

Environmental Guidelines Handbook



Disclaimer

It is the responsibility of all Endeavour Energy workers and ASPs to ensure that Endeavour Energy work practices are adequately managed in accordance with current environmental legislative requirements and the Endeavour Energy Environment Management System. The information in this Handbook has been provided as a guide for this purpose.

Endeavour Energy may change the information in this document without notice. All changes take effect on the date they are made by Endeavour Energy. The Environmental Guidelines Handbook will be reviewed as required, or on a minimum annual basis.

Endeavour Energy workers and ASPs are required to implement any mitigative measures derived from environmental assessments relevant to their work but must continue to identify environmental aspects and introduce appropriate mitigative measures to address these aspects in the course of carrying out their work. This Handbook may be used to assist in the identification of environmental aspects and mitigative measures.

Endeavour Energy disclaims any and all liability to any person or persons for any procedure, process or any other thing done or not done, as a result of this Handbook.

This Handbook does not cover work health and safety (WHS) requirements.

A print version is always an uncontrolled copy.

Environmental Sustainability Policy

Endeavour Energy aims to power communities for a brighter future. We commit to enhancing our environmental sustainability performance, focusing on our material aspects including climate change. We do this through protecting the environment, integrating sustainable practices into our daily activities and choices, and focussing on continuous improvement.

We will achieve our commitment through:

- Identifying, considering and prioritising environmental and sustainability risks and opportunities with every activity or decision we make.
- Target setting, monitoring, and measuring our environmental and sustainability performance to drive results and continually learn and improve.
- Implementing sustainability programs and partnerships and integrating them into business processes.
- Empowering staff to foster a sustainability and environmental culture through provision of appropriate training and awareness .
- Engaging with employees, communities, contractors, suppliers, and other external stakeholders on environmental and sustainability initiatives and performance.

Our workers will:

- Protect the environment for future generations through the implementation of our sustainability strategy which commits us to:
 - accelerate the transition to a low carbon economy
 - improve our ecological footprint where possible
 - promote a circular economy and extend resource use
 - enable and engage with a range of stakeholders to act on climate and social initiatives
 - identify and manage climate related risks and opportunities
 - improve the resilience of our network and our communities
- Implement and continually improve our Environmental Management System (EMS).
- Be customer focused and respect the community.
- Managing the impact of our network and operations on the community and sensitive environment in which we work, including prevention of pollution.
- Comply with relevant environmental and sustainability legislation and reporting and align to relevant best practise standards.



PREFACE

Endeavour Energy's Environmental Guidelines Handbook is issued in accordance with the provisions of the Environment Sustainability Board Policy.

The Handbook has been developed for Endeavour Energy workers and Accredited Service Providers (ASPs) to provide a practical translation of Endeavour Energy's Environment Management System to day-to-day operations. It prescribes the minimum environmental controls for work carried out by Endeavour Energy workers and ASPs. It aims to supplement mitigation for identified environmental aspects in Environmental Management Plans for works undertaken by Endeavour Energy workers and ASPs. It also provides a reference for Endeavour Energy employees to provide mitigation for environmental aspects that may be relevant for fault, emergency and maintenance works to assist in the preparation of eWHRA documentation.

ASPs are cautioned that some parts of the Handbook are relevant only to Endeavour Energy employees and ASPs are required to address such matters according to their own procedures.

The Handbook should be made available to all Endeavour Energy workers and ASPs so it can be referenced at the worksite.



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CONTACTS

Contact	Phone
Internal	
Endeavour Energy Call Centre—Incident Reporting	13 10 03
Head of Sustainability	0419 296 019
Environmental Services Manager	0475 554 069
Sustainability Systems and Assurance Manager	0498 061 991 or 0429 399 063
environment@endeavourenergy.com.au	Team email address
External	
Emergency Services	000 or 112
Fire and Rescue NSW	1300 729 579
WIRES—Wildlife Rescue	1300 094 737
WaterNSW	1800 061 069
Sydney Water	131 110
National Parks and Wildlife Service	Refer to EMS 0012
Coopers Environmental (liquid waste contractor)	1300 791 977 or 0412 454 245 (out of hours)

Note that:

- Endeavour Energy's Environmental Specialists are the Environmental Representatives for Endeavour Energy workers.
- For ASPs, Endeavour Energy Environmental Representatives can be contacted via their Contractor Inspector.
- For externally notifiable incidents, Endeavour Energy will contact the appropriate external agencies.
- ASPs must report environmental incidents by calling 13 10 03 and contact their Contractor Inspectors to confirm that the incidents have been logged in SAP EHS.

ENVIRONMENTAL MANAGEMENT SYSTEM

Endeavour Energy has an Environmental Management System (EMS) that is certified in accordance with International Standard *ISO 14001- Environmental Management Systems*. It is a condition of our Distributor's licence under the Electricity Supply Act 1995 that our EMS remains certified to this standard.

The EMS consists of a number of standards, procedures and policies (listed in the references section), in addition to this Handbook. This Handbook has been developed for all Endeavour Energy workers and ASPs involved in the construction and maintenance of the company network to provide a practical translation of the EMS.

In addition to this Handbook, a range of project specific documents could also apply to your work. Depending on the type of activity these documents may include:

- Environmental Management Plan (EMP) — For designed projects (e.g. upgrade or development works) an EMP must be available in the work package. An EMP identifies environmental aspects specific to that project and how these aspects can be managed. EMP in this handbook includes Construction Environmental Management Plan (CEMP) which is an EMP specifically prepared to cover the construction phase of a project
- Design drawings— environmental aspects may be included in the notes.
- Approvals, Licences, Permits and Notifications.
- Hazardous Materials Register.
- eWHRA.



- **Before commencing works, check your work package for project specific documents.**
- **Implement appropriate environmental controls outlined in the project specific documents.**
- **Brief all workers on environmental aspects and associated controls to be implemented.**

PROJECT SPECIFIC DOCUMENTS

Environmental Management Plan- (EMP) from Summary Environmental Report (SER)

ENVIRONMENTAL MANAGEMENT PLAN

INSTRUCTIONS:

- Step 1:** The following page contains a Generic Environmental Management Plan for the activity. Delete mitigation measures which are not relevant.
- Step 2:** Add additional rows to the table to document the environmental risks relevant to the activity (refer to SECTION 2 – Environmental Issues Questionnaire)
- Step 3:** Refer to FAT 0051 to supplement mitigation measures were required
- Step 4:** Seek advice from an environmental specialist where there is likelihood that identified environmental impacts cannot be mitigated by using these generic measures.
- Step 5:** Assign responsibility for the implementation of the environmental risk
- Step 6:** Summarise mitigation measures for high risk matters in the top right section of the construction drawing
- Step 7:** Section 1 of this form will be inserted into the work package for the implementation of mitigation measures to reduce environmental harm associated with the Activity
- Step 8:** The **Project Manager, Operations Manager and Site Supervisor** (internal employees) or relevant staff (ASPs) must review this Environmental Management Plan and sign the relevant section below to confirm the document has been read and understood.

Project Manager	
Name	Click here to enter text.
Signed	
(By signing here you confirm that you have read and understood the EMP and your responsibilities)	
Date	Click here to enter a date.
Title	Click here to enter text.
Operations Manager	
Name	Click here to enter text

ENVIRONMENTAL RISK	CONTROL MEASURES	RESPONSIBILITY FOR IMPLEMENTATION
General	Refer to the Environmental Guidelines Handbook for the identification of generic environmental mitigation measures when preparing the WHRA (or equivalent) for the Activity.	Construction personnel
Environmental Incidents	All accidents and emergencies must be reported by calling Endeavour Energy's Call Centre 131 003. Ensure spills are controlled and contained. Spill kits shall be available at the worksite.	Construction personnel
COMMUNITY		
Community notification	All landowners within or adjacent to the worksite (adjacent lands) shall be notified in writing 14 to 30 days prior to the commencement of works. Notification shall include: - proposed commencement date; - anticipated duration of the works; 24 hour contact details of the project manager or other appropriate contact person in the event of any complaints; and, - details on proposed blocking or impairing access to driveways and/or residences/businesses (if any).	Project Manager
Traffic management	Where required, approvals and Road Occupancy Licenses (ROLs) must be in place prior to works commencing. Comply with associated conditions.	Project Manager and construction personnel
Traffic management	Ensure that affected residences/businesses are consulted with.	Project Manager
Traffic management	Safe pedestrian pathways are to be established and clearly signposted around the	Construction personnel

Hazardous Materials Register (available on SAP)

Endeavour Energy

Hazardous Materials Register

Selection Criteria

Location: Seven Hills / ID: 7925

Hazard:

Status:

Site Type: Network

What / Type:

Friability:

Site Subtype: Transmission Substation

Indoor / O...:

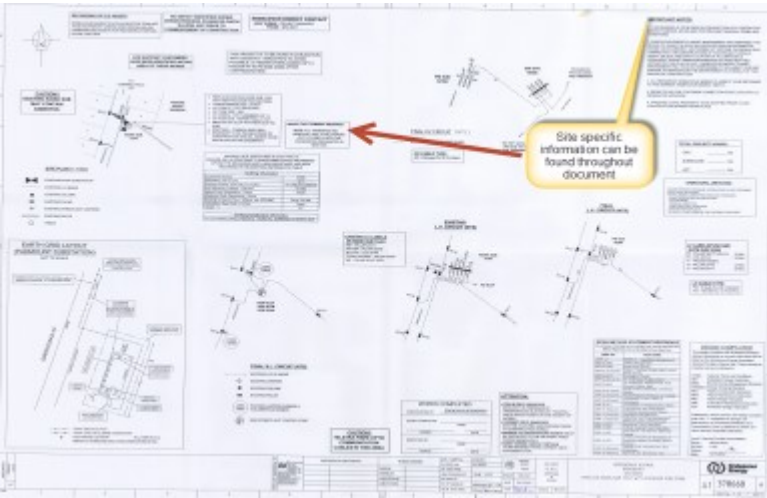
Sample St...:

Hazardous Material Register

CreateDelete SelectedGenerate Import TemplateImport Excel

Location	Site Type	Site Subtype	Location ...	Owner	Hazard	Status	Risk Level
☐ Seven Hills TZ9523 11kV Reyrolle CB...	Network	Transmission Substation	Active	Aadity ...	Asbestos	In Process	Low
☐ Seven Hills TZ9523 33kV 470 Circuit ...	Network	Transmission Substation	Active	Aadity ...	Asbestos	In Process	Low
☐ Seven Hills TZ9523 33kV 479 Circuit ...	Network	Transmission Substation	Active	Aadity ...	Asbestos	In Process	Low
☐ Seven Hills TZ9523 CB 9523SC01CB...	Network	Transmission Substation	Active	Aadity ...	Asbestos	In Process	Low
☐ Seven Hills TZ9523 CB 9523SC02CB...	Network	Transmission Substation	Active	Aadity ...	Asbestos	In Process	Low
☐ Seven Hills TZ9523 CB 9523SC03CB...	Network	Transmission Substation	Active	Aadity ...	Asbestos	In Process	Low

Project Design Drawings

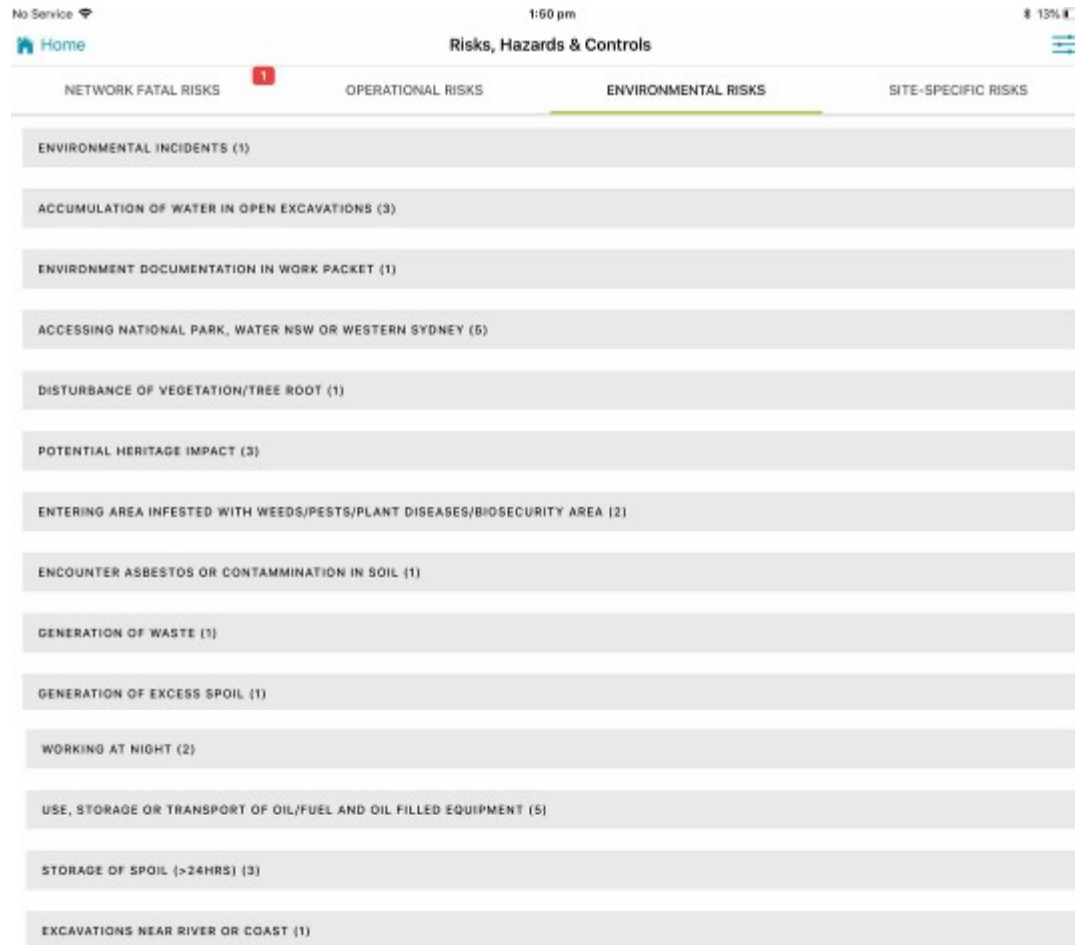


eWHRA

Screenshot of the eWHRA

Tips for eWHRA:

- Expand each environmental risk to view suggested environmental controls.
- Select the controls required to be implemented to manage each environmental risk.
- Consider whether additional controls are required to be included.
- Discuss with the crew the environmental controls that are to be implemented.



RESPONSIBILITIES

All workers and ASPs

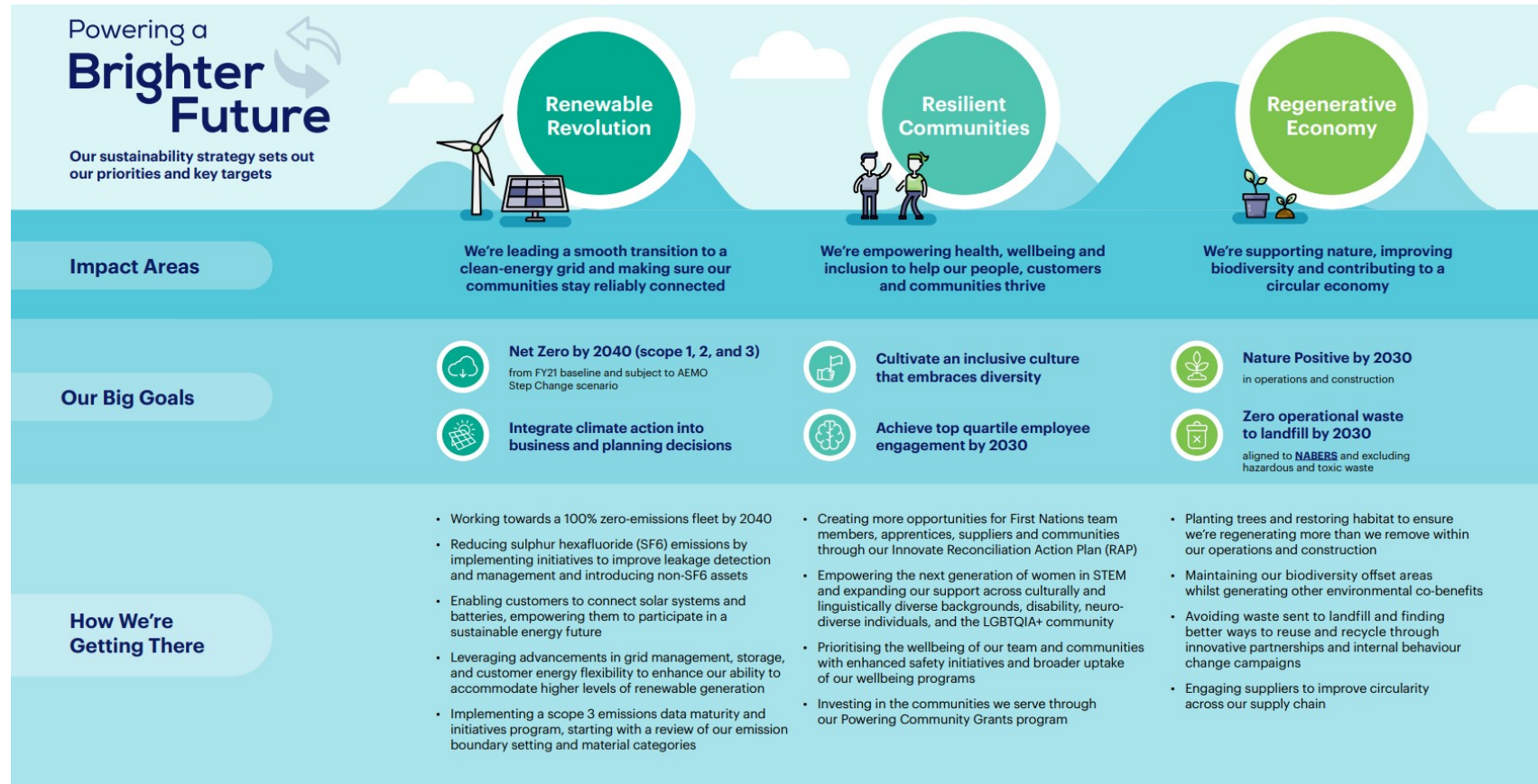
- Comply with the requirements in all relevant environmental documents (e.g. EMP)
- Use due care, skill and foresight to minimise environmental harm.
- Act in good faith when performing your job.
- Raise issues with your supervisor when you think an environmental document is missing or cannot be followed, something appears to be wrong, you are not sure what to do, or something could be improved.
- Discuss and document environmental risks and controls when preparing an eWHRA.
- Immediately report environmental incidents to your Supervisor or the Endeavour Energy Call Centre **13 10 03**

Supervisor and Manager

- Understand environmental risks and legal requirements relevant to your area of responsibility.
- Check there are specific procedures and instructions for your workers to effectively manage environmental aspects e.g. Project Specific Documents or access to the Environmental Guidelines Handbook.
- Make environmental documents accessible to your workers.
- Check your workers have adequate supervision, training and resources to comply with procedures and instructions.
- Have appropriate contingency plans for environmental emergencies.
- Investigate all relevant environmental concerns.
- Share information with other areas of the company.
- Evaluate the operational performance of your workers and discuss results with your manager.

Contact your Environmental Representative if you are uncertain about how to manage environmental risks.

SUSTAINABILITY



ENVIRONMENTAL IMPACT ASSESSMENT

What is our aim?

To comply with relevant planning legislative requirements when completing works not considered exempt development.

Background?

Environmental planning legislation allows Endeavour Energy to self-determine activities that:

- are not likely to significantly affect the environment; and
- are conducted by or on behalf of Endeavour Energy (including works undertaken by ASPs) for the purpose of electricity transmission or distribution.

For proposed works that are not associated with electricity transmission or distribution, these will likely require Council approval.

What am I responsible for?

During design

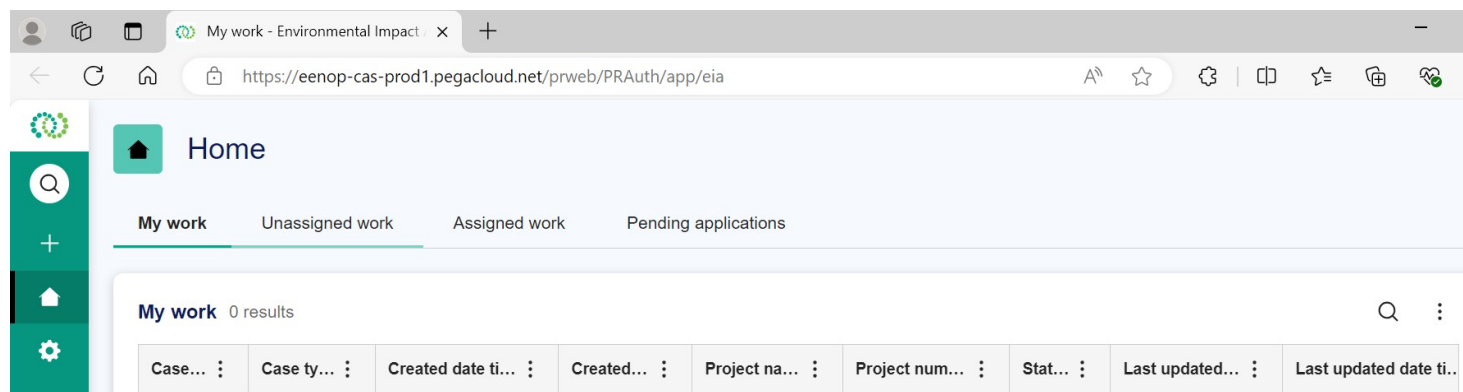
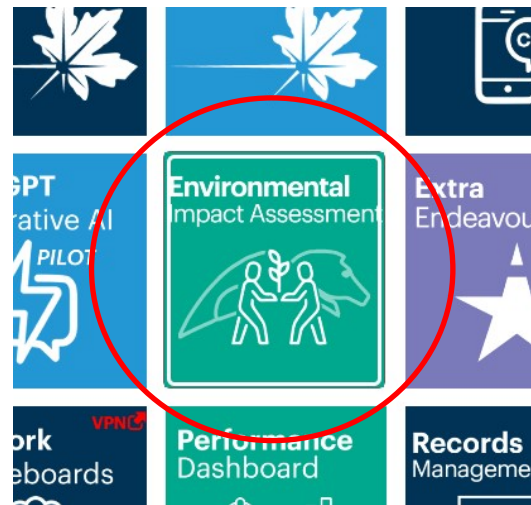
- An environmental impact assessment is to be completed for works conducted by or on behalf of Endeavour Energy (including works undertaken by ASPs) for the purpose of electricity transmission or distribution that are not considered exempt development. This environmental impact assessment can be either a Summary Environmental Report (SER) or Review of Environmental Factors (REF), and should identify, assess and mitigate potential impacts of the works proposed.
- Work site access and potential to impact on environmentally sensitive items in the vicinity needs to be considered when addressing whether works are considered exempt development. For works deemed exempt development, contact your Environmental Representative for their review.



Access to the site should be considered during the environmental impact assessment and/or when considering whether works are exempt development

ENVIRONMENTAL IMPACT ASSESSMENT (Cont.)

Endeavour Energy staff can carry out the EIA via the Pega Environmental Impact Assessment (EIA) Tool which can be accessed on via the 'System Shortcuts' page of myEndeavour.



ENVIRONMENTAL IMPACT ASSESSMENT (Cont.)

What am I responsible for?

During construction

- Check the work package documents for site specific information on relevant environmental risks, and follow any specific mitigation measures detailed in the Environmental Management Plan (EMP) and/or design drawings where present.
- Where an EMP exists, managers and site supervisors are to sign onto the EMP. The EMP and a copy of these Environmental Guidelines Handbook are to be present on the work site at all times.
- Environmental risks identified in the EMP and/or design drawings are to be reflected in the eWHRA so that they can be discussed during site inductions/ toolbox talks.
- If the works (including access to the work site) do not reflect the design and/or the scope of works change, contact your Environmental Representative for further advice as the EMP may require reviewing and updating.



Include environmental risks in the eWHRA and discuss with crew

COMMUNITY

What is our aim?

To engage with the community in an open, respectful and honest way, consider the community and garner their support for Endeavour Energy's business operations.

Background?

Endeavour Energy and ASP activities may potentially affect the community through changes to traffic and pedestrian flow, increases to noise and vibration, accidental releases, visual amenity impacts or changes to electromagnetic fields (EMF). Effective engagement with the community, businesses, councils and other relevant groups assists in managing community expectations and operations.

What am I responsible for?

- Identify those likely to be impacted through site visits and/or environmental assessment processes and engage with relevant Communication Specialists for assistance with the community engagement process.
- Consider the visual amenity when designing and scoping a project.
- Consider any potential changes to EMF when designing and scoping a project. EMF is to remain below 2000 milligauss (mG).
- Give notice of the work to impacted stakeholders as follows:
 - 40 days notice to Council under the Electricity Supply Act 1995 (NSW) for electricity works (i.e. if the proposed activity does not involve the installation of a substation of any voltage); and
 - 21 days notice to Council, occupiers of adjoining land and affected community under the State Environmental Planning Policy (Infrastructure) 2007 (NSW) for the development of a substation of any voltage and/or if the activity is likely to cause significant disruption.



Report customer environmental complaints as per the environmental incident process



Selecting materials and colours which blend into the surrounds is one way we can consider the community

COMMUNITY (Cont.)

What am I responsible for? (Cont.)

- The 21 day notification period should also be used in the design stage if the proposed activity is likely to impact on the community
- If an activity is likely to have more than a minimal impact (e.g. blocking access, significantly changing visual amenity), and there is an opportunity for the community to be involved in the route or site selection, then additional community consultation should be considered.
- Provide impacted stakeholders with the following information:
 - proposed commencement date and anticipated duration of the works;
 - details of any impact on access to driveways and/or residences/businesses; and
 - 24 hour contact details for the project manager or other appropriate contact person.
- Where out of hours works are proposed, the surrounding community (including local council) must be notified in accordance with the “Noise and Working Hours” section of this Handbook.
- Provide at least four (4) business days notice of planned electricity interruptions to customers.
- Respond to customer complaints in a prompt and professional manner and record customer complaints relating to environmental assessment or aspects in SAP EHS.



Notify the community of works that are likely to impact them

ENVIRONMENTAL INCIDENTS

What is our aim?

To prevent and appropriately manage environmental incidents safely and with minimum environmental harm.

Background?

An environmental incident may include:

- leaks and spills (other than clean water) into water, air or land from Endeavour Energy work sites, premises or assets;
- sediment runoff from Endeavour Energy work sites or premises;
- explosion or fire at Endeavour Energy work sites, premises or assets;
- damage to lands managed by WaterNSW or by National Parks and Wildlife Services as a result of activities being completed in these lands by or on behalf of Endeavour Energy;
- damage to heritage listed items (non– aboriginal and aboriginal) without the appropriate approvals;
- damage to trees listed on local council significant tree register without appropriate approvals;
- damage to threatened species, endangered populations, endangered ecological communities and/or their habitats without appropriate approvals;
- unlawful waste management practices from Endeavour Energy work sites or premises;
- creation of offensive noise from Endeavour Energy work sites, premises or assets;
- illegal dumping by a third party on Endeavour Energy owned land; and/or
- a breach of the NSW Code of Practice for Authorised Network Operators and complaints in relation to activities where an environmental assessment has been prepared.



Oil spills and fires are common types of environmental incidents



Damage to NPWS lands and threatened species are also environmental incidents

ENVIRONMENTAL INCIDENTS (Cont.)

What am I responsible for?

Prevention

Identify and assess environmental risks on the work site and implement relevant control measures. Document risks and controls on the eWHRA.

Preparedness

- An appropriate spill kit must be available near oil/chemical storage areas, on all plant and equipment containing hydraulic oil and designated vehicles transporting oil filled equipment.
- Spill kits at FSCs are to be inspected annually, and spill kits on Endeavour Energy vehicles are to be inspected during Safety Days every six months.
- Maintenance of bunds and oil water separators in zone and transmission substations is to be completed in accordance with company standard SMI 115, and in wash bays at FSCs is to be completed in accordance with the relevant Trade Waste Agreement.
- Inspection and maintenance of spill kits, weeds, drains and gross pollutant traps/ onsite detention systems at zone and transmission substations is to be completed in accordance with company standard SMI 106, and at FSCs these are to be inspected at least annually.

Response

- Follow the steps in the environmental incident response flowchart provided on the following page. All environmental incidents must be reported immediately to the Endeavour Energy Call Centre (131 003). The local Endeavour Energy FSC will be notified to respond to the incident if required. A Worksite Coordinator will then be nominated to manage the spill incident.
- Additional spill response consumables are available in each Endeavour Energy FSC to ensure that adequate volumes are readily available for any required response.



Spill kits are located at all Endeavour Energy FSC's and substations and should always be easily accessible



Vehicle spill kits are available on most Endeavour Energy trucks

ENVIRONMENTAL INCIDENTS (Cont.)

Response (cont.)

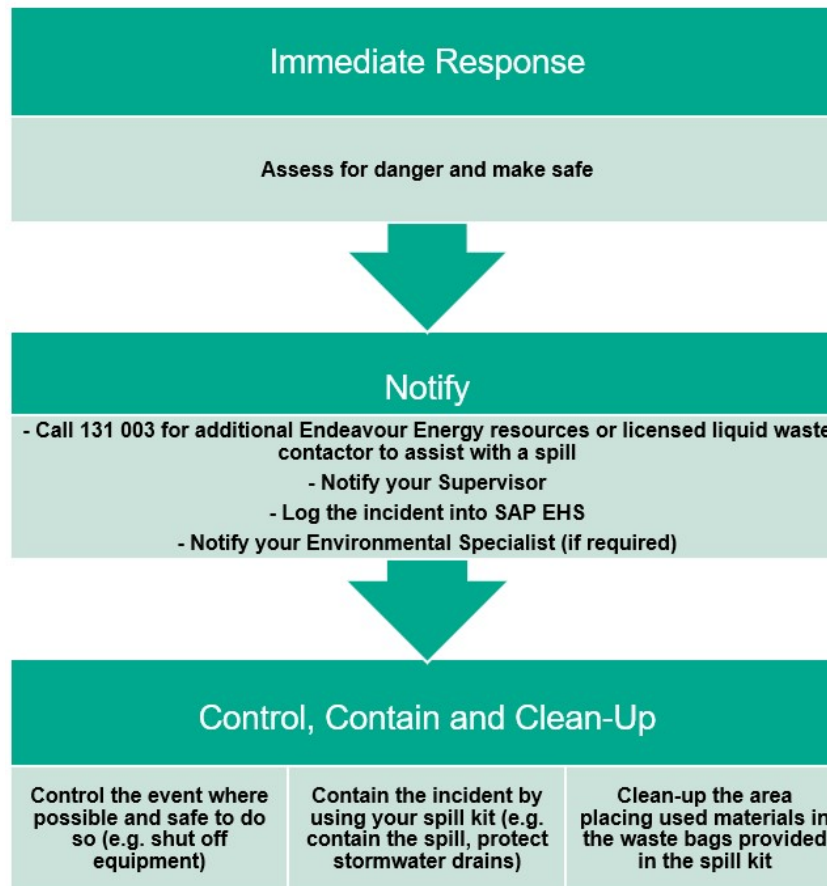
- Tips for responding to spills:
 - ⇒ Minimise the spread of the spill by not moving leaking equipment or machinery unnecessarily;
 - ⇒ Use items available in spill kits to contain spills and prevent migration. Focus on protection of stormwater drains and/or surface water receptors;
 - ⇒ Materials used for spill response must be removed from the spill site, placed in the contaminated waste bags provided in the spill kits, and disposed of in the brown oily waste bins located at the FSCs;
 - ⇒ Refer to the “Spoil Management” section of this Handbook for guidance for removing impacted spoil from spill sites.
 - ⇒ Ensure spill kits are restocked following use. Vehicle spill kits and field spill kits can be restocked by ordering the required items through the store. If FSC or substation spill kits require restocking, contact your Environmental Representative; and
 - ⇒ Follow the Worksite Coordinator’s instructions.
- Upon arrival on site, the nominated Worksite Coordinator will manage the spill together with the coordinator nominated to handle any electrical matters associated with the incident.
- The Worksite Coordinator will be responsible for controlling the spill, allocating appropriate and adequate resources (including engaging additional resources as required), escalation and reporting of the incident to the regional Environmental Specialist and confirming that the incident has been reported in SAP EHS.
- Follow guidance provided in SWM/SIS 1.056 (Endeavour Energy employees).



Field spill kits are located at FSCs. These field spill kits are for Endeavour Energy crews to take with them to respond to spills in their area. They are 140 litres in size with red lids, and require a 2 person lift or mechanical aid to place on vehicle.

ENVIRONMENTAL INCIDENTS (Cont.)

Environmental Incident Response Flowchart



When responding to a spill, focus on protecting stormwater drains.



For Endeavour Energy employees, brown oil waste bins are available at FSCs for disposal of used spill kit materials.

ACID SULFATE SOILS

What is our aim?

To minimise the impact on the environment from the disturbance of Potential Acid Sulfate Soil (PASS).

Background?

Acid sulfate soil is a naturally occurring soil found in both coastal (tidal) and inland or upland (freshwater) environments (typically < 5 m above sea level). When these soils are exposed to air, they can produce sulfuric acid which may impact on aquatic life and water quality.

What am I responsible for?

Be on the look out for signs of PASS such as: rotten egg smell; blue grey, dark greenish grey or rusty coloured soils; milky blue green water; or close proximity to swampy or estuarine environments. If in doubt mapping for PASS is available in the Environmental GIS.



Release of acid sulfate soils to water can impact on aquatic life

When working in PASS, do

- Keep soil disturbance at a minimum and as shallow as possible.
- Consider using non-destructive digging with water.
- If stockpiling is necessary, cover stockpiles separately on plastics or in a skip bin to minimise exposure to air and keep damp. Install sediment controls.
- Re-bury PASS ASAP (<24 hours) at the same depth they originated from.
- Neutralise PASS with 10kg/tonne of agricultural lime prior to reinstatement if it has been exposed to air.
- Dispose at a waste facility licensed to accept PASS. Prior to disposal, notify the waste facility and discuss neutralisation requirements.
- Contact your Environmental Representative for further guidance if required.

When working in PASS, do not

- Expose to air where possible.
- Stockpile PASS if possible.
- Re-use PASS on other work sites.

ACID SULFATE SOILS (Cont.)

What am I responsible for? (Cont.)

- For fault/emergency and maintenance works, Endeavour Energy employees can use acid sulfate soil mapping to populate the eWHRA. The mapping will show a low or high probability of acid sulfate soil occurring at a particular location.



Rusty coloured soils can be an indicator of acid sulfate soils



Neutralise PASS with agricultural lime (source of photo: Bunnings)

Example of acid sulfate soil mapping

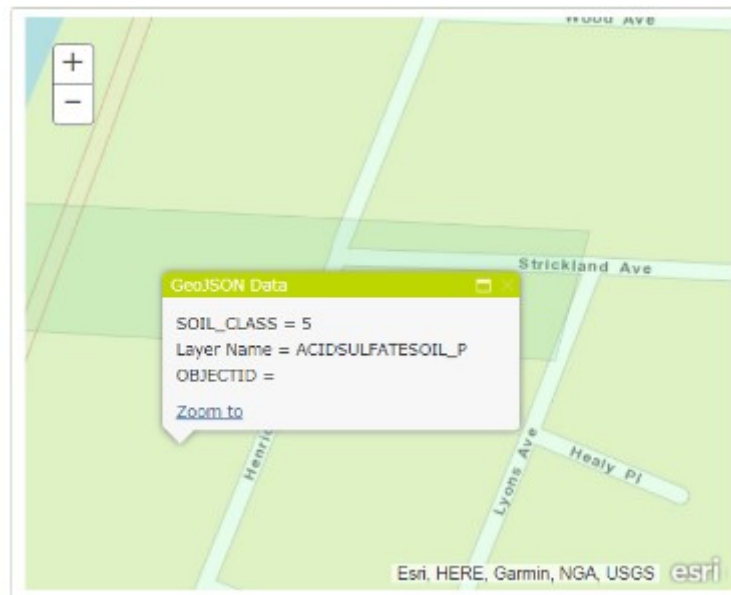
ACID SULFATE SOILS (Cont.)

What am I responsible for? (Cont.)

- For project works, Endeavour Energy employees can use acid sulfate soil mapping in the Pega EIA Tool to assist with completion of the EIA. The mapping in the Pega EIA Tool uses a classification system for the likelihood of acid sulfate soil being present in a particular area at a certain depth.
- Endeavour Energy employees should follow the Generic Acid Sulfate Soils Management Plan (in EMS 0013) for works involving less than 50m³ of PASS, and should contact their Environmental Representative if more than 50m³ of PASS requires disturbance.



Stockpiles of acid sulfate soil should be covered with plastic



Example of acid sulfate soil mapping in the SER Application

AIR QUALITY

What is our aim?

To minimise the impact on the environment, human health and property from dust, fumes, gases and odours.

Background?

Air quality has the potential to be affected in a number of ways whether it be accidental losses from gas filled equipment such as SF₆ switchgear and automotive air conditioning, dust from construction worksites or emissions from machinery and vehicles.

What am I responsible for?

- Handle SF₆ and other gases in accordance with approved work practices. Further information is provided in the “Use and Handling of SF₆” section of the Handbook.
- Implement dust prevention strategies as per the “Erosion and Sediment Control” section of the Handbook.
- Do not leave vehicle or equipment idling where they are not needed.
- Check vehicles and equipment are serviced regularly and operate efficiently.
- Position vehicles, generators and other equipment where the fumes will least affect receivers.
- Handle refrigerant gases in accordance with Endeavour Energy’s Refrigerant Trading Authorisation and associated risk management plan (applicable to appropriately licensed Endeavour Energy staff at mechanic workshops at Hoxton Park FSC and Narellan FSC only).



Attach dust barriers to fences of construction sites where required



Do not leave vehicles idling when not in use

ASBESTOS IN SOIL

What is our aim?

To safely manage asbestos in soil and comply with legislative requirements.

Background?

Examples of when asbestos may be encountered in soil include: buried asbestos containing conduits, asbestos contaminated fill, poor demolition or refurbishment practices and illegal dumping. Any asbestos removal works must be completed in accordance with Company Procedure GSY 1065 - Asbestos Management, Work Health and Safety Regulation 2011 and relevant Codes of Practice.

What am I responsible for?

- Check the work package for the HAZMAT Register and any warnings on construction diagrams, Environmental GIS or Dial Before You Dig (DBYD) drawings for the presence of asbestos containing materials at the work site (including contaminated sites). When working within substations, refer to the site manifest at site entry.
- If excavation is required in an area of known or suspected asbestos contaminated fill, contact your Environmental Representative for advice.
- If asbestos contaminated fill is encountered unexpectedly, stop works and contact your Environmental Representative. Apply asbestos PPE, then cover any suspected asbestos contaminated soil with plastic and barricade with asbestos signage.
- Where a buried asbestos conduit is in good condition, it can be carefully removed to avoid damaging the conduit. Update the HAZMAT register where required. Where a buried asbestos conduit appears damaged or broken, contact your Environmental Representative for advice.
- Asbestos requires disposal at appropriately licensed waste facilities. Contact your Environmental Representative for advice on disposal of asbestos contaminated soil and transport requirements.



An example of asbestos contaminated soil

BUSHFIRES

What is our aim?

To appropriately manage bushfire risks associated with our network and works.

Background?

Much of the Endeavour Energy's network is located in areas prone to bushfires. Endeavour Energy's Bushfire Risk Management Plan outlines steps taken to manage the risk of bushfires. There are also special restrictions that must be adopted when completing works during declared bushfire danger periods and Total Fire Ban (TOBAN) days.

What am I responsible for?

- Check EnviroGIS or the mapping in the PEGA EIA Tool for the identification of bushfire prone lands.
- When designing works, select sites, routes and/or access that avoid bushfire prone lands, and consider the use of engineered options (such as ABC conductor) in bushfire prone lands. Refer to company policy 9.2.5— Network Asset Design for further information.
- Manage vegetation located in close proximity to network assets in accordance with MMI 0013.
- Remove excess leaf litter and rubbish from substations and FSCs to reduce fuel loads.
- Endeavour Energy employees should refer to company procedure GAM 0011 for controls required when working during the gazetted bushfire danger period and declared Total Fire Ban (TOBAN) days.
- Endeavour Energy employees should refer to company procedure GSY 0013 for the process to be followed when completing hot work.



On TOBAN days, appropriate signage is to be displayed at FSCs/ depots notifying of TOBAN conditions

CONTAMINATED LAND

What is our aim?

To identify contamination at the earliest possible stage of the work and to manage it in a way that minimises impacts on human health and the environment and in accordance with relevant legislation.

Background?

Contamination is the presence of a substance above naturally occurring levels that could be detrimental to human health and/or the environment. Potential signs of contamination include odours, staining or discolouration, the presence of oil or a sheen, and/or the presence of buried foreign material such as drums or asbestos in soil.

What am I responsible for?

- When working in industrial areas or adjacent to service stations, be vigilant of potential signs of contamination.
- Check the EPA website or Endeavour Energy's Environmental GIS for the list of NSW contaminated sites notified to or regulated by the EPA.
- Check the work package documents for any identified contaminants on the worksite.
- When working on a site with known or suspected contamination, contact your Environmental Representative prior to commencing any work that will cause ground disturbance.
- Cease works if contamination is encountered unexpectedly and contact your Environmental Representative for assistance. You will need to re- evaluate and implement appropriate safety controls.
- Do not re-use contaminated soil. It needs to be appropriately classified to inform disposal at an appropriately licensed waste facility. Your Environmental Representative can advise on storage, transport and disposal options.



Discolouration of soils is a sign of potential contamination



The presence of an oily sheen is a sign of potential contamination

CONTAMINATED LAND (Cont.)



*Example of
contaminated site
mapping*

DEWATERING

What is our aim?

To remove water that has collected in excavations, trenches and pole holes in a manner that prevents environmental harm .

Background?

The guidance in this Handbook only applies to dewatering of excavations, trenches and pole holes. It does not apply to dewatering of stormwater that accumulates in bunded areas (e.g. in substations) or trade waste. The dewatering of stormwater from bunded areas must be completed in accordance with SDI 540– Transformer Oil Containment, and involves the implementation of controls to prevent the migration of oil from these areas. Dewatering of trade waste requires a trade waste permit for the relevant authority.

What am I responsible for?

DO NOT DEWATER DIRECTLY TO STORMWATER

Contaminated Water	Not contaminated (based on land use and observations) and less than 1000 litres	More than 1000 litres
• If suspected to be contaminated, water must be removed by an EPA licensed liquid waste contractor and disposed of at an appropriately licensed waste facility. • Report contaminated and/or suspected contaminated water to your Environmental Representative.	• May be discharged to a grassed area provided the process on the following page is followed.	• Contact your Environmental Representative for advice or have the water removed by an EPA licensed liquid waste contractor.



Contaminated water requires removal by an EPA licensed liquid waste contractor



Call your Environmental Representative when you need to dewater more than 1000 litres

DEWATERING (Cont.)

Process for dewatering less than 1000 litres of water that is not contaminated (based on land use and observations):

May be discharged to a grassed area using the following process:

- Requires a grassed area of greater than 5m² in size.
- Sandbags/ gravel socks must be placed in the nearby gutter (upstream from receiving stormwater drain) to capture sediment.
- Care must be taken when installing the pump to minimise disturbance to sediment such as placing the pump at the top of the excavation.
- Monitor discharge for cloudiness and/or turbidity. If the discharge is cloudy or turbid, pump the water through a filtration device (e.g. geo-fabric dewatering bag) prior to discharging or slow down the pump flow rate.
- If the water remains cloudy after filtration, cease dewatering and seek advice from your Environmental Representative.
- Any sediment captured by the sandbag/ gravel socks must be moved back into the excavation or regarded as general solid waste.
- Maintain awareness of potential safety hazards (e.g. creation of slip hazards) and mitigate where required.



Sandbags/ gravel socks should be placed in gutters when dewatering to capture sediment



If discharge is cloudy/ turbid consider use of a dewatering bag

ECOLOGY

What is our aim?

To avoid and/or mitigate impacts on biodiversity (plants and animals).

Background?

Threatened plants, animals, populations and communities are protected under State and Commonwealth legislation (known as Matters of National Environmental Significance). Removing or damaging threatened species and/or their habitat can result in individual and/or corporation penalties. Important wildlife habitat includes native vegetation, tree hollows, water bodies and rocky outcrops.

What am I responsible for?

- Check the work package documents for site specific information on threatened species and follow any specific mitigation measures detailed in the Environmental Management Plan (EMP).
- Avoid disturbing previously undisturbed areas by using established access tracks to the worksite.
- Follow the environmental assessment process and seek approval before removing vegetation unless the removal is for safety clearances of electrical assets as defined in MMI 0013.
- Use the EnviroGIS to identify threatened plants and animals and significant vegetation
- Adhere to controls provided by land managers (e.g. NPWS) and employ measures to protect existing vegetation and threatened plant species e.g. use existing access tracks, minimise clearing and disturbance, barricade protected vegetation, clearly designate areas for storage.
- Avoid disturbing habitat such as hollow bearing trees, intact vegetation and drainage lines.
- As live bats potentially harbour disease contact local wildlife services (**13 000 WIRES**) to salvage injured or displaced fauna . If dead bats require removal, follow guidance provided in SWM 6.014 (Endeavour Energy employees).

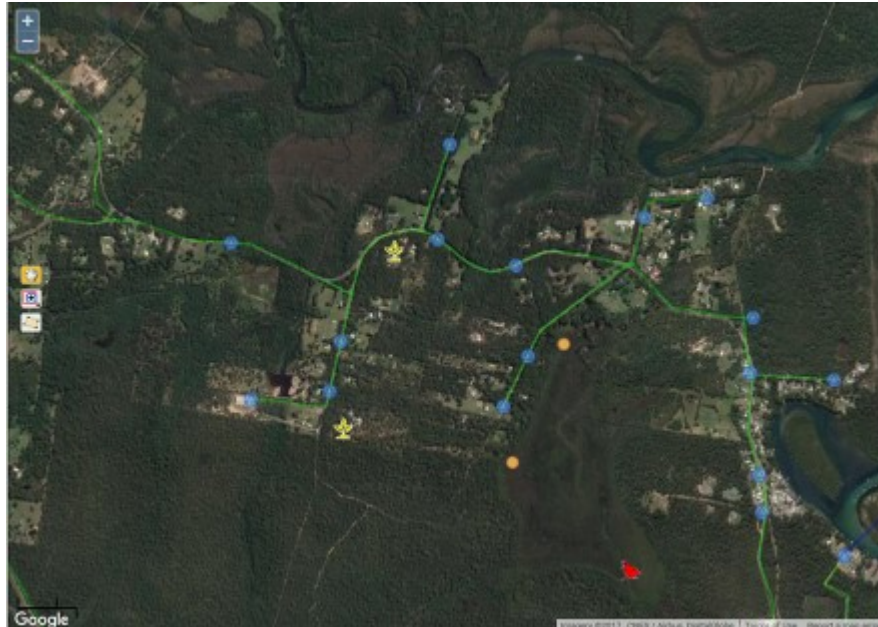


Sublime Point Pomaderris



Coastal Upland Swamp EEC

ECOLOGY (Cont)



*Example of mapping of Threatened
Plants and Animals*

*Mapping of Endangered Ecological
Communities*



EROSION AND SEDIMENT CONTROL

What is our aim?

To minimise erosion and contain sediment on work sites to prevent pollution of the environment.

Background?

Sediment can be lost from work sites through rain or wind. Activities that have the potential to cause loss of sediment include trenching, minor earth works, pole replacements, vehicle movements, track maintenance and vegetation removal. The release of sediment into the environment can affect plants and animals, reduce drinking water quality, cause algal blooms in water bodies and spread noxious weeds. It can also create a traffic hazard if released onto a roadway.

What am I responsible for?

- Review work package and implement site specific erosion and sediment control identified in the EMP.
- Minimise removal of grass, vegetation and mulch and avoid disturbance during wet weather.
- Install and maintain sediment control downslope of disturbed areas or stockpiles.
- Consider use of a water truck or street sweeper during dry weather and install dust barriers on fences and gates.
- Remove accumulated sediment from gutters at the completion of works.
- Cover loads when transporting to prevent loss of sediment / generation of dust.
- Restrict traffic movement to sealed areas where possible to prevent dust generation and erosion.
- Contact your Environmental Representative if the worksite is located within 40 metres of a creek, river or waterway.



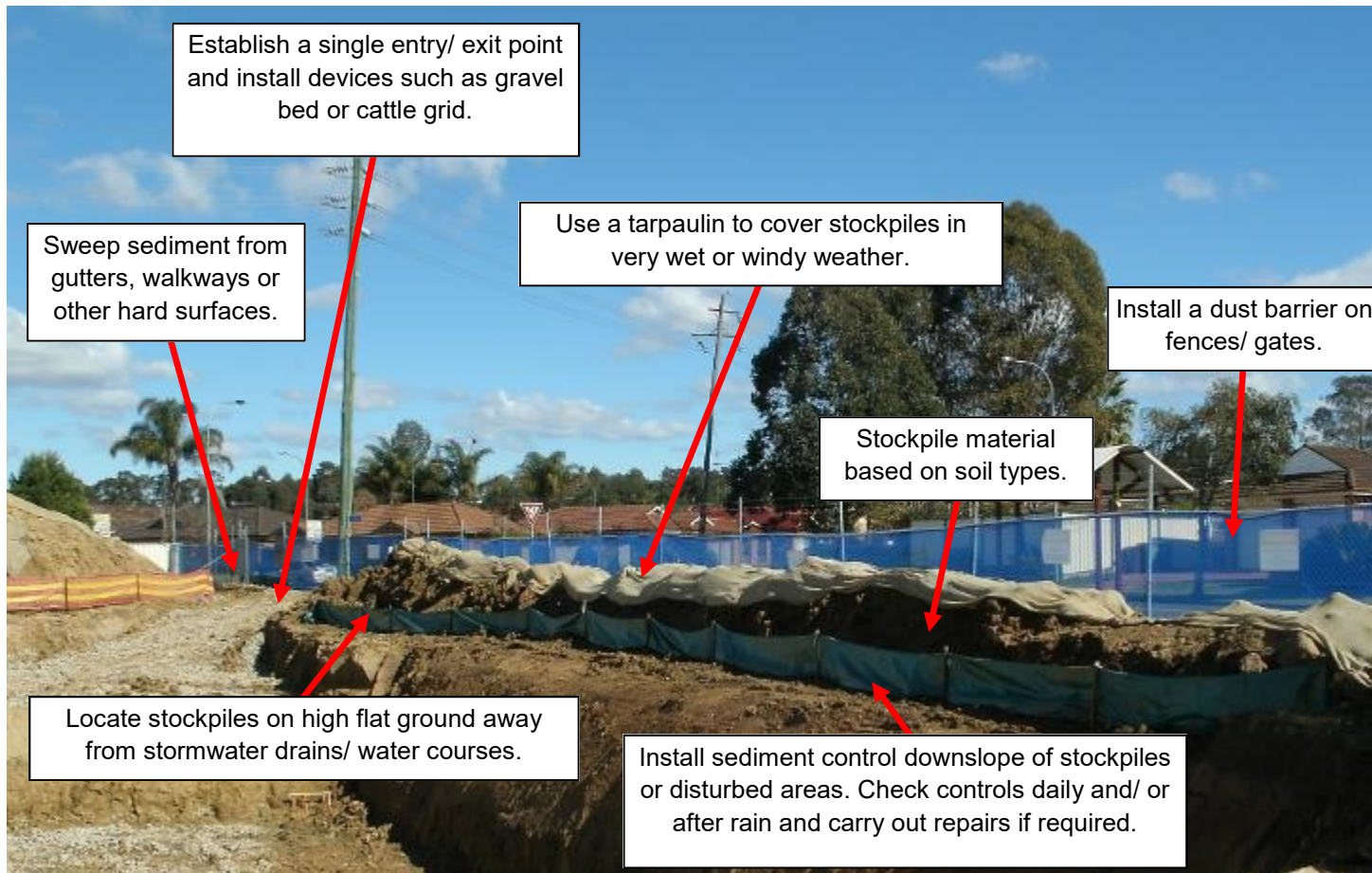
Attach dust barriers to fences of construction sites where required



Fines can be imposed for uncovered loads

EROSION AND SEDIMENT CONTROL (Cont.)

Sediment Control Methods



EROSION AND SEDIMENT CONTROL (Cont.)

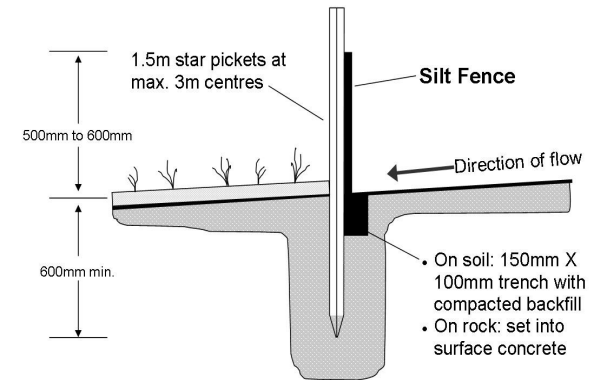
Sediment Fence Installation

Some reminders for sediment fence installation include:

- Support sediment fence fabric (e.g. with star pickets that are capped) every 3 metres (min);
- Install supports (star pickets) downstream of the sediment fence fabric; and
- Install the sediment fence fabric to a depth of 150 mm.

After works

- Stabilise the work site by revegetating, seeding, mulching or using spray grass.
- Maintain sediment controls until the site has stabilised (i.e. vegetation has regrown) and repair as required.



Place sediment fences downslope of disturbed areas or stockpiles



Install cattle grids and gravel beds at the site exit point



Spray grass and seeding can be used to stabilise a work site

HERITAGE

What is our aim?

To protect all known or suspected heritage items.

Background?

Endeavour Energy assets (including moveable items) that have heritage significance are listed under the s170 Register (refer intranet). Examples include Blacktown TS and Prospect ZS.

Heritage items that may be encountered during the course of works include:

- **Aboriginal heritage** - occupation sites, shell middens, sharpening grooves and tools, rock paintings or carvings, quarries, stone arrangements, scarred trees, burial sites, water holes, caves, bones.
- **Non-aboriginal heritage** (local, state and national) - weirs, trees, bridge and building footings, cobblestone roads, wells, fences, walls, cemeteries, heritage listed buildings, world heritage areas.

What am I responsible for?

- Before conducting works on an asset owned by Endeavour Energy, check the Endeavour Energy s170 Register to assess whether the asset has heritage significance.
- Check Endeavour Energy's Environmental GIS for state listed non-aboriginal heritage items and aboriginal heritage items mapped on or near the worksite.
- Check the work package documents for heritage identified on the worksite. In relation to aboriginal heritage, permits may include reburial and/or salvage locations that construction personnel need to be aware of to prevent disturbance. This should be marked on the design diagram.
- If heritage is identified to be present at a site, ensure all the relevant approvals/ permits/ management plans are obtained prior to completing the works (design and upgrade works). Ensure approvals and mitigation measures are within your work package before proceeding and that they are being implemented throughout the course of the work. Contact your Environmental Representative if requiring to complete maintenance on or near a heritage item.



East Parramatta ZS heritage well



Heritage listed distribution substation

If you sight or unearth an item suspected to have heritage significance, stop work immediately and contact the relevant Environmental Specialist.

HERITAGE (Cont.)

What am I responsible for?

Aboriginal Scarred Trees

Our works have the potential to impact on natural and cultural heritage features including aboriginal sites such as Aboriginal scarred trees.

Aboriginal scarred trees are trees that have been scarred by Aboriginal people through the deliberate removal of bark or wood. The scars expose the sapwood on the trunk or branch of a tree and can consist of the following:

- **Curved bark removal scars:** consisting of circular, oval or elongated shape which is a result of a curved section of either the tree bole, major limb or large burl being removed. Curved bark removal was used for items such as a canoe or container to carry grain or water in.
- **Bark slab removal scars:** Sheet and slab artefacts from the removal of rectangle or square sheets of bark. Historically these pieces could have been utilised as a part of a single shelter.
- **Toe Holds:** small incisions into the bark and sapwood that allowed for tree climbing. These usually occur in staggered lines on near vertical trees
- **Resource extraction holes:** small holes (smoke holes or access holes) cut into hollow trunks or limbs to assist with catching game.
- **Bark strip removal scars:** fibre components stripped from a tree to be utilised as sewing thread, fishing line, climbing ropes, blankets etc.
- **Grub procurement scars:** caused by cutting away patches of bark to expose individual grub holes and larger sections of a grub infested trunk.
- **Marked and carved trees:** Tree carving and marking was undertaken for a range of ceremonial purposes.
- **Wood removal scars:** Predominantly seen on dead trees which show signs of split timber or bark removal utilised for wooden shields, boomerangs and waddies.



Aboriginal sharpening grooves



Aboriginal scar tree

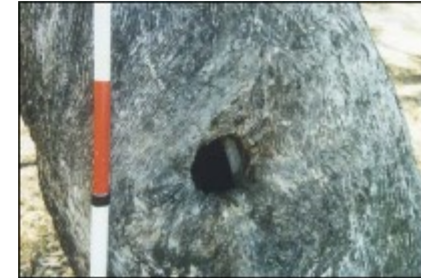
HERITAGE (Cont.)

What am I responsible for?

Aboriginal Scarred Trees (cont'd)

It is important to note that some aboriginal tree scars are difficult to identify due to later impacts and peculiarities in the healing patterns distorting or hiding the original scar features. If workers/ ASPs find a tree which is suspected to have an Aboriginal scar works must cease and an Environmental Specialist contacted.

Examples of Aboriginal scarred trees:



HERITAGE ITEMS (Cont.)



Mapping of Aboriginal heritage



Mapping of European heritage

IMPORTED MATERIALS MANAGEMENT

What is our aim?

To prevent contamination of our sites when importing material to our sites for use in landscaping, levelling, surfacing and earthwork processes.

Background?

We import a range of different materials to our sites for landscaping, levelling, surfacing and earthworks (such as fill, topsoil, aggregate and mulch). It is important that imported material is suitable for the intended land use, free of contamination and does not pose any other safety or environmental risks.

What am I responsible for?

When importing material:

- If importing fill, the material must be verified (in writing) to be VENM or ENM
- Request documentation from the supplier on the origin of the material, past activities conducted at the site of origin and confirmation that the material is uncontaminated (e.g. VENM certificate, ENM statement of compliance). If the material is a recovered product, also request documentation confirming that the product complies with the relevant NSW EPA Resource Recovery Order, and request NATA accredited laboratory test results confirming the product is not contaminated.
- Inspect delivery of all loads of the material onto the site to confirm the product is what was ordered, and that it is free from signs of potential contamination such as asbestos, glass and plastic. These inspections, including date of importation, supplier details and photographs, should be documented.
- Request documentation from transporters delivering the material to the work site to verify the origin (e.g. Section 143 Approved Notice, transport tracking documentation).
- Recovered aggregate can be imported for the purpose of road making activities, building, landscaping and construction works only.



Request documentation from suppliers confirming that recovered materials comply with the relevant NSW EPA Recovery Order, and request NATA accredited laboratory test results proving the product is not contaminated.



Inspect delivery of all loads of imported material to confirm there are no signs of contamination.

IMPORTED MATERIALS MANAGEMENT (Cont.)

What am I responsible for? (cont'd)

If the material is a recovered mulch product, also complete the following:

- Obtain a written statement from the supplier confirming that the recovered mulch complies with the conditions of *The Mulch Order 2016 (NSW EPA)* and *Australian Standard 4454-2012 Composts, soil conditioners and mulch*.
- Obtain a copy of the supplier's written risk management protocol. This should be less than 2 years old with inclusions as required by the Mulch Order 2016 such as measures implemented by the supplier that minimise the potential for the mulch to cause harm to the environment and the introduction/ spread of weeds, disease or pests.
- Obtain written confirmation from the supplier on control measures implemented to prevent the presence of asbestos in recovered mulch, together with supporting evidence from the supplier to confirm that these control measures have been effectively implemented (such as NATA accredited laboratory test results for asbestos testing of the mulch proposed to be delivered).
- Do not apply recovered mulch to environmentally sensitive areas (such as National Parks, Water NSW Special Areas/ Controlled Lands, coastal wetlands, littoral rainforests, critical habits and agricultural land). If recovered mulch is proposed to be applied in environmentally sensitive areas contact your Environmental Specialist for further advice.
- Supervise delivery of all loads on to the work site to confirm that there are no signs of contamination such as asbestos.

Refer to company standard *EMS0013 Spoil and Imported Materials Management* for further information.



Obtain written confirmation from recovered mulch suppliers on control measures implemented to prevent asbestos contamination.



Do not apply recovered mulch to environmentally sensitive areas.

NATIONAL PARKS AND WATER NSW AREAS

What is our aim?

To notify National Parks and Wildlife Service (NPWS) and WaterNSW correctly when accessing their lands for emergency, inspection or maintenance works.

Background?

A access consent and notification protocol exists between Endeavour Energy and NPWS and WaterNSW that details notification requirements for accessing their lands for the following purposes:

- inspection works— viewing of assets, OLI/GLI;
- maintenance works— repairing or replacing existing elements, managing vegetation as per MMI0013, grading and maintaining the drainage of existing tracks; and/ or
- emergency works— maintaining or restoring electricity to ensure public safety, to protect buildings or the environment due to a sudden outage.

Where the proposed activities do not comply with these definitions, contact your Environmental Representative.

What am I responsible for?

- Notify NPWS and/or WaterNSW in accordance with EMS0012 (summarised in the following table). Follow all mitigation measures outlined in the notification paperwork and NPWS/ WaterNSW direction.
- Prior to accessing a WaterNSW Special or Controlled Area, complete the WaterNSW Induction. Contact your relevant Environmental Representative if you require this induction.
- Report any incidents immediately to the Call Centre (13 10 03) and notify your relevant Environmental Representative.



An access notification protocol exists between Endeavour Energy and NPWS and WaterNSW



Workers and ASPs are required to complete a WaterNSW Induction prior to accessing WaterNSW Special and Controlled Areas

NATIONAL PARKS AND WATER NSW AREAS (Cont.)

Access notification requirements for NPWS or Water NSW are summarised in the following table:

	National Parks NPWS [^]	Special Areas/Controlled Lands WaterNSW [*]
Inspection works ⁺	 Two (2) days prior <u>OR</u> submit form FAT0048	
Maintenance works ⁺	 Two (2) weeks prior	 Two (2) weeks prior
	<u>AND</u> submit form FAT0049 with CRA ^{**}  	<u>AND</u> email form FAT0049 with CRA ^{**} 
Emergency works	 < 24 hours after	 < 24 hours after 1800 061 069

[^] Refer to EMS 0012 for NPWS contact details

^{*} (02) 4640 1282 (0429 820 008)  special_area_access@waternsw.com.au

^{**} CRA= Conservation Risk Assessment. Consult your Environmental Representative for assistance.

⁺ -No access following 10 mm rainfall in a 24 hour period

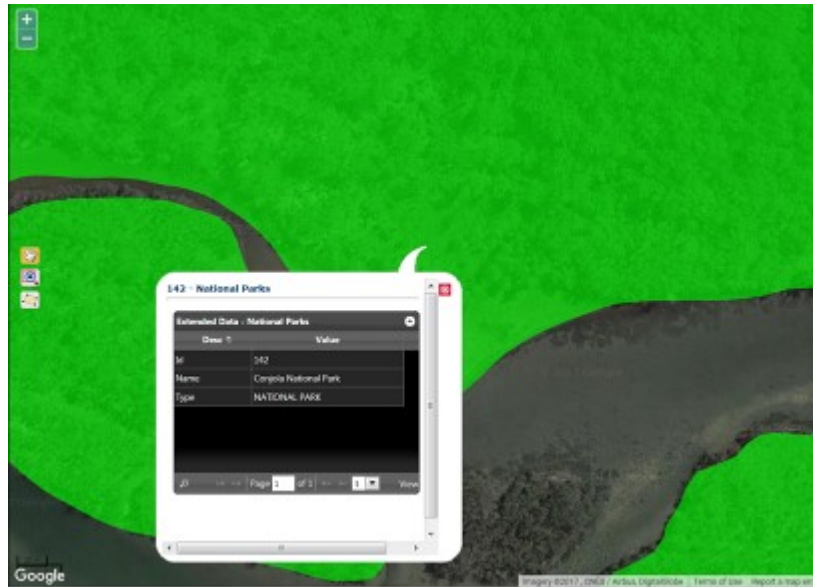


Do not access NPWS or WaterNSW areas following 10mm rainfall in a 24 hour period unless it is for emergency works

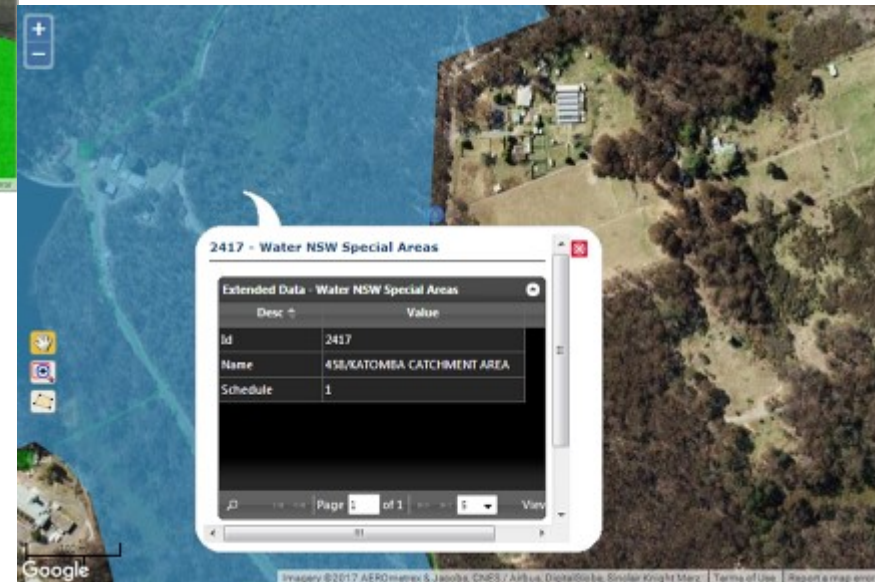


Report any environmental incidents immediately by calling the Endeavour Energy Call Centre (13 10 03)

NATIONAL PARKS AND WATER NSW AREAS (Cont.)



Mapping of National Parks



Mapping of WaterNSW Special or Controlled area

NOISE AND WORKING HOURS

What is our aim?

To minimise the impact of industrial or construction noise on the community.

Background?

The NSW EPA defines recommended standard normal working hours as Monday to Friday from 7.00am to 6.00pm and Saturdays from 8.00am to 1.00pm.

What am I responsible for?

For EIA approved or scheduled out of hours work, notify residents that are likely to be affected, **5-14 days** prior to commencement of works. A template notification letter is available on the Endeavour Energy intranet. Use the out of work customer fact sheet to supplement the template notification letter and notice of electricity interruption (depending on the likely spread of noise outside of the outage area). Where works are proposed to occur outside of the recommended standard hours or EIA approved work hours, the project manager must seek approval from the Environmental Services Manager. Construction and maintenance works that are planned to occur over more than two consecutive nights in any given week must be appropriately justified.

Where feasible and reasonable, minimise noise on adjacent homes and businesses by:

- Considering the use of silenced equipment, installation of noise dampening measures and temporary noise shielding barriers around stationary plant (such as generators and lighting), subject to manufacturers' design requirements.
- Turning off equipment when not being used.
- Avoiding dropping materials from a height or dragging equipment.
- Avoiding the use of radios or stereos outdoors and limiting loud talking and shouting.
- Limiting loud talking and shouting.



Out of hours works can only occur if fully justified for safety or electrical integrity or as per EMS 0016 — Industrial and Construction Noise Standard.

SUN	MON	TUE	WED	THU	FRI	SAT
1	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Work is not to be undertaken on a Sunday night/ Monday morning unless fully justified, necessary and unavoidable.

NOISE AND WORKING HOURS

- Identifying and using quieter construction methods, vehicles, plant and equipment for the works.
- Regularly maintaining plant and equipment to minimise unnecessary noise (e.g. rattling).
- Scheduling the noisiest work to be undertaken during recommended standard normal working hours. Where this is not possible, complete the noisiest work during hours that would be less interruptive to sensitive receptors (e.g. before 10pm).
- Scheduling respite periods if the works are likely to generate noise over extended periods in the same area.
- Considering scheduling works to avoid impacting the same receptors for more than two nights during any single week, and consecutive nights of works where possible.
- Where practicable, scheduling the noisiest work to move progressively away from sensitive receptors during a single night of work and the overall program of work during any single week.
- Arranging the worksite to minimise the activation of audible reversing and movement alarms, and to take advantage of obstructions that may act as noise barriers.
- Selecting access roads to the work site as far away as possible from sensitive receptors, and loading and unloading equipment as far away as possible from sensitive receptors.
- Considering the location and orientation of plant and equipment that generates high, impulsive, low-frequency and/or tonal noise so as to minimise impacts on sensitive receptors.
- Avoiding the simultaneous operation of two or more noisy plant or equipment close together.
- Locating storage compounds (if required) in industrial areas and not near sensitive receptors (such as homes).
- Not using hammers or other noisy methods to clean equipment.
- Installing noise dampening measures on temporary road plates that are to be used in the same location for longer than two nights.



Consider the use of traffic Variable Message Signs (VMS) as an additional communication tool to notify the community of upcoming out of hours works.



Temporary noise barriers installed to minimise out of hours noise impacts.

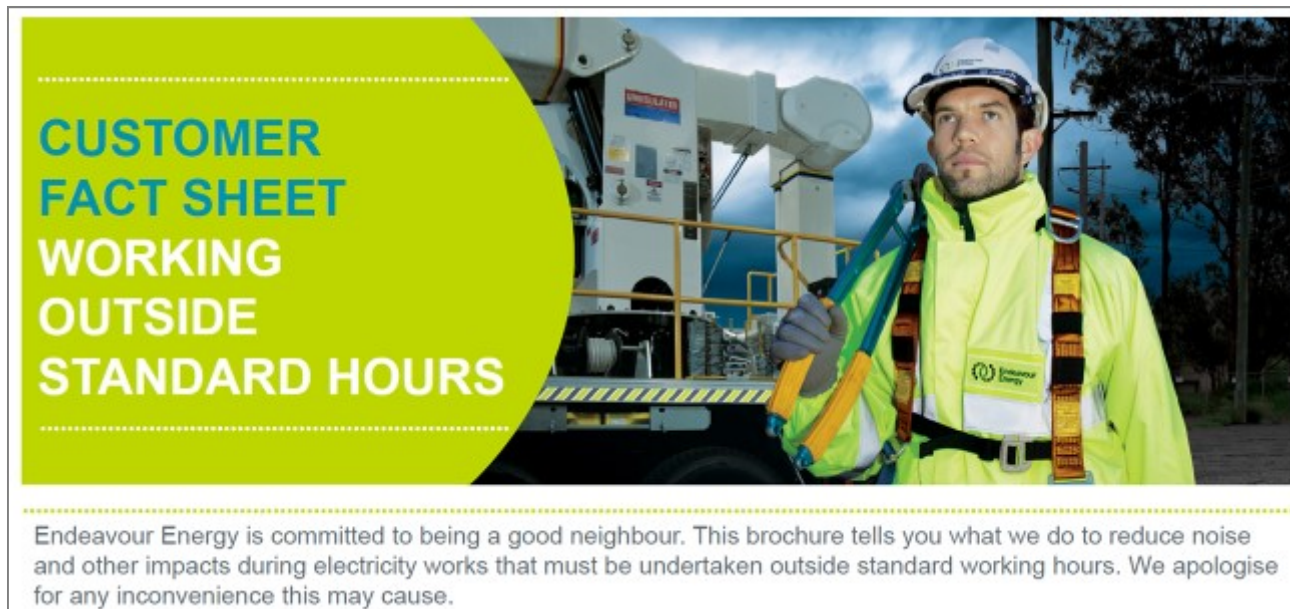
NOISE AND WORKING HOURS (Cont.)

What am I responsible for? (Cont.)

If complaints are received:

- Handle in a prompt and responsive manner.
- Implement all feasible and reasonable measures to address the reason for the complaint.
- Report noise complaints to 131 003 and SAP EHS, direct all EPA enquiries to an Environmental Representative.

*Customer Fact Sheet for
supplementing the template
notification letter*



**CUSTOMER
FACT SHEET
WORKING
OUTSIDE
STANDARD HOURS**

Endeavour Energy is committed to being a good neighbour. This brochure tells you what we do to reduce noise and other impacts during electricity works that must be undertaken outside standard working hours. We apologise for any inconvenience this may cause.

OIL AND CHEMICAL MANAGEMENT

What is our aim?

To prevent accidental releases and long term legacy issues associated with the storage, transport and handling of oil (including fuels), chemicals and oil filled equipment.

Background?

The permanent and temporary storage of oil/ chemical containers and oil filled electrical equipment poses a serious risk of accidental leaks and spills across the network area. Some older equipment may also contain residues of PCBs. Electrical equipment that was manufactured prior to 1991 and is not designated 'PCB free' on nameplate must be assumed to contain PCBs.

What am I responsible for?

Storage areas for oil containers and oil-filled equipment (including Envirotemp FR3 fluid) must conform to the requirements as specified in AS 1940:2017, in Company Standard EMS 0017– Oil Management and the following general requirements:

- Located within a secure site away from the site boundary, ignition sources, stormwater drains, and other sensitive areas;
- Consist of a sealed surface where possible;
- Located to minimise the potential for damage by vehicle collision or vandalism;
- Located adjacent to a fully stocked, appropriate size and type, and identifiable spill kit; and
- Inspected regularly for damage and accumulation of foreign materials such as sediment, rubbish and combustible materials.

All out-of-service oil-filled equipment must be stored in a permanent or portable bund. In the event of insufficient bund capacity, new transformers can be stored unbundled following the general requirements listed above.

Signage of oil/chemical storage areas is to be in accordance with WHS Regulation 2011, and oil/ chemical containers must be fit for purpose and appropriately labelled. Oils, fuels and chemicals must be compatible to be stored in the same area.



Drums on a portable bund



Wrapping a transformer before transport

OIL AND CHEMICAL MANAGEMENT (Cont.)

All spills must be controlled, contained and cleaned up according to EMS 0008– Environmental Incident Response and Management.

Portable storage areas

Portable storage areas are designed for the *temporary storage* of decommissioned assets within a controlled environment where a permanent bund is not available. The following key requirements apply:

- Locate storage area on a level surface.
- Seal and/or wrap leaking oil-filled equipment or containers.
- Contact the Supply Chain Officer to arrange a contractor to drain leaking units.
- Organise for a licensed liquid waste contractor to pump out the storage area following rainfall.
- Keep all oil filled equipment in an up-right position, unstacked and at a sufficient distance away from the edge.
- The storage area must be capable of capturing the contents of at least 110% of the capacity of the largest oil-filled unit or 25% of the total capacity of all oil-filled units being stored, whichever is the greater (AS 1940:2017).

Permanent storage areas

The following key requirements apply:

- Seal and/or wrap significantly leaking oil-filled equipment or containers.
- Keep all oil filled equipment in an up-right position, unstacked and at a sufficient distance away from the edge.
- Keep sumps and bunds clear of foreign materials.
- Report any spills greater than 50 litres to your relevant Environmental Representative.



Larger portable bund



Old distribution transformers within bunded area

OIL AND CHEMICAL MANAGEMENT (Cont.)

Transporting oil and oil filled equipment

A spill kit must be carried during the transport of oil and oil filled equipment. The spill kit must be able to contain the volume of the largest container or oil filled equipment. Safety Data Sheets for the type of liquid being transported must also be carried during transport. Use Company Form FPE 0009—Oil Transport Tracking Register to assist with tracking the transport of new and used oil.

The following actions must be taken prior to transport to minimise the risk of leaks:

- inspect electrical connections including insulators, taps, vents, pipes and other weak points;
- test all taps and plugs for tightness and leaks and apply sealant where appropriate;
- seal all vents, holes and openings, and seal and secure containers/drums; and,
- wrap damaged or leaking equipment in plastic, store in a bunded pallet within the vehicle and strap it down securely.

Where the risk of leaks remains high following these steps, the equipment must be pumped out by a licensed contractor prior to transport. Licensing requirements for the transport of oil and oil filled equipment is included within the following pages.

Vehicle wash bays

- All washing of company vehicles is to be undertaken within FSC designated wash bays. As per requirements in EMS 0017, only quick-break detergents and degreasers (as approved by Endeavour Energy Supply Chain team) are to be used in vehicle wash bays.
- Check that the oil water separator is within the scheduled service dates. If it has not been serviced, is not working or there are visible oils in the discharge, notify your relevant Environmental Representative immediately.

Plant and equipment

- Regularly inspect and maintain all plant and equipment with hydraulic oil and designated vehicles transporting oil filled equipment.



New transformer storage



Vehicle wash bay— pressure hoses are to be used to limit water use. Do not leave hoses on unattended.

OIL AND CHEMICAL MANAGEMENT (Cont.)

Polychlorinated Biphenyls (PCBs)

PCB containing oil is oil with a PCB concentration greater than 2 mg/kg. Scheduled PCB containing oil has a PCB concentration greater than 50 mg/kg. Oil that contains less than 2 mg/kg of PCB is considered PCB free oil.

Safety precautions:

- No smoking, eating or drinking in the working area.
- Use appropriate PPE to minimise potential exposure, including chemical resistant gloves, safety glasses, long sleeves and trousers (or disposable overalls) and appropriate footwear.
- Use exhaust fans when working in confined areas to avoid the build up of gases.
- Wash hands and face with soap and water at conclusion of work and/or prior to eating, drinking or smoking.

General requirements for the storage of PCB contaminated waste or equipment include:

- PCB containing oil (suspected or proven) must be stored in a temporary or permanent bund above flood levels, pending processing.
- If PCB test results confirm the presence of PCB containing oil, the equipment or container with PCB containing oil must be labelled accordingly, removed and lawfully disposed or recycled by the licensed liquid waste contractor within three weeks of being advised of the PCB test results. The Endeavour Energy Disposals Coordinator is responsible for managing the disposal and recycling of PCB contaminated oil.
- PCB containing oil must be stored separately from PCB free oil.
- PCB capacitors, light fittings, or used spill response materials must be double wrapped in plastics, sealed with adhesive tape and disposed of using the designated PCB waste bin at the FSC.



PCB labelling



PCB contaminated waste bin

OIL AND CHEMICAL MANAGEMENT (Cont.)

- PCB containing oil must be stored in appropriate and structurally sound containers e.g. 205 litre drum with clip on lids or 1000 litre Intermediate Bulk Container (IBC) tank.
- The disposal of items in the PCB designated waste bin at the FSC can be arranged by contacting the relevant Environmental Representative.

Volume requirements for storage and transport of oil and oil- filled equipment

Oil stored in oil– filled equipment while awaiting refurbishment or PCB testing is not considered a waste and is exempt from the licensing requirements discussed below.

When storing oil removed from equipment, the following cumulative totals apply:

Oil category	PCB concentration	Storage Limit without a licence	Transport limit without a licence
PCB free oil	<2 mg/kg	60,000 L	< 200 L
Non scheduled PCB oil	>2 mg/kg, <50 mg/kg	5000 L	<200 L
Scheduled PCB oil	>= 50 mg/kg	One tonne or 1000L	<200 L

Non– scheduled or PCB free oil is not a dangerous good for transporting purposes and a dangerous goods licence is not required.

If the thresholds for transporting PCB containing oil (suspected or proven) removed from oil-filled equipment are likely to be exceeded, the waste oil must:

- be stored at its place of origin while awaiting PCB testing and removal by a licensed liquid waste contractor within three weeks of being advised of the PCB test results; or
- transported in accordance with Endeavour Energy's Environmental Protection Licence in consultation with your Environmental Representative (relevant to Endeavour Energy employees only).



The following waste oil storage thresholds must not be exceeded on our sites:

PCB free oil <60,000L

PCB containing oil <5,000L

Scheduled PCB containing oil <1,000L or <1 tonne

OIL AND CHEMICAL MANAGEMENT (Cont.)

Endeavour Energy's Environment Protection Licences

There are certain activities that Endeavour Energy undertakes that require an Environment Protection Licence (EPL) issued by the NSW EPA.

Endeavour Energy has the following EPLs in place:

Licence Number	Site	Activity that Licence applies to
13025	Narellan FSC	Storage of waste oil
21666	N/A	Transport of liquid waste
21988	Riverstone ZS	Storage of environmentally hazardous chemicals (PCBs)

A Pollution Incident Response Management Plan (PIRMP) exists for each of these licences. The PIRMP details actions to be taken if a pollution event occurs when the above activities are being completed in accordance with an EPL. PIRMPs are available on the Sustainability page of our website and can be found at the following locations:

- 13025 Narellan FSC– PIRMP available [here](#)
- 21666 Transport of liquid waste– PIRMP available [here](#)
- 21988 Riverstone ZS– PIRMP available [here](#)

It is important that you are aware of licence and PIRMP requirements, and Environmental Specialists complete annual training and testing of PIRMP requirements. If you have not yet been trained on PIRMP requirements, but are involved in activities that each of our three EPLs covers, please contact your Environmental Specialist to arrange training.



Endeavour Energy has three Environment Protection Licences in place including:

- Narellan FSC (for storage of oil);*
- Riverstone ZS (for storage of PCBs); and*
- Transport of liquid waste*

If you are involved in any of these activities, please ensure you are aware of requirements of these licences.

PESTICIDES

What is our aim?

To provide guidance on the environmental requirements for the use and handling of pesticides.

Background?

Pesticides are used across the network area to control pests, to protect network assets and the community. The Pesticides Regulation 2017 provides guidance on the recording and notification requirements for pesticide use.

What am I responsible for?

- Undertaking appropriate training for the non domestic use of pesticides.
- Apply pesticides according to the specimen label and SDS.
- Records must be made within 24 hours following the use of a pesticide for non domestic purposes and must be retained for a minimum of three years.
- A copy of the record should be provided to the owner or occupier of the land on which the pesticide was applied as per company procedure GPE 0004– Pesticide Use.
- Records are not required to be provided to the owner or occupier if: the location of the pesticide application is remote and out of sight of any dwellings and the owner or occupier is not easily identified.
- It is recommended that notification of pesticide use is done following the Endeavour Energy Pesticide Use Notification Plan. Accordingly, the pesticide notification sign must be displayed at the work site when treating timber poles by hand application of liquid residual termiticide and dust termiticide and during vegetation management by hand application (spot spray and cut and paint) of Glyphosate.



Termiticides are used for timber pole treatment



A Pesticide Notification sign should be displayed when applying pesticides in public places for the purposes of timber pole treatment and vegetation management

PESTS, WEEDS AND DISEASES

What is our aim?

To reduce the potential for pests, weeds and diseases to spread across the network area in conjunction with construction and maintenance works.

Background?

Pests, weeds and diseases can threaten agriculture, human health and the environment. They can be spread by vehicles, personnel, machinery, mulch and/or imported spoil.

Noxious weeds, such as Fireweed, contain toxins that can be lethal to cattle and can aggressively invade areas, outcompeting native plant species. It is an offence to knowingly transport or use machinery or equipment that contains such noxious weeds. For the current list of noxious weed species located in Endeavour Energy's network, refer to the Department of Primary Industries – [NSW Weedwise](#) or contact the relevant Environmental Representative. Local council websites can also provide information on noxious weeds found in their area.

Diseases such as Myrtle Rust and *Phytophthora* ('root rot'), cause dieback within endangered ecological communities and Chytrid fungus can lead to the mortality of threatened frog species.

What am I responsible for?

- Remove weed cuttings by sealing in plastic bags and disposing in general waste.
- Check and clean boots, vehicles, plant and equipment when leaving weed infested sites as per the Hygiene Protocol for Mitigating the Spread of Pests, Noxious Weeds and Diseases in company standard EMS0004- Managing Vegetation Near Electrical Infrastructure and Pest, Weed and Disease Mitigation
- Follow directions provided by landholders (e.g. NPWS, WaterNSW and farmers) to prevent the spread of weeds and diseases.
- Consult with stakeholders to assist with the identification of areas harbouring soil and water borne fungal pathogens.
- Control noxious weeds on network owned property in consultation with your relevant Environmental Representative to prevent spread to adjoining land.



Environmental weeds including Whiskey Grass can be spread through vehicle movements or disturbance



*Disinfecting tyres prior to exiting known *Phytophthora* infected areas*

SPOIL MANAGEMENT

What is our aim?

To manage excess spoil in accordance with legislative requirements.

Background?

Stringent legislation governs the re-use and disposal of excess spoil. These requirements exist to prevent the contamination of sites and ensure appropriate disposal of waste materials.

What am I responsible for?

Spoil storage

- Contact relevant landowners prior to storing spoil on their land.
- The volume of spoil being stored should not exceed 1000 m³ or 1000 tonnes, whichever is less, and 6000 tonnes per annum per site.
- Store spoil as close as possible to the worksite with appropriate erosion and sediment controls.
- Fence, lock and signpost the storage site and only one work party should use a spoil storage site at any one time.
- Restore site to their original condition on completion of work.



Install sediment control around spoil storage sites



Log spoil storage sites in the company's Spoil Register

SPOIL MANAGEMENT (Cont.)

Contaminated spoil

- If spoil is excavated from a substation or FSC, is suspected to be contaminated, or is excavated from around pole butts treated with creosote contact your Environmental Representative. They can arrange chemical testing of the material as required and provide advice on storage, transport and disposal requirements.
- Contaminated spoil cannot be re-used and prior to disposal, the material requires waste classification, following which the material must be disposed of at an appropriate waste facility licensed by the EPA.

Spoil re-use

	Contaminated Spoil	ENM*	VENM*
Re-use on worksite	✗	✓	✓
Re-use on other worksite	✗	✓ (with testing)	✓
Re-use on a third party site #	✗	✓ (with testing)	✓

* Refer to the Definitions section

Contact your Environmental Representative if considering this option as Development Approvals and Conditions of Consent need to be reviewed. You will also need to consider evidence required as proof of lawful disposal.



Store contaminated spoil on plastic or in a designated plastic lined receptacle and cover with plastic



Contaminated spoil will often require transportation by an appropriately EPA licensed vehicle.

SPOIL MANAGEMENT (Cont.)

Spoil disposal

- If spoil is contaminated or cannot be re– used, it must be disposed at an appropriately EPA licensed waste facility.
- For the disposal of large volumes of spoil (> 100 tonnes), consider the use of licensed resource recovery facility. Licensed resource recovery facilities recover spoil and as such have financial and environmental benefits. Consult your Environmental Representative if considering this option as the material will require prior testing.
- Spoil intended for disposal at a landfill must be disposed of at an appropriately EPA licensed waste disposal facility located < 150 km from the place of generation.
- Obtain waste disposal dockets for each load of spoil disposed and retain for a minimum of three years.

Advice & Environmental Testing

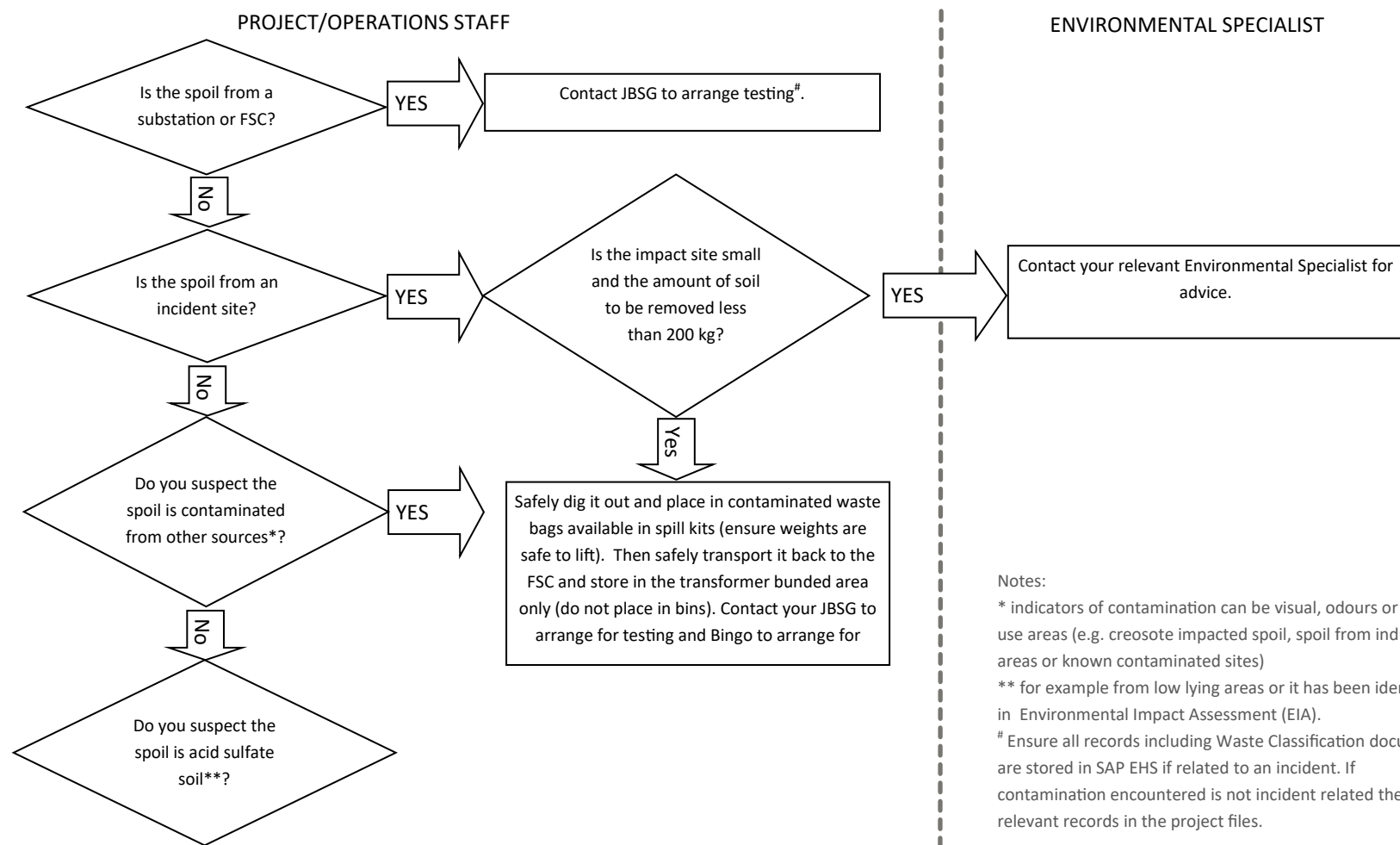
- Environmental Specialists will need a work order raised to cover time and costs for inspection, sampling and analysis.



Obtain disposal dockets for each load of spoil disposed of at a licensed waste facility

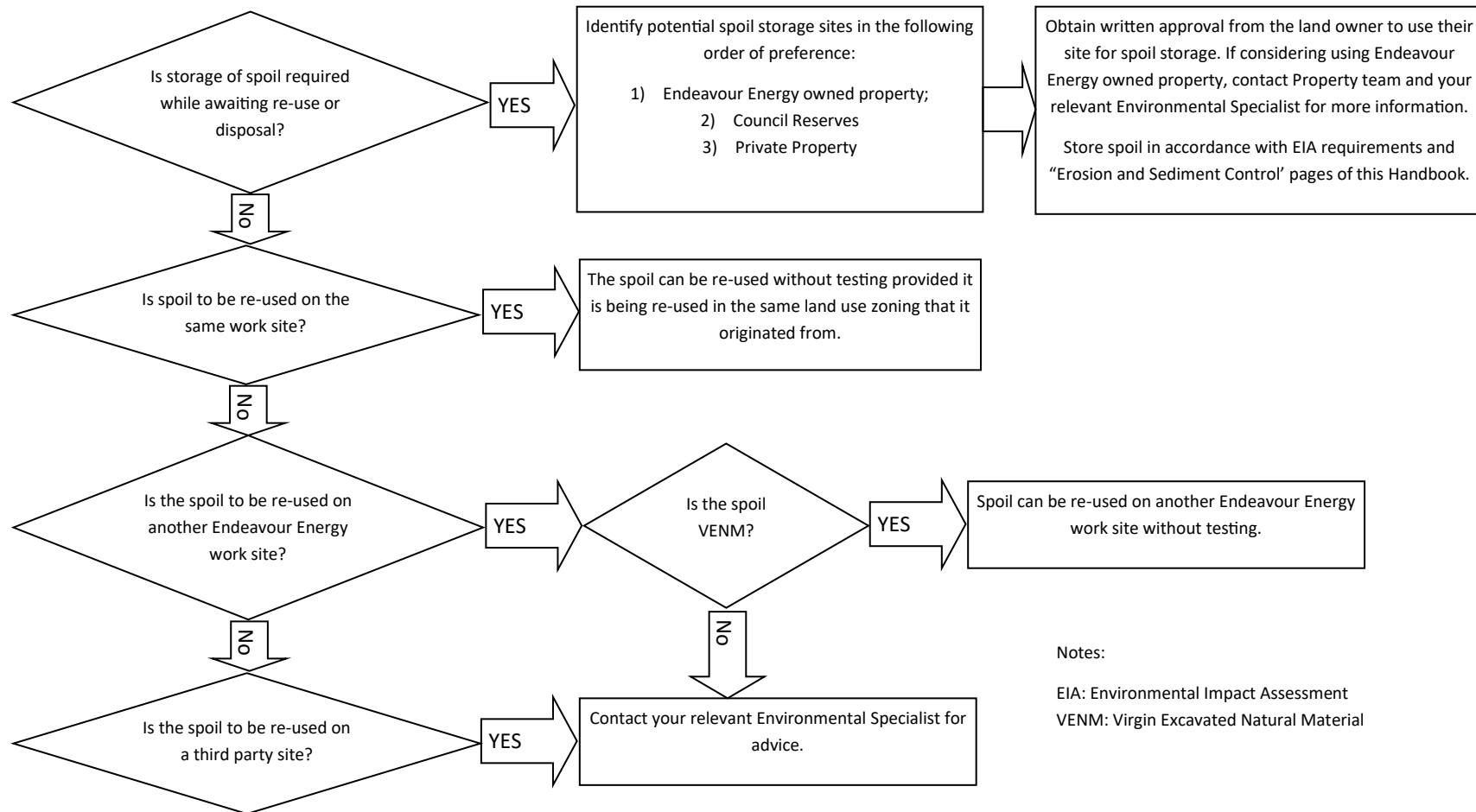
SPOIL MANAGEMENT (Cont.)

Spoil Management Flowchart– Potentially Contaminated or Acid Sulfate Soil



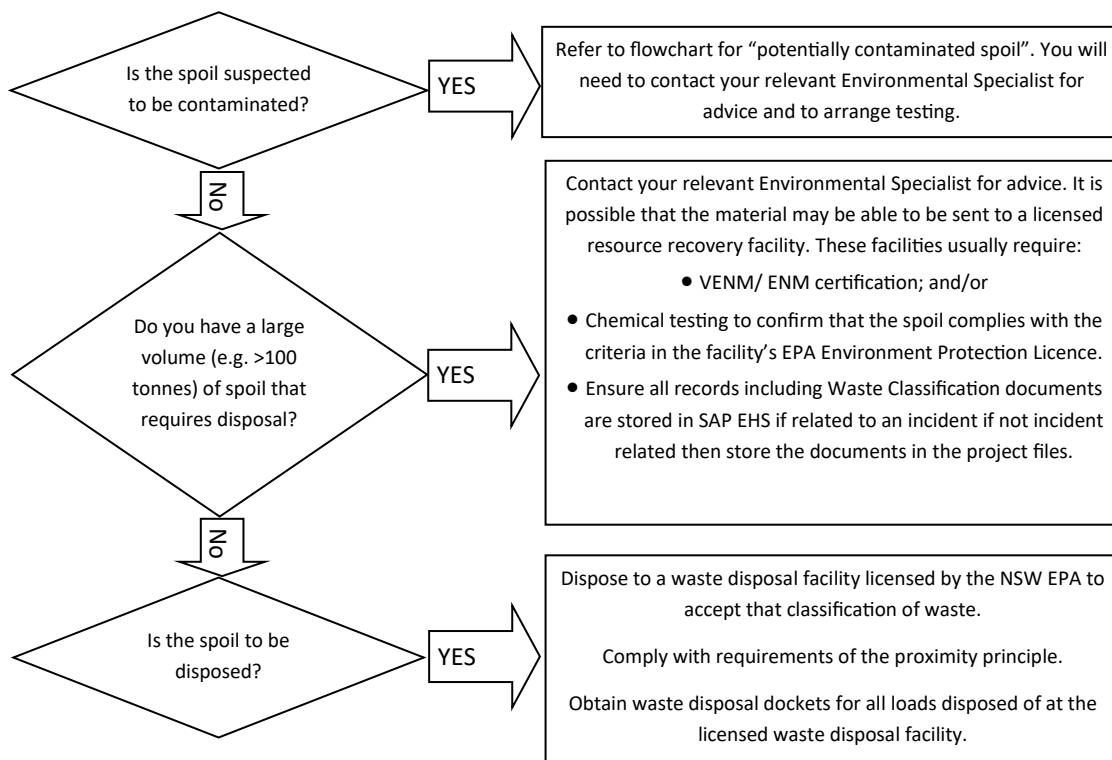
SPOIL MANAGEMENT (Cont.)

Spoil Management Flowchart– Spoil Storage and/or Re-Use



SPOIL MANAGEMENT (Cont.)

Spoil Management Flowchart– Disposal



Notes:

VENM: Virgin Excavated Natural Material

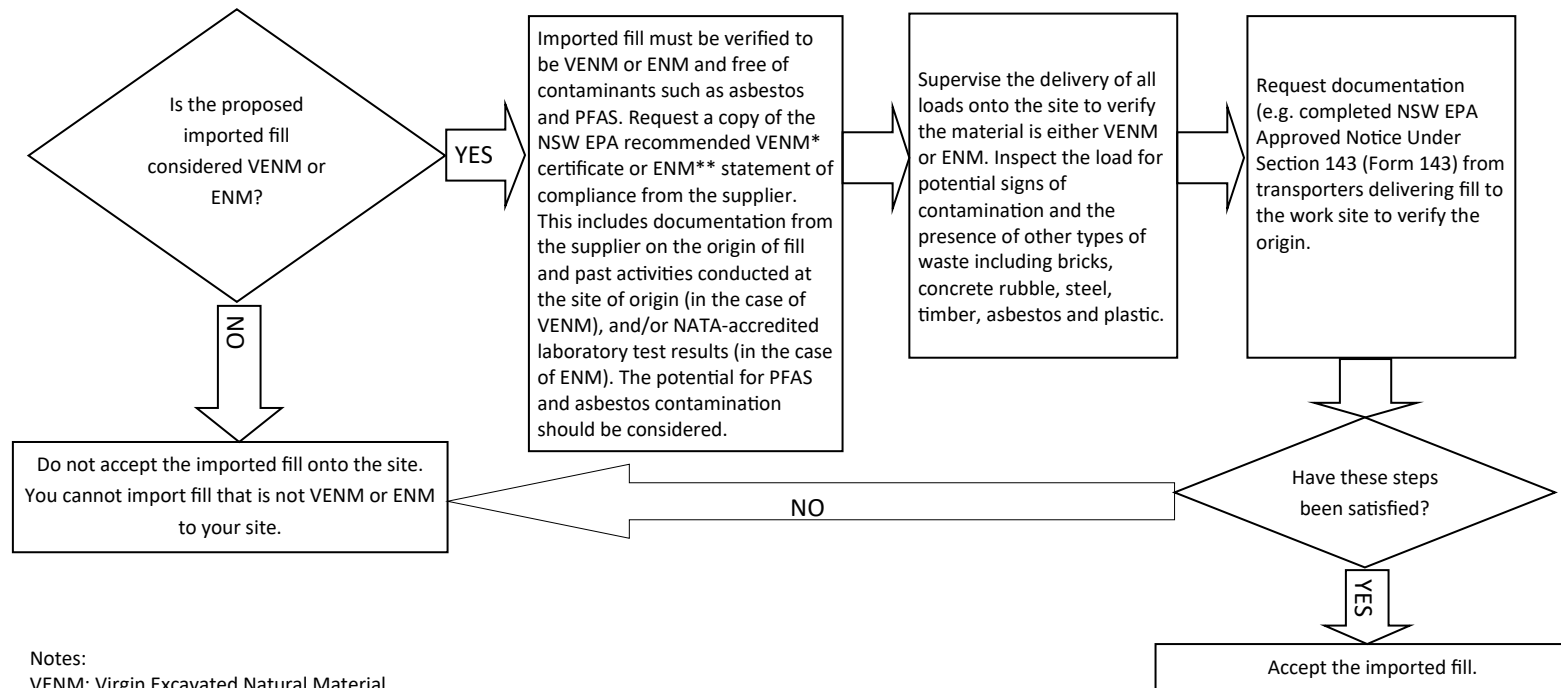
ENM: Excavated Natural Material

EPA: Environment Protection Authority (NSW)

Proximity Principle: Waste must be disposed of at a licensed waste disposal facility located within 150 km from the place of generation, unless there is no facility licensed to accept that classification of waste within 150km which in that case it must be disposed of to one of the two nearest lawful disposal facilities. Note the proximity principle only applies to waste being disposed, it does not apply to waste being recovered or recycled.

SPOIL MANAGEMENT (Cont.)

Spoil Management Flowchart– Importing Fill



Notes:

VENM: Virgin Excavated Natural Material

ENM: Excavated Natural Material

* If there are doubts as to whether the material is VENM, request that the material is appropriately sampled, and then chemically tested by a NATA-accredited laboratory for potential contaminants of concern and sight the certification and original laboratory results.

** If importing ENM, it must also meet the requirements of *The ENM Order and Exemption 2014*. In accordance with *The ENM Order and Exemption 2014*, the following must be completed:

- a written statement must be obtained from the supplier stating that the ENM complies with the conditions of *The ENM Order 2014*. These conditions include but are not limited to, chemical testing by a NATA-accredited laboratory of the ENM and relevant record keeping. This chemical testing should include testing for asbestos, with ENM to be free of asbestos. Relevant NATA-accredited laboratory test results should be provided by the supplier for the ENM. Consideration should also be given to the requirement for chemical testing for PFAS (depending on the origin of the fill and past activities conducted at the site of origin); and
- the delivery of all loads onto the worksite must be supervised to verify the material meets the physical characteristics of ENM (e.g. <2% foreign material).

USE AND HANDLING OF SULPHUR HEXAFLUORIDE (SF₆)

What is our aim?

To prevent the release of sulphur hexafluoride (SF₆) gas into the atmosphere during the installation, maintenance and decommissioning of equipment.

Background?

SF₆ is an inert gas that is approximately five times heavier than air and a potent greenhouse gas. SF₆ provides exceptional electrical insulation and arc quenching capabilities due to it being chemically stable and non-flammable. Despite its stability, SF₆ will partly decompose when subject to high temperatures e.g. arcs, producing mainly metal fluorides in the form of a fine grey powder.

This handbook provides guidance on environmental requirements of handling SF₆ only. Refer to SMI 122 and WRG 0526 for advice on the safe use and handling of SF₆ and for use of the SF6 app refer to Toolbox Talk TBX048.

What am I responsible for?

- SF₆ gas losses to the atmosphere must be avoided. All gases must be handled in a closed cycle to avoid any releases to the atmosphere and work area.
- SF₆ gas contained in equipment must be recovered using a commercially available SF₆ recovery machine. The aim is to recover at least 99.9% of SF₆ from the equipment using the recovery/filling cart.
- If SF₆ powder is present, follow clean up guidance provided in WRG 0526. Do not wash SF₆ powder down the drain.
- Report any SF₆ gas leaks and/or losses immediately into SAP EHS (refer to Environmental Incidents) and for Endeavour Energy workers to the relevant Transmission Manager for prompt investigation and rectification where feasible and reasonable.
- Evacuate if there is a major leak e.g. due to catastrophic failure of equipment or if the leak is audible.



The global warming potential of SF₆ is extremely high, 23,900 times more potent than CO₂

VEGETATION MANAGEMENT

What is our aim?

To be Nature Positive by 2025

To first minimise and then improve the impacts on vegetation from our activities.

Background?

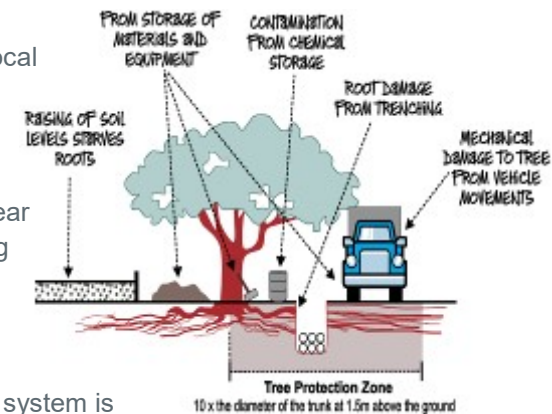
Minimising impacts on vegetation, protecting the soil around trees and using correct trenching and pruning procedures can help to maintain healthy vegetation.

What am I responsible for?

- Seek approval before removing any vegetation (except for safety clearances of electrical assets as defined in MMI 0013).
- Check the work package documents for any identified significant trees and approval documentation if removal of vegetation is required. Significant trees are protected under local government legislation or on a Significant Tree Register.
- Engage qualified personnel (e.g. arborists) to carry out vegetation works in accordance with the relevant standards, including pruning in accordance with AS 4373.
- Manage the generation of mulch in accordance with EMS 0004– Managing Vegetation Near Electrical Infrastructure and Pest, Weed and Disease Mitigation. This includes not applying mulch to environmentally sensitive areas if it has been generated outside of these areas.
- Install protection methods around significant trees and vegetation that could be damaged on your work site including barrier fencing.
- Minimise disturbance to the roots in the Tree Protection Zone. If damage to the tree's root system is unavoidable, contact your Environmental Representative or seek an arborist assessment before starting the works.
- Further guidance can be found in Endeavour Energy's Tree Management Plan (Endeavour Energy staff), and the Ecology section of this Handbook.



Liquid Ambers—Significant Trees in the Blue Mountains LGA



Potential impacts within a Tree Protection Zone

WASTE MANAGEMENT

What is our aim?

To be Waste Neutral by 2030.

To reduce amount of waste generated and disposed to landfill, while encouraging the recovery of resources by re-use or recycling and to manage waste appropriately.

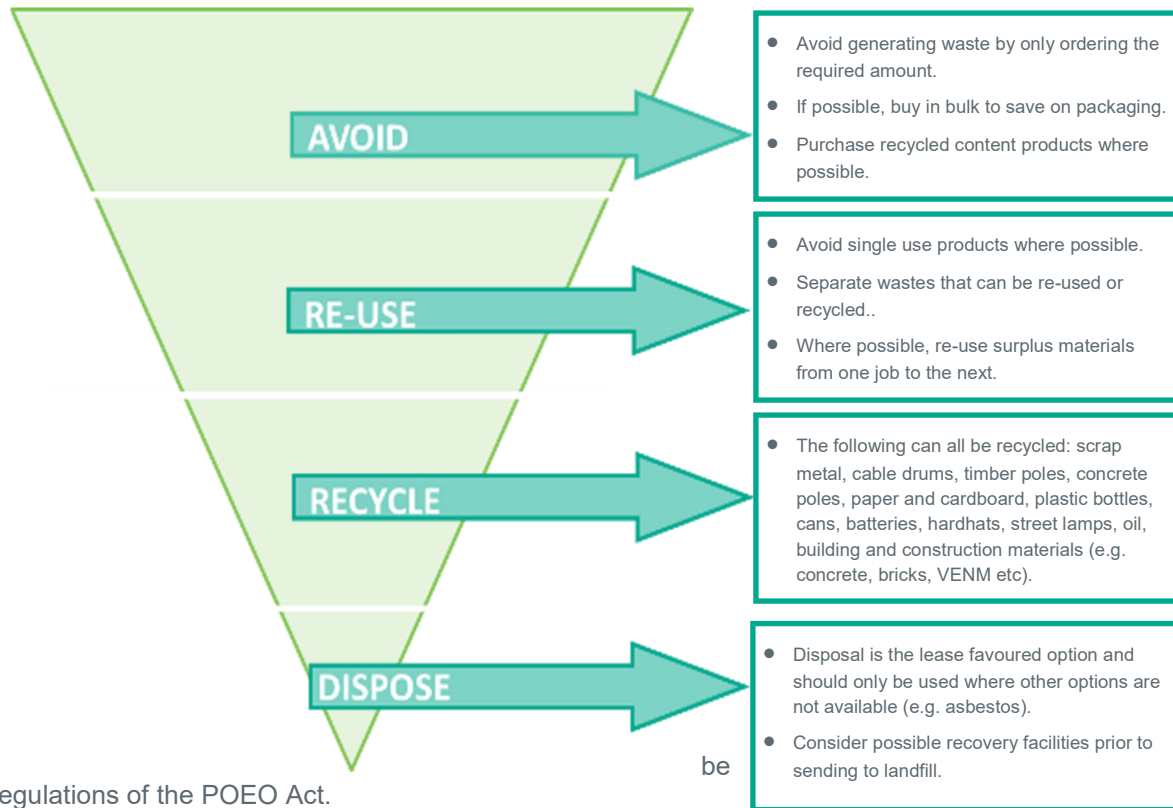
Background?

The waste generated by Endeavour Energy ranges from timber power poles, through to asbestos, oil, chemicals and general solid wastes. Each waste type must be stored, transported, disposed and reported in accordance with defined classifications detailed in EMS0007 – Waste Management.

The **maximum** quantity of waste that can be stored on site at any one time without an Environment Protection licence is **1,000 tonnes or 1,000 m3 and/or 6,000 tonnes per annum**. If these thresholds are exceeded on work sites waste should be managed in accordance with the Waste Regulations of the POEO Act.

What am I responsible for?

- Following the waste hierarchy shown in the adjacent diagram.
- Avoiding where possible the generation of waste.



WASTE MANAGEMENT (CONT.)

- Re-using surplus materials.
- Sorting waste and recycling as much as possible to minimise waste going to landfill.
- Disposing of all waste from the worksite at an appropriately licensed waste facility. Endeavour Energy employees can return solid waste to FSCs for disposal in the appropriate bins provided.
- Dispose of waste in the correct bin at the FSC.
- Storing empty chemical containers on a bunded pallet ready for removal by a licensed liquid waste contractor.
- Disposing of waste in accordance with the Proximity Principle, i.e. to an appropriately EPA licensed waste facility located within 150km of the worksite.
- Obtaining waste dockets for all waste disposed off site.
- Securing and covering loads to prevent spilling of waste during transport.
- Using licensed waste transporters for restricted solid waste, hazardous waste and liquid waste exceeding 200kg complete with appropriate waste tracking.
- Not transporting more than 100 kg of asbestos waste or more than 10 m³ of asbestos sheeting waste in any single load. If these amounts are exceeded, appropriate waste tracking is required.
- Reporting third party illegal dumping on Endeavour Energy worksites into MySafe or to your Environmental Representative. Illegally dumped waste may contain hazardous materials so do not inspect it until an appropriate Worksite Hazard and Risk Assessment (WHRA) has been completed. Secure the waste if required by covering with plastic and erecting barricading where appropriate to reduce safety risks.



Globes have their own waste bins



Cables sorted by metal type



For Endeavour Energy employees, dedicated bins for asbestos disposal (bonded and asbestos PPE only) are available in all FSCs. Asbestos waste must be double wrapped and sealed with asbestos warning labels

WASTE MANAGEMENT (CONT.)

Timber pole recycling

Pole racking for the temporary storage of old poles requiring recycling have been installed at various FSCs and pole yards. Poles removed from the network should be taken to the nearest pole racking storage site for collection for recycling.

What can be accepted for recycling?

Accepted	NOT accepted
• Timber Poles >4m and <12.5m length • Poles with small amounts of burnt sections and pole butts • Treated poles • Small amounts of hardware, such as “U” brackets and insulators can remain on the pole as long as they are secure.	• Cross arms and steel supports • Termite infested or extremely degraded poles (e.g. with big splits or cracks) • Pole nails • UGOH connections • Excessive bolts, insulators etc.

- Pole needs to be stripped as much as possible with nothing overhanging.
- Cross arms should be removed/ cut off either side of king bolts and loose items removed.
- Poles should be stored safely while awaiting pick-up and pole racking should not be overloaded.
- Dispose of items not accepted into the bulk waste bin.
- If you are uncertain whether a pole meets the recyclable requirements, consult your Environmental Representative.



Springhill FSC pole rack



Poles awaiting recycling



Recycled timber poles can be used for timber flooring

DEFINITIONS

Accredited Service Provider (ASP)

An Accredited Service Provider (ASP) is a person with accreditation under Part 3 of the *Electricity Supply (Safety and Network Management) Regulation 2014* categorised into Levels 1, 2 and 3 as defined by the Department of Industry Resources & Energy under the Accredited Service Provider (ASP) Scheme for contestable works. An ASP is allowed to perform work on behalf of an Authorised Network Operator (ANO) where the ANO is the Determining Authority for that work, as prescribed by Section 110(1) of the *Environmental Planning and Assessment Act 1979*.

Biodiversity

The variety of biological life (plants and animals)

Bonded Asbestos

Contains a bonding compound reinforced with asbestos fibres

Bund wall

A retaining wall surrounding equipment for the containment of liquid spills. Bund walls may be constructed of solid concrete and/or brick.

Bushfire prone areas

Areas of land defined as bushfire prone by local Councils in accordance with the requirements of the Rural Fires Act 1997.

Catchment

An area determined by topographic features where falling rain will contribute to runoff through a waterway or drain at a particular point.

Construction noise

Refers to noise generated through construction or maintenance activities.

Domestic use (regarding pesticide use)

A pesticide is considered to meet domestic use criteria provided **all** of the following conditions are satisfied:

- the pesticide is commercially available to the general public (through retail outlets);
- the pesticide is ordinarily used for domestic purposes (including home gardening);
- the pesticide is being applied by hand or by using hand held equipment only;
- in the case of outdoor use, the quantity used is no more than 5 litres/5 kilograms of concentrated product or 20 litres/20 kilograms of the “ready-to-use product”, applied per person per day; and
- in the case of indoor use, the quantity used is no more than 1 litre/1 kilogram of concentrated product or 5 litres/5 kilograms of “ready-to-use product”, applied per person per day.

Environment

The surroundings in which a company operates including air, water, land, natural resources, flora, fauna, humans and their interrelation.

DEFINITIONS (cont.)

Environment Impact Assessment (EIA)

A process required by State and Commonwealth Law, prior to the approval and development of resource projects. The assessment integrates environment factors into project planning and decision making in a way that is consistent with ecologically sustainable development. An EIA is completed by the design office for non-maintenance works.

Environment Management Plan (EMP)

An EMP identifies environmental risks specific to that project and how these risks can be managed.

Environmental Representative

For Endeavour Energy workers, their Environmental Representatives are the Environmental Specialists who can provide support and assistance with environmental matters encountered on the worksite. For ASPs, their Environmental Representatives are their Contract Inspectors who can consult the Environmental Specialists as required

Erosion

The wearing away of the land by running water, rainfall or wind.

Erosion and Sediment Control Plan

Defines practical measures to manage erosion and location of sediment during the construction phase of works.

Excavated Natural Material (ENM)

ENM meets the conditions of *The ENM Order 2014* and *The ENM Exemption 2014* and includes naturally occurring rock and soil that:

- has been excavated from the ground;
- contains at least 98% (by weight natural material);
- does not meet the definition of Virgin Excavated Natural Material (VENM); and
- has been sampled and tested in accordance with *The ENM Order 2014* and *The ENM Exemption 2014*.

ENM does not include material that has been processed (e.g. mixed, blended); from a contamination hotspot; or that contains asbestos or actual or potential acid sulphate soils. In other words, ENM is previously disturbed soil which has been proven to be uncontaminated via sampling and testing.

Fault and Emergency Works

Works for the purpose of maintaining or restoring infrastructure facilities or equipment in order to ensure public safety or to protect buildings or the environment due to:

- a sudden natural event, including a storm, flood, tree fall, bush fire, land slip or coastal inundation;
- accident, equipment failure or structural collapse; or,
- damage caused by vandalism or arson.

Friable Asbestos

Asbestos containing material which when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.

DEFINITIONS (cont.)

Geo-fabric

A synthetic fabric, woven or non woven used for reinforcement/ stabilisation of embankments, seepage control and pollution containment

Impervious surface

Constructed surface covered by material impenetrable to liquid.

Inspection

Refers to the detailed viewing, examination, or measurement of network assets and associated infrastructure.

Inspection work may include minor maintenance activities that are undertaken in conjunction with the inspection, including vegetation work that is restricted to hand trimming, hand clearing or herbicide application affecting a small number of trees at one location, and the repair or replacement of such things as anti-climbers, signage, communications cables or antennae.

Maintenance

Refers to those activities undertaken to provide ongoing assurance of the safety, reliability and protection of Endeavour Energy's network assets and associated infrastructure, and includes:

- repairing or replacing any element of a transmission or distribution line, including bridge repairs and the replacement of consumable materials, such as sacrificial anodes;
- managing vegetation to maintain safety and trimming clearances;
- managing vegetation at communications sites to provide a safe working environment, site security and bushfire risk management;
- access track maintenance that involves only grading a track surface, maintaining drainage structures and watercourse crossings, and removing vegetation which hinders vehicle access along tracks; and
- Maintenance may be of a cyclic or planned nature, be based on condition data and assessments, or be undertaken in response to emergencies.

Maintenance does not include:

- track works beyond the access track maintenance including resurfacing, increasing the dimensions of, or extending, any track or road;
- earth works and the movement or transport of earth material;
- clearing of vegetation, or application of herbicides and pesticides
- abrasive blasting of steel towers for the purpose of removing corrosion;
- widening of a corridor where the corridor has not previously required clearing to that corridor width; or
- clearing of vegetation at communications sites, where no clearing has previously been done.

DEFINITIONS (cont.)

Network assets

All elements of Endeavour Energy's electrical infrastructure associated with the transmission, distribution and supply of electricity. This includes but is not limited to power lines, pilot cables, streetlights, poles, stay wires, substations and transformers

Notifiable incident

Defined as an environmental incident that must be reported immediately by Endeavour Energy Environmental Services Manager to the EPA and/or OEH. A notifiable incident is one that causes material harm to the environment. More specifically, harm to the environment is material if it:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; and/or
- results in actual or potential loss or property damage in excess of \$10,000, including the costs and expenses that would be incurred in taking all reasonable and practical measures to prevent, mitigate or remediate harm to the environment.

Oil container

A containment device used for the storage of oil including, among others, 205L drums and pallecons.

PCB containing oil

Oil containing PCB at a concentration exceeding 2mg/kg

PCB free oil

Oil with a PCB concentration less than or equal to 2mg/kg

Pesticide

Refers to a substance or a mixture of substances that is used to:

- destroy a plant; or
- destroy, stupefy, repel, inhibit the feeding of, or prevent the infestation by or attacks of any pest in relation to a plant, place or a thing; or
- attract a pest for the purpose of destroying it.

Pollution

Includes water pollution; air pollution; noise pollution; land pollution.

Populations

A group of organisms, all of the same species, occupying a particular area as defined in the *Threatened Species Conservation Act 1995* (NSW)

DEFINITIONS (cont.)

Prescribed public place

Any of the following to which the public is entitled to have access (whether or not on payment of a fee):

- any public garden;
- any picnic area;
- any playground;
- any park, sporting field or oval;
- any public land owned or controlled by a public authority (for example, a road verge, rail easement or an easement for electricity purposes or for the purposes of other utilities);
- any land reserved under the National Parks and Wildlife Act 1974 or any State forest or Crown land; or
- the grounds of any government school (within the meaning of the Education Act 1990) or any establishment maintained by the Technical and Further Education Commission, but does not include the inside of any building or structure located at such a place.

Risk assessment

Likelihood of a hazard causing harm to a person or the surrounding environment.

Scheduled PCB containing oil

Oil with a PCB concentration exceeding 50 mg/kg

Sediment

Any material that is generated from an excavation, comprising of soil, sand or clay and that is excavated from an area that is free from contamination.

Sediment Control

Measures to reduce sediment or material leaving the worksite. These controls may include silt fences, drain covers, covering stockpiles with plastic, hay bails and sandbags.

Summary Environment Report (SER)

The SER is a type of environmental impact assessment report prescribed by the *NSW Code of Practice for Authorised Network Operators* for Class 3 development. Class 3 development is development that is reasonably expected to have only minor and not extensive or complex impact on the environment.

SER Application

An electronic web based program used to complete SERs. It consists of a GIS containing environmental data.

DEFINITIONS (cont.)

Virgin Excavated Natural Material (VENM)

VENM is defined in the *Protection of the Environment Operations Act 1997* as natural material (such as clay, gravel, sand, soil or rock fines) that:

- has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities; and
- does not contain any sulfidic ores or soils or any other waste.

VENM cannot be “made” from processed soils, and excavated material that has been stored or processed in any way cannot be classified as VENM. In other words, VENM is previously unturned soil that has no potential to be contaminated.

Worker

A person is a worker if the person carries out work in any capacity for a person conducting a business or undertaking, including work as:

- an employee; or
- a contractor or subcontractor; or
- an employee of a contractor or subcontractor; or
- an employee of a labour hire company who has been assigned to work in the person’s business or undertaking; or
- an outworker, ie a person who performs work for an employer at their own home or at another location that is separate from their employer’s factory, workshop, office or worksite; or
- an apprentice or trainee; or

- a student gaining work experience; or
- a volunteer; or
- a person of a prescribed class

ACRONYMS

ANO	Authorised Network Operator
APVMA	Australian Pesticides and Veterinary Medicines Authority
ASP	Accredited Service Provider
EEC	Endangered Ecological Community
EIA	Environmental Impact Assessment
EMF	Electromagnetic Frequency
EMP	Environmental Management Plan
EMS	Environmental Management Standard
ENM	Excavated Natural Material
EPA	Environment Protection Authority
ESCP	Erosion and Sediment Control Plan
EWP	Elevated Work Platform
FSC	Field Service Centre
GIS	Geographic Information System
HAMS	Heritage Asset Management Strategy
NPWS	National Parks and Wildlife Service
PASS	Potential Acid Sulphate Soil
PCB	Polychlorinated Biphenyls
PPE	Personal Protective Equipment

SDS	Safety Data Sheet
SER	Summary Environmental Report
SF ₆	Sulphur hexafluoride
TS	Transmission Substation
VENM	Virgin Excavated Natural Material
WHS	Work Health and Safety
WIRES	Wildlife Information Rescue and Education Service
ZS	Zone Substation

QUICK REFERENCE GUIDES

Policies

4.0 Environmental Sustainability

4.7 Prevention and Management of Contamination

Standards

EMS0001	Environmental Impact Assessment & Environmental Management Plans
EMS0004	Managing Vegetation Near Electrical Infrastructure and Pest, Weed and Disease Mitigation
EMS0005	Substation Landscaping
EMS0006	Maintenance and Construction of Access Tracks
EMS0007	Waste Management
EMS0008	Environmental Incident Response and Management
EMS0012	Notification of Access to National Parks and Water NSW Special Areas and Controlled Areas
EMS0013	Spoil and Imported Materials Management
EMS0014	De-watering worksites
EMS0016	Industrial and Construction Noise
EMS0017	Oil Management
MMI0013	Vegetation Clearance Management
SDI540	Transformer oil containment
SMI121	Storage and handling of insulating oil
SMI122	Use and Handling of Sulphur Hexafluoride (SF ₆)

Procedures and Workplace Instructions

GAM0011	Work Performed During Bushfire Danger Period
GPE0004	Pesticide Use
GPE0009	Contaminated Land Project Management
GPE0063	Greenhouse Gas Measurement and Reporting
GPE0065	Environmental Communication
GPE0078	Environmental Competence, Awareness and Communication
GSY0013	Hot Work Permit
GSY0050	Hazardous Chemicals Management
GSY0051	Health Safety and Environment Incident Learning and Reporting
GSY0068	Work Health, Safety and Environment Contractor Management
GSY0089	Working with Lead
GSY1065	Asbestos Management
GSY1066	Worksite Hazard and Risk Assessment
TBX048	Emissions Management, SF ₆
WRG0526	Handling of SF ₆ (Sulphur Hexafluoride)

QUICK REFERENCE GUIDES

Forms

FAT0048	Notification of Inspection Work in National Parks or WaterNSW Special and Controlled Areas
FAT0049	Notification of Maintenance Work in National Parks or WaterNSW Special and Controlled Areas
FPE 0004	Record of Pesticide Application
FPE 0009	Oil Transport Tracking Register
FSE 0002	Pollution incident report
FSE 0003	Report on breach on NSW Code of Practice for Authorised Network Operators
FSY0118	Worksite Hazard and Risk Assessment