> <p>Email:</p>

Role	Responsibility	Authority	Accountability
	<p>any issues that arise that may have an environmental impact.</p> <ul style="list-style-type: none"> Report and raise the discovery of any artefacts, Aboriginal relics or places and cease work until the matter has been addressed. 	<p>cause environmental harm.</p> <ul style="list-style-type: none"> Report any incidents or near-misses that may impact on the environment or breach conditions set-out in this CEMS or CEMP. 	<p>Ariel.Obrero@transgrid.com.au Phone: 02 9620 0524</p> <p><u>Principal Contractor</u> Consolidated Power Project (CPP) Craig Hadfield Email: chadfield@conpower.com.au Phone: 02 9645 9100</p>

4.2 ENVIRONMENTAL PLANS

A CEMP will be prepared to guide the delivery of environmental management on the project. The CEMP will be supported by a series of sub-plans, EWMS, Erosion and Sediment Control Plans and other documents. These documents are prepared to identify requirements and processes applicable to specific impacts or aspects of the activities. They address the measures identified in the environment assessment documentation.

A list of construction sub-plans and strategies for the Project are provided in

Table 4-2.

Table 4-2 Construction sub-plans

Document Name	Document Identifier	Reference
Construction Environmental Management Plan	CEMP	SoC 61
Construction Compound and Ancillary Facilities Management Plan	CCAFMP	Prepared under CEMP to meet general CoA's and SoC's
Construction Traffic Management Plan	TMP	CoA Schedule 1, Condition 27
Soil & Water Quality Management Plan	SWQMP	Prepared under CEMP to meet general CoA's and SoC's
Heritage Management Plan	HMP	CoA Schedule 2, Condition 18
Biodiversity Management Plan	BMP	CoA Schedule 2, Condition 21
Air Quality Management Plan	AQMP	Prepared under CEMP to meet general CoA's and SoC's
Noise & Vibration Management Plan	NVMP	Prepared under CEMP to meet general CoA's and SoC's
Environmental Work Method Statement	EWMS	Prepared under CEMP to meet general CoA's and SoC's
Checklists, records and other documents	As required	Prepared under CEMP to meet general CoA's and SoC's

4.3 TRAINING, AWARENESS AND COMPETENCE

To ensure that this EMS is effectively implemented, each level of management is responsible for ensuring that all personnel reporting to them are aware of the requirements of this strategy. The Environmental Site Representative (ESR) will coordinate the environmental training in conjunction with other training and development activities (e.g safety).

4.3.1 Environmental induction

Prior to working on site all personnel and sub-contractors will undertake an environmental induction. This is done to ensure all personnel involved in the Project are aware of the requirements of the CEMP and to ensure the implementation of environmental management measures.

Short-term visitors to site for purposes such as deliveries will be required to be accompanied by inducted personnel at all times.

The HSE Advisor will conduct the environmental component of the site inductions.

The environmental induction will address a range of issues including, but not limited to:

- Meeting legal and other requirements
- Roles and responsibilities
- Typical Environmental Hazards and Risks
- Typical Environmental controls
- Stop work procedures (eg. Heritage finds)
- Emergency preparedness and response procedure

A record of all environment inductions will be maintained and kept on-site.

The ESR will review and approve the induction program and monitor its implementation. Any modification to the induction programme, necessary as a result of a significant change of scope or occurrence of an incident would require change to the induction program. Inducted employees would be advised of any update to this programme via toolbox discussions, or other appropriate mechanism.

4.3.2 Toolbox talks, training and awareness

Toolbox talks will be one method of raising awareness and educating personnel on issues related to all aspects of construction including environmental issues. The toolbox talks are used to ensure environmental awareness continues throughout construction.

Toolbox training will help to ensure that relevant information is communicated to the workforce and that feedback can be provided on issues of interest or concern. Toolbox training will generally be prepared and delivered by the HSE Advisor. A register of Toolbox training will be kept on site and maintained by the HSE Advisor.

Toolbox attendance is mandatory and attendees of toolbox talks are required to sign an attendance form and the records maintained.

The ESR will review the training program and monitor implementation.

4.3.3 Environmental Awareness Training

Staff and sub-contractors working on site will be provided with environmental training that would be incorporated into ‘tool box’ and inductions. Inductions for the project will include all environmental aspects relevant to the project, including incident management and emergency response procedures. The ESR is responsible for preparing site induction presentation and updating the induction as required.

Formal qualifications for specialist staff may be required in relation to activities such as animal handling and the design of erosion and sedimentation control plans. The aim will be to achieve a level of awareness and competence appropriate to their assigned activities.

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact.

This training will generally be prepared and delivered by the ESR. The target groups and suggested topics for this training are detailed in the table below.

Table 4-3 Example Environmental Training Schedule

Training	Senior Managers	Superintendents	Engineers	Environmental Staff	Foreman	Leading Hands	Sub-Contractors	Administrative Staff
Project Inductions	✓	✓	✓	✓	✓	✓	✓	✓
Biodiversity Awareness (Induction and Tool-box talks)	✓	✓	✓	✓	✓	✓	✓	
Erosion & Sediment Control (Induction and Tool-box talks)	✓	✓	✓	✓	✓	✓	✓	
Heritage Awareness Training (Induction and tool-box talks)	✓	✓	✓	✓	✓	✓	✓	
Spill Response (Induction and tool-box talks)	✓	✓	✓	✓	✓	✓	✓	

4.3.4 Daily Pre-Start Meetings

The pre-start meeting is a tool for informing the workforce of the day’s activities. Safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination with other trades, hazards and other information that may be relevant to the day’s work.

The site construction co-ordinator will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Daily pre-start meetings are generally succinct and take approximately 10-15 minutes.

The environmental component of pre-starts will be determined by relevant foreman and environmental personnel and will include any environmental issues that could potentially be impacted by, or impact on,

the day's activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

Pre-start topics, dates delivered and a register of attendees will be recorded.

4.4 INTERNAL AND EXTERNAL COMMUNICATION

4.4.1 Internal

Clear lines of communication through all levels and functions (e.g. management, staff and sub-contractors), is key to minimise environmental impacts and achieving continual improvements in environmental performance.

The ESR will meet fortnightly as part of the project construction meeting to discuss any issues with environmental management onsite, any amendments to plans that may be required or any new/ changes to construction activities.

Fortnightly environmental inspections will be completed or undertaken with the ESR and relevant environmental staff. The purpose of these inspections would be to communicate ongoing environmental performance and to identify any issues to be addressed.

In addition, environment team members will participate in toolbox talks on at least a fortnightly basis. This forum will provide an opportunity for the environment team members to communicate on environmental performance, to advise on any upcoming sensitive environmental matters for future work areas and receive feedback from onsite personnel.

Further, internal communication regarding environmental issues and aspects identified will be through awareness training and inductions as described in Section 4.3.3.

4.4.2 External

The proponent is responsible for Community Enhancement, the Silvertown Wind Farm Community Consultative Committee (CCC) and Project website as per Section 3.1 of the AGL OEMS (Appendix A4). AGL has also engaged a dedicated Community Relations Manager for the Silvertown Wind Farm who will coordinate with the TransGrid ESR if any external concerns arise.

The TransGrid ESR will be the main point of contact regarding specific environmental issues. The TransGrid ESR of TransGrid would provide written input to the monthly report provided to AGL on the progress of the project on a monthly basis. Where required by exception TransGrid would provide written information to AGL. AGL has the responsibility to report on the ongoing environmental performance of the project to DPE as required.

The name and contact numbers for the site personnel who are available to EPA on a 24-hour basis and who have the authority to take immediate action to shut down any activity or to effect any pollution control measure as directed by an authorised officer of EPA are:

1. Project Manager

Ariel Obrero

Email: Ariel.Obrero@transgrid.com.au

Phone: 02 9620 0524

2. TransGrid ESR

Bradley Parker

Email:

Bradley.Parker@transgrid.com.au

Phone: 02 6226 9610

3. Site Engineer/ ESA

Michael Howard

Email: Michael.Howard@transgrid.com.au

Phone: 02 6922 0257

4.5 ENVIRONMENTAL INSPECTIONS AND IMPACT VERIFICATION

The ESR will be responsible for carrying out fortnightly environmental and post significant rainfall (>10mm in 24 hours) inspections using TransGrid's standard inspection forms.

The Silverton Wind Farm Developments Pty Ltd (SWDPL) and sub-contractor field staff will attend inspections in relevant areas as required, The SWDPL Project Manager or Project Engineer will attend debriefing session following inspections.

At completion of the inspection, the assigned inspector shall prepare the following:

- A site inspection action plan listing minor deficiencies identified
- Sub-contractor notices for major/serious deficiencies

All deficiencies must be promptly issued to the applicable parties, actioned, verified and closed out within an appropriate time frame based on the risk score associated with each deficiency. Actions listed will be identified and an appropriate timeframe to close out will take into consideration risks (e.g location, weather).

Other environmental specialists may be engaged to enter site for the purposes of surveillance or inspection, to liaison with SWDPL personnel, and to attend site meetings to discuss aspects of the work.

Where compliance audits are undertaken by Government agency representatives or SWFDPL, a member of the Project environment team will participate in these inspections and records maintained. Deficiencies and required actions will be analysed and prioritised at the completion of the inspection and timeframes for implementation of actions agreed. Where actions are not completed within the agreed timeframe and pose a risk to environmental or human health, these issues would be raised as Corrective Action Requests.

Prior to the commencement of works on each shift, an inspection will be carried out and will include a check of the relevant environmental controls and resources required to ensure effective operation and maintenance. Works are not to commence unless inspections are found to be satisfactory.

The ESR will undertake the inspections and keep records in his diary.

4.6 DOCUMENTATION AND DOCUMENT CONTROL

The ESR is responsible for maintaining all environmental management documents as current at the point of use. Types of records include:

- All monitoring, inspection and compliance reports/records
- Correspondence with public authorities
- Induction and training records
- Reports on environmental incidents, other environmental incidents non-conformances, complaints and follow-up action.
- Community engagement information
- Minutes of a EMS and construction environmental management system review meetings and evidence of any action taken

All environmental management documents are subject to ongoing review and continual improvement. This includes times of change to scheduled activities or to legislative or licensing requirements.

Only the ESR, or delegate, has the authority to change any of the environmental management documentation.

4.6.1 Document Control

TransGrid will coordinate the preparation, review and distribution, as appropriate, of the environmental documents listed in Section 4.2. During the Project, the environmental documents will be stored at the main site compound with electronic copies available.

The TransGrid will implement a document control procedure to control the flow of documents within and between stakeholders and sub-contractors.

The procedure will also ensure that documentation is:

- Developed, reviewed and approved prior to issue
- Issued for use
- Controlled and stored for the legally required timeframe
- Removed from use when superseded or obsolete
- Archived

A register and distribution list will identify the current revision of particular documents or data.

4.7 EMERGENCY PREPAREDNESS AND RESPONSE (INCIDENT MANAGEMENT)

TransGrid's standard Environmental Incident Response Procedure is attached in Appendix A3. The Environment Manager will immediately notify the principal's representative of any Environmental incident.. Incident reports will then be provided within 24 hours of the incident occurring, including lessons learnt from each environmental incident occurring, and proposed measures to prevent the occurrence of a similar incident. All efforts will be undertaken immediately to avoid and reduce impacts of incidents and suitable controls put in place. Incidents will be closed out as quickly as possible, taking all required action to resolve each environmental incident.

SWDPL will immediately notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. The proponent will comply with the requirements of the Secretary to address the cause(s) of impact of any incident within the required period.

The EPA will be notified of any environmental incidents or pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the Protection of the Environment Operations Act 1997 (NSW) (POEO Act). The circumstances where this will take place include:

- a) If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.
- b) If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000 (Material Harm).

Pollution incidents posing material harm to the environment will be immediately notified to each 'relevant authority' as defined in Section 148 (8) of the POEO Act. 'Relevant authority' means:

- The appropriate regulatory authority (ARA)
- The Environment Protection Authority (EPA) if they are not the ARA
- The Ministry of Health
- SafeWork NSW (formerly WorkCover)
- The local authority, e.g. the local council, if this is not the ARA
- Fire and Rescue NSW

Where an incident involves an Aboriginal site, relevant Registered Aboriginal Parties will be notified and their input sought in closing out the incident.

TransGrid will maintain all records relating to environmental incidents.

5 MEASUREMENT AND EVALUATION

5.1 SYSTEM AND MONITORING AND MAINTENANCE

Environmental compliance audits by SWDPL or TransGrid may be conducted on all aspects of the CEMP and relevant aspects of the Environment Management System and will be performed in accordance with recognised audit procedures.

SWDPL will give at least five (5) days' notice that an environmental compliance audit is to be conducted and will advise the scope of this audit.

Compliance audit reports shall be provided to TransGrid within 7 working days.

An Internal audit is to be carried out within one (1) year of commencing work onsite. (Refer Table 5-1). The audit will be risk-based and verify that the work under the contract is in compliance with conditions and that environmental control measures are effective. More frequent auditing may occur if environmental checks indicate major deficiencies with environmental management of the site.

The Audit will be planned, carried out and reported in accordance with the requirements of the TransGrid Management System and to ensure no exceedances of Schedule 3 (Environmental Conditions) of the CoA and provide assessment of the Projects:

- Assess the Environmental Performance of the project and assess the environmental performance whether it is complying with the requirements within the Project Approval and any relevant EPL/s.
- Review the adequacy of any approved strategy, plan or program and mentioned approvals
- Recommend measures or actions to improve the environmental performance of the project, and or any strategy, plan or program required under these approvals.
- Level of compliance with conditions, regulations (including license and permit conditions) and planned environmental management requirements
- Capacity to comply, inspect, test, monitor, control and verify that construction (TransGrid and its sub-contractors) activities are being carried in accordance with the projects requirements and conditions

Note: The internal audit performed by TransGrid does not form part of the Independent Environmental Audit (IEA) that will be undertaken by SWDPL as part of the CoA.

Table 5-1 Audit summary table

No.	Audit	Requirement	Timing	Responsibility	Recipient
1	Internal Audit	Verify compliance with legal requirements, specifications and construction documentation	The first audit within 1 year of commencement of construction	Project Manager	(SWDPL)

5.2 ENVIRONMENTAL MONITORING AND REPORTING

The CoA requires that a clear plan depicting all the monitoring and reporting obligations (Table 5-2) and monitoring to be carried out in relation to the project (Table 5-3), including a table summarising under the COA be prepared.

The monitoring and reporting obligations identified in both the CoA and Statement of Commitments (SoC's), along with how these obligations will be met within the EMS are identified in Table 5-2 below.

Fortnightly Environmental inspections (Refer Section 4.5) and internal audits (Refer Section 5.1) will be communicated to SWDPL to enable the environmental performance data for the Connection Works to be maintained on the AGL project website (Appendix A4 Section 3.1).

The objective of the monitoring and reporting will be to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this EMS, and to address specific requirements. Surveillance and inspections by SWDPL or TransGrid may be conducted at any time. Other environmental specialist may be engaged by SWDPL to enter the site for the purposes of surveillance or inspection, liaison with TransGrid environmental staff and to attend site meetings to discuss aspects of the work.

All actions identified during the site inspections by SWDPL or delegates shall be:

- Actioned in the specified timeframes as detailed on the site inspection form
- Addressed in accordance with the TransGrid Environmental Management System
- Responded to and closed out in writing within 5 working days

If surveillance, inspection or audits indicate a major nonconformity of environmental requirements, SWDPL is entitled to conduct an environmental compliance audit at 24 hours' notice to the contractor.

TransGrid will respond in a timely manner to any requests in relation to monitoring or effectiveness of environmental controls and their implementation raised by NSW Government Agencies or SWDPL.

Any non-compliance in regards to the Environmental Conditions outlined in Schedule 3 of the CoA will be communicated immediately to SWDPL.

TransGrid will also at the earliest opportunity:

- take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur,
- consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of

action; and

(c) implement remediation measures as directed by the Secretary.

NB: TransGrid shall make all required personnel and resources available for all SWDPL organised environmental audits and surveillance inspections.

Table 5-2 Monitoring and reporting requirements, as required under the Conditions of Approval and the Statements of Commitments and reporting to be carried out in relation to the project as required under the Conditions of Approval and the Statements of Commitments.

Item	CoA/SoC	Monitoring Requirements	Monitoring proposed
	Project Conditions of Approval		
1	Biodiversity Management Plan Schedule 3, Condition 18 (c)	Include a detailed program to monitor and report on the performance of measures required within the Biodiversity Management Plan.	The Biodiversity Management Plan includes protocols for Weed Control (Protocol 7), and Habitat and Site Restoration (Protocols 5 & 8), and Monitor and Adapt Actions. These provide a program for monitoring and reporting of performance.
2	Heritage Management Plan Schedule 3, Conditions 21 (e) & (f)	Include the following for the management of Aboriginal and historic heritage; monitor and report on the effectiveness of any mitigation measures and any heritage impacts of the project.	This is addressed in section 8.3 of the Heritage Management Plan
3	Traffic Management Plan Schedule 3, Condition 27 (d)	A Drivers Code of Conduct is required. The Traffic Management Plan (TMP) must include the requirement to monitor and report on the effectiveness of driver's code of conduct.	Monitoring requirements in relation to the Drivers Code of Conduct is included in sections 4.3 and 8 of the TMP.
4	Environmental Management Strategy Schedule 4, Condition 1(e) Schedule 4, Condition 1(d)	The EMS strategy must include a clear plan depicting all the monitoring to be carried out in relation to the project, including a table summarising all the monitoring and reporting obligations under the conditions of this approval. The EMS must describe the procedures that would be implemented to: <ul style="list-style-type: none"> Keep the local community and relevant agencies informed about the operation and environmental performance of the project. 	Tables 5-2 and 5.3 of EMS AGL OEMS Section 3.1
5	Adaptive Management Schedule 4, Condition 2b	The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A	refer to item 1 above

Item	CoA/SoC	Monitoring Requirements	Monitoring proposed
		<p>Act or EP&A Regulation.</p> <p>Relevant performance criteria includes those relating to;</p> <ul style="list-style-type: none"> CoA S3, 18 (c) - monitor and report on the performance of measures required within the Biodiversity Management Plan. 	
6	<p>Revision of Strategies, Plans and Programs</p> <p>Schedule 4, Conditions 3(a) & (b)</p>	<p>Within 3 months of the submission of;</p> <p>a) An incident report (CoA S4,5 – see below)</p> <p>b) An audit report (CoA S4, 7 – see below))</p> <p>the Proponent must review and, if necessary, revise the strategies, plans and programs required under this approval to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval.</p>	NA
7	<p>Incident Reporting</p> <p>Schedule 4, Condition 5</p>	<p>The Proponent shall immediately notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.</p>	NA
8	<p>Regular Reporting</p> <p>Schedule 4, Condition 6</p>	<p>The Proponent must provide regular reporting on the environmental performance and make information as required in the CoA (including a comprehensive summary of the monitoring results of the project) of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.</p>	<p>This requirement is detailed in the CEMP.</p> <p>AGL will maintain a project website</p>
9	<p>Access to information</p> <p>Schedule 4, Condition 9(a)</p>		
10	<p>Auditing</p> <p>Schedule 4, Conditions 6 & 8</p>	<p>Within 18 months of the commencement of construction the Proponent must commission an Independent Environmental Audit of the project. The Proponent must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.</p>	NA

Item	CoA/SoC	Monitoring Requirements	Monitoring proposed
	Statement of Commitments		
10	Auditing Schedule 4, Conditions 6 & 8	Within 18 months of the commencement of construction the Proponent must commission an Independent Environmental Audit of the project. The Proponent must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	NA
11	SoC 20 Loss of Biodiversity value	Site stabilisation and rehabilitation would be undertaken as work progresses. This plan is to include protocols for monitoring.	See item 1 above (CoA S3, 18c)
12	SoC 34 Loss of Biodiversity value - weeds	Undertake post-construction weed monitoring after the first significant rainfall event to ensure that no weed infestations have resulted from the works.	See item 1 above (CoA S3, 18c)
13	SoC 59 – Deterioration of water quality	Prepare a Site Restoration Plan including protocols for	NA
14	SoC 61 - Deterioration of water quality	Report any spill that occurs, to the Construction Manager regardless of size or type of spill	NA
15	SoC 73	Prepare road dilapidation reports covering pavement and drainage structures in consultation with roads authorities for the route prior to the commencement of construction and after construction is complete.	NA

5.3 NON-COMPLIANCE AND CORRECTIVE AND PREVENTATIVE ACTION

Any member of the project team may raise a non-conformance or improvement opportunity. The Project Quality Plan will describe the process for managing non-conforming work practises and initiating corrective/preventative actions or system improvements.

The SWDPL management system shall be used to monitor and verify:

- a) That planned actions, work processes and procedures are effectively implemented
- b) That inspection, testing and verification reports are maintained as objective evidence that project activities are being carried out in compliance with client contract conditions and specifications, NSW Acts and regulations, license conditions and referenced publications.

Environmental non-conformances might include:

- Failing to comply with the environmental regulations or license/ permit conditions
- A serious breach of CEMP requirements
- Carrying out an unsafe work practice that has the potential to cause harm to the environment (i.e. near misses)
- Activities that have caused actual harm to the environment not permitted by the project, or covered in the environmental assessment documentation
- Deficiencies or concerns raised by client representatives and/or by state and local authorities or agencies.

Environmental non-conformances will be dealt with through the Incident Management Procedures detailed in Section 4.7.

6 MANAGEMENT REVIEW

An annual Management Review of the EMS, CEMP and subplans would be undertaken. This would include the Environmental Site Representative and relevant Project team members and stakeholders.

The outcomes of the reviews could include amendments to the project's management documents, risk assessment review, re-evaluation of the Project objectives and targets as well as feeding into other Project documents. In addition and to comply with the CoAs, upon receiving an incident report, audit or modification to the Project Approval, TransGrid will review the strategies and management plans and if required, revise within 3 months to the satisfaction of DP&E.

APPENDICES

Appendix A1 Environmental Legislation

Controlling Legislation	Legislation Requirement	Application to the Project	Approvals/ Permits/ Licenses	Responsibility to comply
State Environmental Planning Policies				
SEPP (Infrastructure) 2007 (ISEPP)	<p>The aim of this Policy is to facilitate the effective delivery of infrastructure across the State by:</p> <ul style="list-style-type: none"> (a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and (b) providing greater flexibility in the location of infrastructure and service facilities, and (c) allowing for the efficient development, redevelopment or disposal of surplus government owned land, and (d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development), and (e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and (f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing <p>Section 34(1) permits development for the purpose of electricity generating works to be carried out by any person with consent on any land in a prescribed rural, industrial, or species use zone.</p>	<p>Development consent for the wind farm as electricity generating works was sought and granted from NSW Department of Planning and Environment.</p> <p>SWDPL will continue to consult with other government agencies and local councils throughout construction.</p>	None required	SWDPL

Controlling Legislation	Legislation Requirement	Application to the Project	Approvals/ Permits/ Licenses	Responsibility to comply
Commonwealth Legislation				
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	<p>The objects of this Act are:</p> <ul style="list-style-type: none"> to provide for the protection of the environment, especially matters of national environmental significance to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources to promote the conservation of biodiversity to provide for the protection and conservation of heritage to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples to assist in the co-operative implementation of Australia's international; environmental responsibilities to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and co-operation with, land-holders and indigenous peoples <p>Under the EPBC Act, any action that has, or is likely to have, a significant impact on a Matter of National Environmental Significance (MNES) may progress only with the approval of the Commonwealth Minister for the Environment.</p>	No referral to the Commonwealth is required.	None required	SWDPL
Aboriginal and Torres Strait Islander Heritage Protection Act, 1984	Under section 20 of this Act, a person who discovers anything that they have reasonable grounds to suspect to be Aboriginal remains must report the discovery to the federal Minister for the Environment.	<p>SWDPL will report the discovery of any Aboriginal remains to the relevant authorities.</p> <p>TransGrid shall notify SWDPL prior to contacting any Regulating Authority.</p>	None required	<p>SWDPL</p> <p>TransGrid</p> <p>Subcontractors</p>

Controlling Legislation	Legislation Requirement	Application to the Project	Approvals/ Permits/ Licenses	Responsibility to comply
State Legislation				
Environmental Planning and Assessment Act 1979 (EP&A Act)	<p>The objects of this Act are:</p> <ul style="list-style-type: none"> (a) to encourage: <ul style="list-style-type: none"> i. the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment, ii. the promotion and co-ordination of the orderly and economic use and development of land, iii. the protection, provision and co-ordination of communication and utility services iv. the provision of land for public purposes v. the provision and co-ordination of community services and facilities, and vi. the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and vii. ecologically sustainable development, and viii. the provision and maintenance of affordable housing (b) to promote the sharing of the responsibility for environmental planning between different levels of government in the State, and (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment. The proposed activity requires assessment under Part 3A of the EP&A Act. <p>Section 111 of the EP&A Act requires that the determining authority examine</p>	<p>An Environmental Assessment (EA) was completed to assess the impact of the project. It included the assessment of construction and operational activities along with operation of infrastructure that would affect, or likely to affect the environment. This was approved by the NSW Planning and Assessment Commission as delegate of the Minister for Planning. Compliance with the Conditions of Approval issued by the Commission is a legal requirement of the Project.</p> <p>Work that is additional, or a variation of work approved that was assessed and described in the EA for this project, and was not deemed consistent with the approval would require additional assessment under this legislation.</p>	None required	SWDPL

	and take into account to the fullest extent possible, all matters affecting, or likely to affect the environment by reason of the activity.			
Heritage Act 1977	<p>This Act provides statutory protection and conservation for heritage places and items. The objects of this Act include promoting, understanding, and encouraging the conservation of the State’s heritage and the identification and registration of items of State heritage significance. The Heritage Act details requirements for the protection of non-Aboriginal heritage items.</p> <p>An application under Section 60 must be made to the Heritage Council Office when making changes to a heritage place listed on the State Heritage Register, or when excavating any land in NSW where an archaeological relic may be disturbed.</p>	The project has been assessed as having no significant impacts on the places of heritage significance in or near the project area. If unexpected heritage items are discovered, works will be stopped in that area and in accordance with section 146(a) of the Act the Heritage Council shall be notified.	SWDPL will ensure that no significant physical impact on Heritage items occur from Project work.	SWDPL TransGrid Sub-contractors
Threatened Species Conservation Act 1995	<p>The objects of this Act are as follows:</p> <ul style="list-style-type: none"> (a) to conserve biological diversity and promote ecologically sustainable development, and (b) to prevent the extinction and promote the recovery of threatened species, populations and ecological communities, and (c) to protect the critical habitat of those threatened species, populations and ecological communities that are endangered, and (d) to eliminate or manage certain processes that threaten the survival or evolutionary development of threatened species, populations and ecological communities, and (e) to ensure that the impact of any action affecting threatened species, populations and ecological communities is properly assessed, and (f) to encourage the conservation of threatened species, populations and ecological communities by the adoption of measures involving co-operative management. <p>Section 5A of the EP&A Act lists a number of factors to be taken into account in deciding whether there is likely to be a significant impact on threatened</p>	Assessments of Significance were undertaken as part of the EA process, and identified that the project would not have a significant impact on areas of threatened species listed under the TSC Act.	None required	SWDPL

	species, populations or ecological communities or their habitats. Should a threatened species or community be impacted, An Assessment of Significance must be completed to determine the significance of the impact. A Species Impact Statement is required if there is likely to be a significant impact on a threatened species, population or ecological community or its habitat.			
National Parks and Wildlife Act 1974	<p>The NPW Act sets out responsibilities for the care, control and management of all national parks, historic sites, nature reserves, reserves, Aboriginal areas and state game reserves and associated permits and approvals (e.g. an Aboriginal Heritage Impact Permit (AHIP) under Section 87 from EPA).</p> <p>The Act aims to conserve nature, habitat, ecosystems, ecosystem processes and biological diversity at the community, species and genetic levels. Under this Act all native fauna is protected, threatened or otherwise. Schedule 13 of the act lists protected plants which shall not be harmed or picked on any land either on or off National Park estate. With regard to threatened species, a person must not:</p> <ul style="list-style-type: none"> (a) harm any animal that is of, or is part of, a threatened species, an endangered population or an endangered ecological community, or (b) use any substance, animal, firearm, explosive, net, trap, hunting device or instrument or means whatever for the purpose of harming any such animal. <p>The Act also provides the basis for legal protection and management of Aboriginal sites within NSW. All Aboriginal objects within the state of NSW are protected under Part 6 of this Act. The implementation of the Aboriginal heritage provisions in the NPW Act is the responsibility of the Office of Environment and Heritage (OEH).</p>	Aboriginal heritage will be managed in accordance with the project approval. If any unrecorded Aboriginal objects are encountered during construction, works will cease immediately in that area and in accordance with section 89(A) of the Act, OEH will be notified.	None required	SWDPL TransGrid Sub-contractors
Contaminated Land Management	The CLM Act establishes a process for investigation and (where appropriate) remediation of land where contamination presents a significant risk of harm	SWDPL and TransGrid are required to identify, report and manage any identified land contamination in	None required	SWDPL

Act 1997	to human health, or some other aspect of the environment.	accordance with the CLM Act.		
Native Vegetation Act 2003	The Act requires development approval from the relevant Zone Management Authority for the clearing of any native vegetation.	Approval is not required for the clearing of native vegetation for the construction of the project. Ensure compliance with relevant CoA.	None required.	SWDPL TransGrid Sub-contractors
Noxious Weeds Act 1993	This Act establishes control mechanisms to reduce the negative impacts of weeds on the economy, community, and environment. Section 13 – must control spread of noxious weeds onto adjoining land. Section 15 – must notify relevant control authority within 3 days of becoming aware that a notifiable weed is on site. Section 27 – must notify police & Department of Agriculture of proposed action to control a “prohibited plant” as defined under the Drug Misuse and Trafficking Act 1985. Section 30 – must not scatter or cause to scatter notifiable weed material.	Weeds will be managed in accordance with the Biodiversity Management Plan.	None required	SWDPL TransGrid Sub-contractors
Water Management Act 2000	The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations. The Act controls the extraction of and use of water, the construction of works such as dams and weirs, and the carrying out of activities in or near water sources in New South Wales. If a ‘controlled activity’ is proposed on ‘waterfront land’, an approval is required under the Act (Section 91E).	State significant development does not require water use approvals under s 89, water management work approvals under s 90, or activity approvals (other than aquifer interference approvals) under s 91 of the Water Management Act 2000;	None required	SWDPL
Fisheries Management Act 1994 (FM Act)	The FM Act identifies threatened aquatic species, populations, and ecological communities, and requires an assessment of significance for threatened biota which may be impacted by the work. The FM Act sets out requirements to ensure aquatic habitat is protected and	Generally, if the following activities form part of a proposal, a permit from the Department of Primary Industries is required:	SWDPL must provide DPI (Fisheries) with 60 days’ notice under	SWDPL TransGrid

	that activities that may affect fish habitat must be referred to the DPI (Fisheries).	<ul style="list-style-type: none"> • aquaculture • harming marine vegetation including mangrove, seagrass, or seaweed • dredging or reclamation of waterways • temporary or permanent blockage of fish passage <p>Under Section 219, passage of fish is not to be blocked during construction box culverts in that area.</p>	<p>the Act prior to commencement of any works in drainage lines.</p> <p>Although not expected, if blocking of fish passage is to occur, a permit in respect to Section 219 of the Fisheries Management Act is required.</p>	
Protection of the Environment Operations Act 1997 (POEO Act)	<p>The Act enforces licences and approvals relating to air, water and noise pollution and waste management.</p> <p>Duty to notify EPA of any environmental harm.</p>	The connections work are part of a schedule activity, and as such have been incorporated into the EPL under the POEO Act.	TransGrid shall ensure compliance with the EPL and POEO Act and notify EPA of any environmental incidents in accordance with POEO Act.	<p>SWDPL</p> <p>TransGrid</p> <p>Sub-contractors</p>
Waste Avoidance and Resource Recovery Act	The Act aims to reduce environmental harm and provide for the reduction in waste generation in accordance with Ecologically Sustainable Development principles.	TransGrid will address the objectives of this Act in Project design, management document development and throughout construction.	None required.	<p>SWDPL</p> <p>TransGrid</p>
Occupational	Storage and transport of dangerous goods must be in accordance with the	TransGrid will obtain relevant licences	WorkCover; storage	SWDPL

Health and Safety Act 2000	Act. A licence is required for storage or transport of prescribed quantities of dangerous goods.	where storage and transport of dangerous goods for construction is in licensable quantities.	licence & EPA; transport licence for dangerous goods.	
Road and Rail Transport (Dangerous Goods) Act 1997	The Act requires that dangerous goods are transported in a safe manner.	SWDPL will comply with specific obligations on owners, drivers, consignors, packers, loaders, transferrers and occupiers.	Licenses in accordance with the Act. Drivers of vehicles transporting dangerous goods and the vehicles themselves may need special licenses.	SWDPL TransGrid Sub-contractors
Pesticides Act 1999	The Act regulates and provides for the control and use of pesticides in an environmentally satisfactory manner.	SWDPL will comply with pesticide codes of practice.	None required	SWDPL TransGrid
Rural Fires Act 1997 (Rural Fire Services)	The Act provides for the prevention, mitigation and suppression of bush fires and other fires in NSW	Section 63 of the <i>Rural Fires Act 1997</i> (RF Act) states the duties of public authorities and owners and occupiers of land prevent bush fires. SWDPL is required to take steps to prevent the occurrence of bushfires on, and to minimise the danger of the spread of a bushfire on or from, any land under its management.	None required	SWDPL TransGrid

Appendix A2 Environmental policy

Environment Policy

TransGrid is committed to conducting its activities and services in a manner that prevents pollution and complies with relevant legislation, industry standards and codes of practice. TransGrid implores all employees and contractors to stop and consider the potential impact to the environment from their activities.

“We promote continuous improvement in environmental management”



Paul Italiano
Chief Executive Officer
Approved:
May 2016

The Environment Policy covers all activities and services undertaken by TransGrid including the planning, building and operation of infrastructure, ongoing management of these assets and their decommissioning.

We aim to enhance our systems and processes in a manner that promotes continuous improvement in environmental management and which will lead to the achievement of good industry practice.

In meeting these commitments, TransGrid:

- > Maintains an Environmental Management System that provides the framework for setting and reviewing our environmental objectives and targets, including the implementation, monitoring and review of these objectives and targets, as well as facilitating continuous improvement in environmental performance
- > Continues to develop systems that recognise sensitive environmental and cultural sites on or near our infrastructure, and provides processes to manage our activities with the aim of preventing environmental harm or adversely impacting the environment
- > Integrates environmental management considerations into the planning, design, siting, construction, maintenance, operation, decommissioning and disposal of all TransGrid assets
- > Provides environmental training, assessment and authorisation under our Environmental Management System to employees and contractors to enable them to perform their duties in an environmentally sensitive manner
- > Engages with the community, customers, employees, government and other stakeholders regarding potential environmental or cultural impacts associated with our plans and activities
- > Pursues opportunities to maximise resource efficiencies and reduce the generation of waste through reduction, reuse and recycling programs
- > Identifies, sets and monitors realistic environmental performance measures and communicates them to all employees and stakeholders.

Appendix A3 Environmental Incident Response Procedure

Environmental Incident Management

Summary

This procedure details the requirements for notifying and investigating environmental incidents within TransGrid. All environmental incidents, no matter how minor must be managed and details reported

Document Control

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Approver:	Michael Gatt, EGM/Field Services				

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1. Purpose

This procedure details the requirements for notifying and investigating environmental incidents within TransGrid. All environmental incidents, no matter how minor must be managed and details reported.

2. Scope

This procedure applies to all TransGrid staff.

3. Definitions

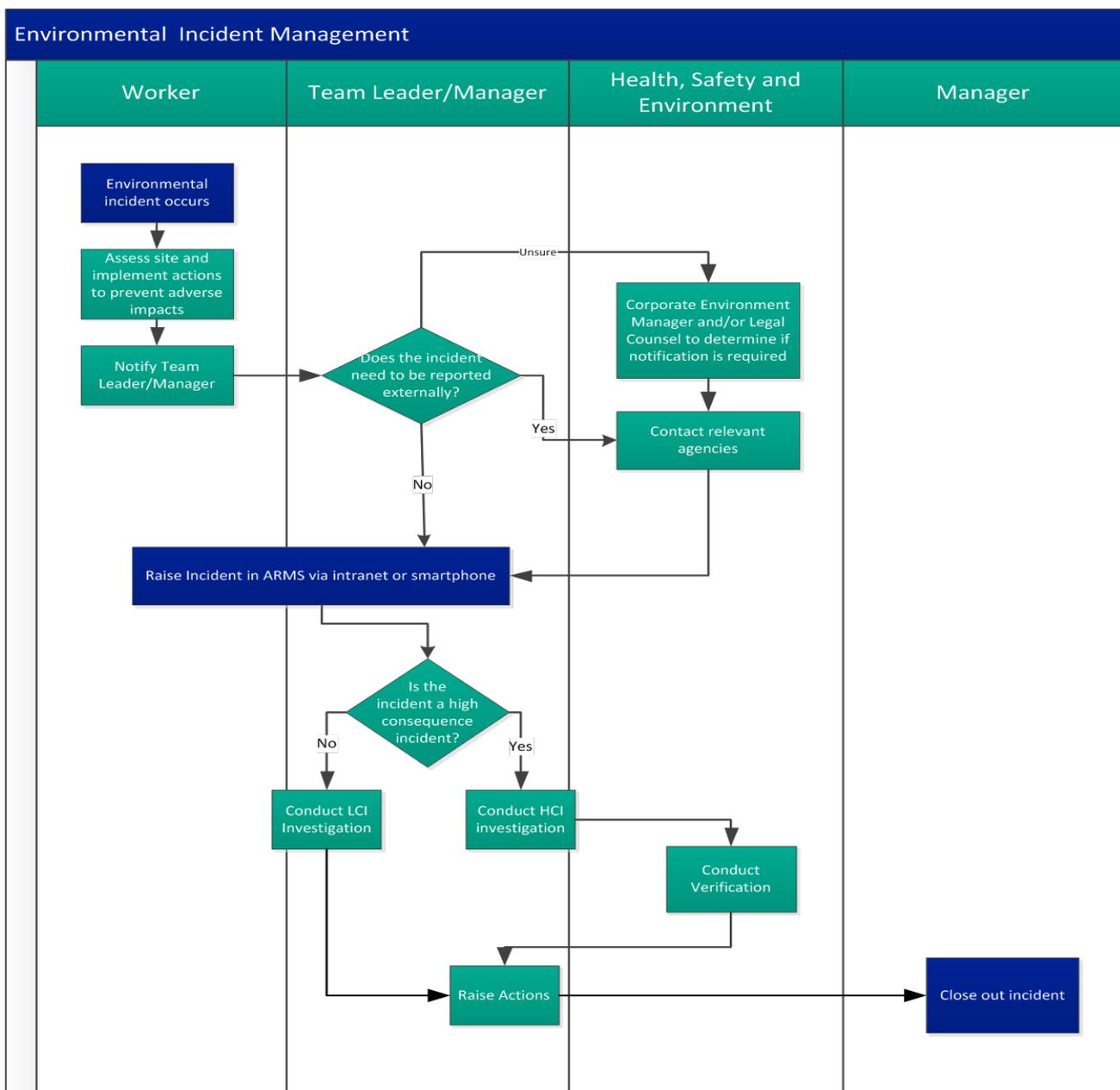
Term	Definition
Environmental incidents	<p>Any potential or actual adverse/negative impact on the environment that may arise from:</p> <ul style="list-style-type: none">• A failure to comply with legislation;• A failure to comply with any TransGrid procedure;• An inadequate operating procedure;• Unforeseen circumstances, e.g. abnormal operating conditions;• Emergencies resulting in spills, discharges or adverse environmental situations; and• Equipment failure.
High Consequence Environmental Incident	<p>A high consequence environmental incident is an incident that has caused, or has the potential to cause material harm to the environment. Examples of these are as follows:</p> <ul style="list-style-type: none">• Harm to threatened species, endangered populations, endangered ecological communities or critical habitat• Damage to any State or locally significant relic or heritage item• Harm to Aboriginal objects and Aboriginal places• Failure to comply with a REF determination/approval/EPA license condition• Works undertaken without required approval or environmental assessment• Discharge of waters from site not in accordance with any legislative requirements• Unauthorised disposal or transport of hazardous chemicals or waste• Unauthorised disposal or management of contaminated soils or waste.• Identification of contaminated soil and/or groundwater during maintenance or construction activities• Material, odour, fire or noise that travels beyond site boundary causing or potentially causing adverse impact to the environment or community. <p>Note: this does not include fires that are fully contained within switch yards (eg CVT catches fire), but does include the potential to cause bushfires beyond site boundaries (eg hot works on or near boundary fences).</p>
Pollution Incident	<p>Pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.</p>
Notifiable Pollution incidents	<p>As defined by the Protection of the Environment Operations Act 1997, notification to the</p>

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Term	Definition
and Material Harm to the Environment	<p>regulator is required if harm to the environment is material. That is:</p> <ul style="list-style-type: none"> • It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or • It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations); and • Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment. <p>It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.</p>

4. Corporate-wide Procedure

The following flowchart sets out the environmental incident management process in TransGrid.



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4.1 Environmental Incidents

Environmental incidents can include (but not be limited to the following):

- Pollution - a leak or spills of fuels, oils, chemicals and other hazardous materials or escape of a substance, or circumstances in which this is likely to occur
- Potential contamination of waterways or land
- Sediment discharge or sediment laden water moving off site
- Pesticide or runoff containing pesticide that (i) enters waters or causes unintended damage to vegetation or property on a site, or (ii) leaves a site and enters waters or causes damage to non target vegetation or property
- Unauthorised damage to an Aboriginal heritage site or object, or any State or locally significant listed relic
- Unauthorised clearing or clearing beyond the extent of the intended scope of works
- Inadequate installation and subsequent failure of temporary erosion and sediment controls
- Unexpected find of contaminated soils, asbestos or other potentially hazardous substances
- Unauthorised damage or interference to native vegetation, threatened species, endangered ecological communities or critical habitat
- Dredging or reclamation works within a watercourse without appropriate authorisation
- Accidental starting of a fire
- Unauthorised or illegal waste disposal by TransGrid or its contractors
- Breaches of environment protection licence conditions
- Odour pollution incidents that involve the emission of an offensive odour that might unreasonably impact on nearby users of land
- Dust pollution involving the generation of excessive dust and/or levels that might unreasonably impact on nearby residences/users of land
- Inappropriate storage of solid or liquid waste that could potentially result in pollution of waters or property damage
- Loss of significant amounts of SF₆, for example, greater than 10 kg
- Vehicles tracking soil or mud onto roadways, where the soil or mud is not cleaned up immediately.
- Failure to notify a regulatory authority in accordance with approval or agreement conditions.

4.1.1 Initial Response to Incidents

If an incident occurs:

- Assess the site or area for danger and make safe where required and possible
- Implement actions to prevent adverse impacts to the environment, this may include:
 - ceasing work in the relevant area, eg. shutting of equipment if this is a source of pollution
 - preventing substances from spreading eg. by using spill kits to contain a spill and protect stormwater drains
 - calling for external assistance if required from the Fire Brigade or State Emergency Services
 - clean up the area and dispose of any contaminated materials appropriately
- Complete internal and external notifications and reporting as required by this procedure

4.2 Internal Notification and Reporting

All staff are responsible for reporting environmental incidents. All environmental incidents or near misses must be reported. Any person becoming aware of an environmental incident must immediately notify their Team Leader or Manager.

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All environmental incidents shall be recorded through the ARMS Incident Reporting process. This can be done through the following ways:

- Incident Reporting via the WIRE – easy reporting via a weblink.
- Using the app on your smartphone – all TransGrid smart phones will have the ARMS Incident Reporting app installed.
- ARMS system (for authorised users only) - Incidents can be raised directly in the ARMS system for staff who are authorised to use the system (typically Managers and Team Leaders).

The person who raised the incident will receive an email to notify that it has been raised in ARMS. Their Team Leader/Manager will also be notified that an incident has been raised to conduct an initial investigation.

4.3 External Assistance

Where incidents are beyond the ability of TransGrid to control, external assistance may be required from local authorities such as the Fire Brigade, State Emergency Services or Local Council. Where external assistance is required, the local manager and the Corporate Environment Manager or delegate must also be notified.

Where external assistance is requested, staff should record the following details in the ARMS:

- Who was notified (organisation);
- Who they notified (name and position);
- How they were notified (phone/fax); and
- Time they were notified.

External notification of notifiable pollution incidents are described in section 4.4.

4.4 External Notification and Reporting

4.4.1 Incidents that Require External Reporting

Incidents that need to be reported to external authorities include:

- Any pollution incidents causing or threatening material harm to the environment, as defined in the POEO Act (see section 4.4.2 for more details)
- Any incidents related to an activity that is licenced under the POEO Act
- Discovery of a heritage item or relic
- Discovery of an Aboriginal object or remains
- Contamination of land at levels above those specified in the reporting guidelines, or if TransGrid becomes aware that their land is contaminated at such levels
- Inability to extinguish any fire burning during a bush fire danger period
- Any serious breaches of the NSW Code of Practice for Authorised Network Authorities relating Part 5 (SER, REF) works. A serious breach includes a breach which has, or is likely to have, a material adverse impact on the environment

The requirements for notification of pollution incidents (eg. who and what to notify) are described in more detail in sections 4.4.2 and 4.4.3.

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The Corporate Environment Manager and the appropriate line manager should be notified verbally of any incident that is likely to require external notification to seek advice on any reporting requirements.

For all other incidents in the list above, in the first instance, contact the Corporate Environment Manager to discuss and confirm if external notification is required. Also, refer to the [Environmental High Consequence Incident](#) guideline for more information on external notification requirements for high consequence incidents that are reportable to an external authority.

4.4.2 Pollution Incidents That Require Immediate Notification

Pollution incidents that cause or threaten material harm to the environment or humans must be notified **immediately to relevant authorities** (in accordance with section 148 of the POEO Act) after becoming aware of the incident.

There are specific definitions for the terms **pollution incident** and **material harm to the environment**:

- **Pollution incident** - includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur
- **Material harm** - includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred. Material harm includes actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or that results in actual or potential loss or property damage of an amount over \$10,000

In determining if the costs from the incident are likely to exceed \$10,000, consider likely costs that may be associated with the following activities:

- soil and water sampling to determine extent and level of pollution
- labour involved in the clean up
- any equipment that will need to be brought onto the site to remove any contaminated material

4.4.3 Notification of Pollution Incidents

Under the POEO Act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- a. the person carrying on the activity
- b. an employee or agent carrying on the activity
- c. an employer carrying on the activity
- d. the occupier of the premises where the incident occurs.

Notification must be given immediately, i.e. promptly and without delay, after the person becomes aware of the incident. Only persons engaged in the activity resulting in the pollution incident, and occupiers of the land where the incident occurs, have a duty to report the incident.

When an incident occurs as a result of an activity by TransGrid or its contractors, the definition of material harm will need to be reviewed to determine if the incident meets the required criteria. As soon as a TransGrid employee becomes aware of such a pollution incident, they are to immediately notify the Corporate Environment Manager by phone. The Corporate Environment Manager will assist in making an assessment of the incident and determine whether or not formal notification of the incident to the NSW Environmental Protection Authority (EPA) and other relevant authorities is required. If for any reason the Corporate

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Environment Manager is not contactable, staff should contact TransGrid's Legal Counsel to assist in assessing whether an incident triggers the notification requirements.

Legal Counsel and the Corporate Environment Manager should be consulted by phone if possible prior to reporting, to determine if specialist advice may also be required to confirm if the incident has caused pollution and/or material harm to the environment. While there is a requirement to notify immediately after becoming aware of pollution incidents causing or threatening material harm to the environment, it is appropriate to establish if the incident meets the definition in the POEO Act.

In any case, if no assistance can be obtained within a reasonable time, staff are required to notify the relevant authorities in the order of notification outlined in section 4.4.4 and provide each agency with the information required (see section 4.4.5). Even if you do not have all the information, you must notify each agency with the information you have at hand and ensure that they are updated as soon as further relevant information becomes available.

Contractors undertaking works are responsible for notifying TransGrid, EPA and the relevant authorities in accordance with Part 5.7 of the POEO Act. If the incident occurs on premises that are regulated by an environment protection licence, also refer to the Pollution Incident Response Management Plan.

4.4.4 Authorities to be Notified – Notifiable Pollution Incidents

Pollution incidents causing or threatening material harm to the environment should be notified to each relevant authority (see table below), immediately after becoming aware of the incident.

If the incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted first for emergency assistance.

If the incident does not require an initial emergency agency, or once the 000 call has been made, notify the relevant authorities in the following order:

Relevant Authority (as defined in section 148(8) of the POEO Act)	Contact Details
Environment Protection Authority (EPA) Environment Line	phone 131 555
Appropriate regulatory authority (ARA)	the ARA for the activity under the POEO Act (usually the EPA or local authority) – the local authority is a local council of an area under the Local Government Act 1993), or the Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council)
Ministry of Health	via the local Public Health Unit – see www.health.nsw.gov.au/publichealth/infectious/plus.asp 
SafeWork Authority	phone 13 10 50
Fire and Rescue NSW	phone 1300 729 579 (for environmental harm)

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phone 000 for human health or safety incidents

Note: If the situation warranted calling 000 as a first point of notification, you do not need to ring Fire and Rescue NSW again

4.4.5 Information to Provide

The table below summarises the information that needs to be notified. It is important to avoid speculation on origin, causes or outcomes of a pollution incident in discussions with the authorities.

There is also an ongoing duty to ensure that relevant information be notified after it becomes known ie. if the information required is not known when the initial notification is made, but becomes known afterwards, that information must be notified immediately after it becomes known.

Section 150 POEO Act - Relevant Information to Provide

No.	Relevant Information
a	The time, date, nature, duration and location of the incident.
b	The location of the place where pollution is occurring or is likely to occur, the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known.
c	The circumstances in which the incident occurred (including the cause of the incident, if known).
d	The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.
e	Other information prescribed by the regulations.

4.5 Incident Investigation

Once an incident has been raised, the team/leader manager is responsible for determining if it is a high consequence environmental incident. A high consequence environmental incident is an incident that has caused, or has the potential to cause material harm to the environment. Examples of these are as follows:

- Harm to threatened species, endangered populations, endangered ecological communities or critical habitat
- Damage to any State or locally significant relic or heritage item
- Harm to Aboriginal objects and Aboriginal places
- Failure to comply with a REF determination/approval/EPA license condition
- Works undertaken without required approval or environmental assessment
- Discharge of waters from site not in accordance with any applicable REF determination/approval/EPA license condition
- Unauthorised disposal or transport of hazardous chemicals or waste
- Unauthorised disposal or management of contaminated soils or waste.

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- Identification of contaminated soil and/or groundwater during maintenance or construction activities
- Material, odour, fire or noise that travels beyond the site boundary causing or potentially causing adverse impact to the environment or community.

Note: this does not include fires that are fully contained within switch yards (eg CVT catches fire), but does include the potential to cause bushfires beyond site boundaries (eg hot works on or near boundary fences).

If the incident is a high consequence environmental incident, a detailed investigation is undertaken in ARMS. If an incident is not a high consequence incident, a less detailed investigation is undertaken. If an incident investigator determines that a detailed incident investigation is required for a low consequence incident, contact the System Administrator in the HSE Group to make the change in ARMS.

The determination of incident consequence must be made within 24 hours of receiving the incident notification. If the determination is not made within that timeframe, the incident will be escalated to their direct manager.

4.5.1 High consequence investigation

For high consequence incident investigations, a detailed investigation is required. The requirements for a high consequence investigation are as follows:

- Determine the timeline or sequence of events for the incident
- Identify any environmental, property or equipment damage
- Review network assets maintenance history, if appropriate
- Determine the primary causal factor (Attachment A), and if any contributing causal factors, for the incident
- Document the activities undertaken for the investigation
- Document the recommendations from the incident investigation
- Raise or link existing actions in ARMS, if appropriate.
- The investigation must be verified by the Health, Safety and Environment group before the incident can be closed out by a manager.

For more information on how to conduct an incident investigation, refer to the Health, Safety and Environment Incident Investigation Process.

4.5.2 Low Consequence Investigation

For low consequence incident investigations, a less rigorous investigation is required. The requirements for a low consequence investigation are as follows:

- Determine the primary causal factor (Attachment 1), and any contributing causal factors, if relevant, for the incident.
- Raise or link existing actions in ARMS, if appropriate.
- The investigation must be completed in ARMS and closed out by a manager. No verification by HSE Group is required for low consequence incidents.

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5. Accountability

Title	Responsibilities and Accountabilities
Worker	<ul style="list-style-type: none">> Notifying team leader/manager of incident> Raising incident notification in ARMS
Manager/Team Leader	<ul style="list-style-type: none">> Raising incident notification in ARMS> Conducting incident investigations
Health, Safety and Environment Group	<ul style="list-style-type: none">> Verification of all high consequence environmental incidents
Managers	<ul style="list-style-type: none">> Closing out incident investigations

6. Implementation

This procedure will be implemented the following ways:

- Notification on the HSE news page on the WIRE
- Discussed at WHS Committee meetings
- Email to all Team Leaders/Manager with a briefing pack.

7. Monitoring and review

This procedure will be reviewed every three years in accordance with the Document and Records procedure.

8. Change from previous version

Revision no	Approved by	Amendment
3	Ken McCall, Manager/HSE	Reformat of procedure to revised template with the following minor amendments: <ul style="list-style-type: none">• Updating position titles
4	Ken McCall, Manager/HSE	Document has been update to reflect the new ARMS incident notification and investigation process.

9. References

Corporate and Regional Emergency Management Plan (CREMP)

Health, Safety and Environmental Incident Investigation Process

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10. Attachments

Attachment 1 – Environmental Causal Factors

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Attachment 1 – Environmental Causal Factors

Category	Causal Factor
Worker Competency/Fitness	<ul style="list-style-type: none"> • Inadequate or no training for task • Lack of specific competency to carry out task • Fatigue • Psychological/emotional issues • Lack of concentration/distraction
Leadership/Supervision	<ul style="list-style-type: none"> • Inadequate instruction/direction • Non-enforcement of standards/rules • Inadequate supervision
Work Procedure/Practice	<ul style="list-style-type: none"> • No documented/inappropriate procedure for the work • Procedure not followed/incorrectly/misunderstood • Inappropriate/inadequate risk assessment (hazard not identified) • Inappropriate or non use of environmental protection equipment/PPE • Inappropriate technique
Information/Communication	<ul style="list-style-type: none"> • Inadequate information available e.g. SDS • Poor reception area for mobile phones, two-way radios etc • Noise environment causing misunderstanding of verbal communications • Inadequate communication of policy/procedure/standards etc
Workplace Environment	<ul style="list-style-type: none"> • Poor housekeeping • Workplace design/layout • Lighting/ventilation/temperature • Weather conditions • Access/egress conditions • Surface/ground conditions • Terrain/topography
Plant/Equipment	<ul style="list-style-type: none"> • Environmental devices inoperative/defective • Failure of environmental control equipment • Defective tools/equipment • Inappropriate/lack of appropriate equipment • Ineffective maintenance

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