

Construction Environmental Management Plan

Snowy 2.0 Transmission Connection Project

Stage 1 Document Number: 3200-0645-PLN-012-CEMP

Stage 2 Document Number: HLW-HLJV-PRW-ENM-PLN-000014

TransGrid
Date 24/10/2024

Snowy 2.0 TCP
Construction Environmental Management Plan

Document Control

Approvals

Title	Snowy 2.0 Transmission Connection Project - Construction Environmental Management Plan
Approved on behalf of Transgrid (Snowy 2.0 TLP) by	Andrew Buttigieg
Signed	
Dated	22/11/2024
Approved on behalf of Transgrid HumeLink by	Jeremy Roberts
Signed	
Dated	01 Nov 2024
Approved on behalf of HLWJV by	Tim Burns
Signed	
Dated	28 Oct 2024
Approved on behalf of UGL by	Louis Linde
Signed	 L. J. LINDE
Dated	20/11/24

Snowy 2.0 TCP
Construction Environmental Management Plan

Version Control

Revision	Date	Description	Author	Reviewer	Approver
0.01	29/09/2022	Initial issue for review	Jane Love	Whitney Heiniger	Trevor Noble
0.02	10/11/2022	Required plan review	Jane Love	Whitney Heiniger	Trevor Noble
0.03	13/10/2023	Address Transgrid comments & final review	Jane Love	Kim Lembke	Tim McCarthy
0.04	18/10/2023	Address Transgrid and Stakeholder comments	Brendan Toohey	Tim McCarthy	Tim McCarthy
0.05	29/07/2024	Address IEA findings	Camille Palmer	Brendan Toohey	Tim McCarthy
0.06	24/10/2024	Inclusion of Stage 2 works	Ian Irwin	Brendan Toohey	Louis Linde / Tim Burns

Distribution of controlled copies

This Construction Environmental Management Plan (CEMP) is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Snowy 2.0 TCP website.

The document is uncontrolled when printed. One controlled hard copy of the CEMP and supporting documentation will be maintained by the Quality Manager at the Project office (and, if required, on the Snowy 2.0 TCP website [Snowy 2.0 Transmission Connection | Transgrid](#)).

Copy number	Issued to	Version

Snowy 2.0 TCP
Construction Environmental Management Plan

List of emergency and key contacts

Position	Name	Phone
EPA pollution hotline		131 555
Fire and Rescue NSW		000 (for pollution incidents that present an immediate threat to human health or property) 1300 729 579 (for pollution incidents that do not present an immediate threat to human health or property)
Minister of Health (or delegate)	Albury Public Health Unit (Murrumbidgee and Southern NSW LHD)	(02) 6053 4800 After hours 1300 066 055
Rural Fire Service	Wagga Wagga LGA (Riverina office)	02 6971 4500
	Snowy Valleys LGA (Riverina Highlands office)	02 6981 4222
Hospitals (With Emergency Facilities)	Batlow - Adelong Multi-Purpose Service	(02) 6941 4333
	Wagga Wagga Health Service	(02) 5943 10005
	Tumut District Hospital	(02) 6947 0800
	Gundagai Multi-Purpose Service	(02) 6940 6300
	Holbrook District Hospital	(02) 6052 2800
SafeWork NSW		131 050
Council	Snowy Valleys Council	1300 275 782
24 hour community information line		1800 931 189
Stage 1 Project Personnel		
Construction Environmental Manager – Stage 1	Brendan Toohey	0488 951 736
Project Manager – Stage 1	Louis Linde	0493 818 783

Snowy 2.0 TCP
Construction Environmental Management Plan

Position	Name	Phone
Construction Manager	Darrell Van Bruchem	0447 307 244
Transgrid Representative – Stage 1	Andrew Buttigieg	0436 166 667
Transgrid Environmental Representative – Stage 1	Jason Snape	0472 756 143
Stage 2 Project Personnel		
Construction Environmental Manager – Stage 2	Jeremy Slattery	0421 827 231
Project Director	Tim Burns	0417 759 637
Construction Director	Vince Newton	TBC
Project HS Manager	Andrew Bruce	0455 081 843
Transgrid Representative – Stage 2	Jeremy Roberts	0408 950 387
Transgrid Environmental Representative – Stage 2	Ali Youssef	0498 260 949

Snowy 2.0 TCP
Construction Environmental Management Plan

Contents

1. Introduction.....	14
1.1. Background.....	14
1.2. Project responsibility	15
1.3. Environmental Management Strategy	15
1.4. Purpose of this CEMP	16
2. Project Description.....	18
2.1. Project site and location	18
2.2. Project scope of works	18
2.3. Project site access	19
2.4. Project activities and sequence	22
2.5. Project Program	24
2.6. Project hours.....	25
3. Planning	26
3.1. Project environmental obligations.....	26
3.2. Legal and other requirements.....	26
3.3. Conditions of Approval	26
3.4. Approvals, permits and licensing	26
3.5. Check-It planner and planning schedule.....	27
4. Environmental Management System.....	28
4.1. Environmental Policy.....	28
4.2. Organisational commitment and Leadership	28
4.3. Environmental Principles, Objectives and targets.....	29
4.4. CEMP	31
4.5. Environmental management subplans	31
4.6. Consultation and approval.....	33
4.7. UGL Management Systems	33
4.8. Environmental Work Method Statements	34
4.9. Hold points	35
4.10. Site Environmental Plans	35
4.11. Roles and Responsibilities	36
4.11.1. Organisational Structure and Contacts	36
4.11.2. Transgrid Environmental Accountabilities and Responsibilities	39
4.11.3. Contractor’s Roles and Responsibilities	40
4.12. Subcontractor Management	47
5. Environmental risk Assessment and Management.....	49
5.1. Hierarchy of Controls.....	49

Snowy 2.0 TCP
Construction Environmental Management Plan

5.2. Environmental Mitigations	49
5.2.1. Biodiversity Mitigation measures.....	50
6. Environmental Training and Awareness	51
6.1. Environmental Site Inductions	51
6.2. Toolbox Talks, environmental training and Awareness.....	52
6.3. Environmental awareness Training	53
6.4. Daily Prestart Meetings	55
7. Communication	56
7.1. Internal Communication	56
7.2. External Communication	56
7.2.1. Agencies and Authorities	56
7.2.2. Community and Stakeholders.....	57
7.3. Interface Management Plan	57
7.4. Complaints procedure	57
8. Environmental Incidents and Emergencies	59
8.1. Emergency Contact Details.....	59
8.2. Emergency and incident preparedness	61
8.3. Environmental Incidents	61
8.4. Incident Notification and Duty to Notify.....	62
8.4.1. Incident Reporting in accordance with the conditions.....	62
8.4.2. Incident Reporting in accordance with the POEO Act	64
8.5. Incident investigation and reporting	64
9. Inspections, Monitoring, Auditing and Reporting	66
9.1. Environmental Inspections	66
9.2. Environmental Monitoring Requirements.....	68
9.3. Auditing.....	68
9.3.1. Internal Audits.....	69
9.3.2. Independent external audits.....	69
9.4. Reporting	72
9.5. Non-conformity, corrective and preventative actions	78
10. Review and improvement.....	79
10.1. Revision of the CEMP	79
10.2. Continuous improvement	79
11. Document management	81
11.1. Environmental records	81
11.2. Document and Data Control.....	81

Snowy 2.0 TCP
Construction Environmental Management Plan

11.3. Record Keeping 81

Figures

Figure 2-1 Amended Project location and footprint 13
Figure 2-2 Amended Project location and footprint 40
Figure 2-3 Project Program 41
Figure 4-1 One HSE Culture Framework 47
Figure 4-2 Transgrid's Organisational Chart 48
Figure 4-3 UGL's Organisational Chart 48
Figure 4-4 UGL/CPB's Organisational Chart 49

Tables

Table 2-1 General Work Methodology and Sequencing..... 22
Table 4-1 Project environmental objectives and targets..... 29
Table 4-2 CEMP sub-plan consultation and approval 32
Table 4-3 UGL and Project Procedures 33
Table 4-4 Project roles and responsibilities 40
Table 6-1 Example Environmental Training Schedule 54
Table 8-1 Project emergency contacts -Stage 1 59
Table 8-2 Project emergency contacts -Stage 2 59
Table 8-3 Emergency service contacts 60
Table 8-4 Written incident notification requirements 62
Table 9-1 Inspection schedule 65
Table 9-2 Audit summary table 69
Table 9-3 Project environmental reporting requirements 71

Appendices

- Appendix A Project Conditions of Approval
- Appendix B Environmental System Certification and Policy
- Appendix C Legal Register
- Appendix D Document Map
- Appendix E Check-it Planner & Planning Schedule Templates
- Appendix F Site Environmental Plan Template
- Appendix G Aspects and Impacts Register
- Appendix H Complaints Register

Snowy 2.0 TCP
Construction Environmental Management Plan

Appendix I Emergency Contacts

Appendix J Environmental Inspection Weekly Checklist

Appendix K Pre and Post Rainfall Inspection Checklists

Appendix L Environmental Monitoring Program

Appendix M Environmental Monthly Report Template

Appendix N Project Environment Filing Structure (1102: Folder)

Appendix O CEMP Sign Off

Appendix P Transgrid's Environmental Policy

Snowy 2.0 TCP
Construction Environmental Management Plan

Definitions

Term	Definition
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
Contractor or Principal Contractor	Stage 1 of the scope of works for design and construction the Contractor or Principal Contractor is UGL Pty Ltd Stage 2 of the scope of works for design and construction the Contractor or Principal Contractor is UGL/CPB Joint Venture. Any reference to the 'Contractor' relates to the activities of both appointed Contractors (UGL and UGL/CPB Joint Venture), but only as is relevant to the appointed stage of works.
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly, or partially resulting from an organisation's environmental aspects.
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental Representative	A suitably qualified and experienced person independent of Snowy 2.0 Transmission Line Project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
Snowy 2.0 Transmission Line Approvals	Snowy 2.0 Transmission Line approvals include: Snowy 2.0 Transmission Line Infrastructure Approval NSW SSI 9717 Snowy 2.0 Transmission Line EPBC Approval Cth EPBC 2018/8363
Non-compliance	Failure to comply with the requirements of the HumeLink Approvals or any applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of HLW system documentation including this CEMP or supporting documentation.
Planning Approval Documentation	The NSW planning approval documents, as they relate to the Snowy 2.0 Transmission Line and as listed in CoA A2 of the NSW Infrastructure

Snowy 2.0 TCP
Construction Environmental Management Plan

Term	Definition
	Approval for HumeLink (SSI – 9717)
Principal, the	Transgrid
Synergy	UGL-CMS incident management software program to manage, report, record and take action on emergency and incidents.

Snowy 2.0 TCP
Construction Environmental Management Plan

Abbreviations

Abbreviation	Expanded text
AHMP	Aboriginal Heritage Management Plan
AR	Amendment Report
APZ	Asset Protection Zone
AS	Australian Standard
BCS	Biodiversity, Conservation and Science
BDAR	Biodiversity Development Assessment Report
BMP	Biodiversity Management Plan
BRP	Bushfire Response Plan
CEMP	Construction Environmental Management Plan
CLMP	Contaminated Land Management Plan
COA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
Cth	Commonwealth
DCCEEW – Cth	Department of Climate Change, Energy, the Environment and Water (Cth) (formerly DAWE)
DCCEEW – NSW	Department of Climate Change, Energy, the Environment and Water (NSW) (formerly DPE)
DPE	Department of Planning and Environment (formerly DPIE)
DPHI	Department of Planning, Housing and Infrastructure (formerly DPE)
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
EM	UGL Environmental Manager
EMPs	Environmental Management Plans
EMS	Environmental Management Strategy
EP	Emergency Plan
EPA	Environment Protection Authority
EPBC	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
ESCPs	Erosion and Sediment Control Plans
EWMS	Environmental Work Method Statement
FCNSW	Forestry Corporation NSW
FGJV	Future Generation Joint Venture

Snowy 2.0 TCP
Construction Environmental Management Plan

Abbreviation	Expanded text
FRNSW	Fire and Rescue NSW
HMP	Heritage Management Plan
HHMP	Historic Heritage Management Plan
HSE	Health, Safety and Environment
ITP	Inspection Test Plans
km	Kilometres
KNP	Kosciuszko National Park
kV	Kilovolt
LGA	Local Government Area
m	metres
MW	Megawatt
MWh	Megawatt hours
NCR	Non-Conformance Report
NEM	National Energy Market
NOA	Naturally Occurring Asbestos
NPWS	National Parks and Wildlife Service
NRAR	Natural Resources Access Regulator
NVMP	Noise and Vibration Management Plan
PC	Principal Contractor
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
SEA	Site Environmental Advisor
SEP	Site Environmental Plan
SMP	Spoil Management Plan
SHL	Snowy Hydro Limited
SR	Submissions Report
SWMP	Soil and Water Management Plan
SWMS	Safe Work Method Statement
SYNERGY	UGL Online Tracking System for all HSE Incident and Event Reporting
RFS	Rural Fire Service
RMP	Rehabilitation Management Plan
TfNSW	Transport for NSW
TARPs	Trigger Action Response Plans

Snowy 2.0 TCP
Construction Environmental Management Plan

Abbreviation	Expanded text
TTMP	Traffic and Transport Management Plan
UGL	UGL Engineering Pty Ltd
VIMP	Visual Impact Management Plan

Snowy 2.0 TCP Construction Environmental Management Plan

1. Introduction

1.1. Background

In 2020, Snowy Hydro Limited (SHL) obtained approval (application number SSI 9208 and EPBC 2018/8322) to expand the existing Snowy Mountains Hydro-electric Scheme (Snowy Scheme), by linking the existing Tantangara and Talbingo reservoirs through a series of underground tunnels and constructing a new underground hydro-electric power station (referred to as 'Snowy 2.0'). Snowy 2.0 is expected to increase the generation capacity of the Snowy Scheme by almost 50%, by providing an additional 2,000 megawatts (MW). At full capacity Snowy 2.0 will provide approximately 350,000 megawatt hours (MWh) (175 hours) of large-scale energy storage to the National Electricity Market (NEM). This will be enough to ensure the stability and reliability of the NEM, even during prolonged periods of adverse weather conditions.

To connect Snowy 2.0 to the NEM, a new transmission connection is required. NSW Electricity Networks Operations Pty Ltd as a trustee for NSW Electricity Operations Trust (known as Transgrid and the Proponent) have approval to construct a new substation and switching station (Maragle Substation) and overhead transmission lines ('the Project') to facilitate the connection of Snowy 2.0 to the existing electrical transmission network, approximately 27 kilometres (km) east of Tumbarumba.

The Project was declared Critical State Significant Infrastructure (CSSI) under the *State Environmental Planning Policy (State and Regional Development) 2011* as part of the CSSI declaration for the Snowy 2.0 and Transmission Project in clause 9 of Schedule 5. An Environmental Impact Statement (EIS) was prepared by Transgrid under Part 5, Division 5.2 of the *NSW Environmental Planning and Assessment Act 1979* to assess the environmental impacts of the proposed Project.

In response to submissions made during exhibition of the EIS, a Submissions Report and Amendment Report was prepared by Transgrid. The submissions resulted in changes to the Project design, additional assessments and updates to safeguards and management measures outlined in the EIS.

Transgrid advised development approval on the Project (SSI 9717) on 2nd September 2022 as received from the Minister of Planning.

The Project has also been subject to approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Approval (EPBC 2018/8322) was granted by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW – Cth) on 21st October 2022.

An Environment Protection Licence (EPL 21753) for the Project premises was issued to Transgrid by the NSW Environment Protection Authority (EPA) on 23rd December 2022 under the *Protection of the Environment Operations Act 1997* (POEO Act). This EPL requirement was triggered under Schedule 1 of the Protection of the Environment Operations (General) Regulation 2022 due to extractive activities required during construction. In the months following calculations determined greater anticipated spoil volumes, and a request was submitted to the EPA for a licence variation. The EPA issued a Licence Variation Notice (1628478) to Transgrid on the 14 September 2023 for the approved extractive limit for spoil to increase to 561,231 Tonnes (i.e. >100000-500000 T annually).

The Environmental Assessment documents for the Project include:

- The Project EIS (Jacobs, 2021)
- The Project Submissions Report (SR)
- The Project Amendment Report (AR)
- Project Infrastructure Approval (2nd September 2022)
- Project EPBC Approval 2018/8363 (21st October 2022)

Snowy 2.0 TCP Construction Environmental Management Plan

- Project EPL 21753 (23rd December 2022) and Licence Variation Notice 1628478 (14 September 2023)

The environmental safeguards outlined in the Environmental Assessment documents have been incorporated into this document and associated sub-plans where relevant.

On the 18th November 2022 DPE approved the staging of the Project in accordance with CoA C3. The staging approval (DPE ref: SSI-9717-PA-12) for the Project are:

- Stage 1 – All activities associated with the construction and operation of infrastructure related to the 330 kV grid connection, including:
 - All civil works associated with the new substation in Bago State Forest and the construction/installation of infrastructure associated with the 330 kV component of the substation.
 - Two new 9 km long 330 kV double-circuit overhead transmission lines from the Snowy 2.0 cable yard in Lobs Hole, National Park to a new substation.
 - 330 kV grid connection between the new substation and Transgrid’s existing Line 64.
 - Upgrade and widening of an existing access road off Elliott Way to the substation.
 - Ancillary construction activities, including the establishment of tensioning and pulling sites for conductor and earth wire stringing, crane pads, site compounds and equipment laydown areas, water extraction and the transport and haulage of equipment and waste to and from the project area.
- Stage 2 – All activities associated with the construction and operation of infrastructure related to the 500 kV component of the substation, including:
 - The delivery of oversize/overmass (OSOM) components, construction/installation of infrastructure associated with the 500 kV component of the new substation in Bago State Forest (i.e. transformers, reactors, switchbays)
 - The upgrade of roads and bridges to facilitate the transport of OSOM 500 kV componentry to the substation.

1.2. Project responsibility

As per Section 1.1 of this CEMP the Project has been separated into two stages. Stage 1 of the scope of works for design and construction has been appointed to UGL Pty Ltd and Stage 2 of the scope of works for design and construction has been appointed to UGL/CPB Joint Venture. Any reference to the ‘Principal Contractor (PC)’ relates to the activities of both appointed Contractors (UGL and UGL/CPB Joint Venture), but only as is relevant to the appointed stage of works.

1.3. Environmental Management Strategy

An Environmental Management Strategy (EMS) has been prepared in accordance with C1 of the Conditions of Approval (CoA) for the Project. The Strategy is an overarching framework detailing the environmental management for all stages of the Project to be undertaken by Transgrid, including this CEMP and relevant subplans. The EMS outlines the responsibilities and requirements of environmental management for Transgrid’s contractors.

The PC has been engaged on behalf of Transgrid to undertake the Project. This Construction Environmental Management Plan (CEMP) has been prepared to outline and describe how the PC will comply with the Project EMS, environmental assessment documents and approvals during the construction of the Project. Additionally, it outlines how the Contractor will minimise environmental risks and achieve environmental outcomes associated with the Project by providing a structured

Snowy 2.0 TCP Construction Environmental Management Plan

approach to ensure appropriate mitigation measures and controls are implemented.

The PC has a legal and moral obligation to manage the environmental compliance requirements associated with the performance of all works. The PC will do this using their Environmental Management System which is located within the UGL Management System (UGLMS). The UGL EMS has been externally certified and maintained in compliance with AS/NZS/ISO 14001:2016.

1.4. Purpose of this CEMP

The purpose of this CEMP is to provide a structured approach to the management of environmental issues during construction of the Project. The CEMP outlines the requirements, controls and management procedures that direct the Project team and provides an overall approach to the Project. It also provides requirements for and directs contractors and suppliers for the Project regarding specific measures that they need to adopt for their own work for the Project. Implementing this CEMP effectively will ensure that the Project team will meet regulatory and policy requirements in a systematic manner and continually improves environmental performance.

This CEMP:

- Describes the Project in detail, including activities to be undertaken.
- States obligations, objectives and targets for issues that are important to the environmental performance of the Project.
- Identifies the approvals, licences and permits that relate to the Project.
- Describes the strategic framework for environmental management of the Project.
- Describes the environmental management related roles and responsibilities of personnel.
- Outlines training and induction requirements for employees, contractors and sub-contractors, in relation to environmental and compliance obligations with applicable policies, approvals, licences, permits, consultation agreements and legislation.
- Describes the procedures that will be implemented for community consultation and notification, and complaints management.
- Includes protocols for managing and reporting incidents and non-compliances with applicable policies, approvals, licences, permits, consultation agreements and legislation.
- Outlines a monitoring regime and inspection program to check the adequacy of controls as they are implemented during construction.

This CEMP is the overarching document in the environmental management system for the construction works of the Snowy 2.0 Transmission Connection Project that includes a number of management documents. It is applicable to all staff and subcontractors associated with the construction of the Project.

The CEMP has been prepared in accordance with:

- Environmental Management Plan Guidelines, Commonwealth of Australia 2014.
- Environmental Assessment documents.
- Environmental Management Plan Guidelines (DCCEEW, 2014).
- AS/NZS ISO 14001: 2016 Environmental Management systems.
- Project Environmental Management Strategy.
- UGL Management System.
- Applicable Federal and State Legislation.

Snowy 2.0 TCP
Construction Environmental Management Plan

1.5. Distribution

The PC's Environmental Manager (EM) will coordinate preparation, review and distribution, as appropriate, of the environmental documents. During construction, environmental documents will be stored at the site office, on the PC's Intranet Project folder or otherwise made available, and can be accessed by request to the PC's Site Environmental Advisors.

The current version of the EMS will also be posted and made available to the public via the Project dedicated website. All printed copies are deemed 'uncontrolled and for information only'.

Snowy 2.0 TCP
Construction Environmental Management Plan

2. Project Description

2.1. Project site and location

The Project is located within the Australian Alps in Southern NSW, about mid-way between Canberra and Albury and located wholly within the Snowy Valleys Local Government Area (LGA). The nearest large towns to the Project area are Cooma and Tumut. Cooma is about 80 kilometres (km) south-east and Tumut is about 55km north of the Project.

The eastern extent of the Project is defined by the location of the Snowy 2.0 cable yard at Lobs Hole in Kosciuszko National Park (KNP), which is owned and managed by National Parks and Wildlife Service (NPWS). From the cable yard, the transmission connection extends west through KNP and up Sheep Station Ridge characterised by steep, mountainous terrain before traversing Talbingo Reservoir. The transmission connection then continues west, crossing Elliott Way at three locations before entering Bago State Forest to the Maragle Substation site. Bago State Forest is owned and managed by Forestry Corporation NSW (FCNSW).

The Snowy 2.0 underground power station will be connected to the principal transmission network through two 330 kilovolts (kV) double circuit transmission lines and the Maragle Substation. The Maragle Substation is to be connected to the network by cutting into the existing Lower Tumut to Upper Tumut 330kV transmission line and augmentation of the Maragle 330kV switching station to establish the combined Maragle 500/330kV substation to connect up with the future Humelink project.

2.2. Project scope of works

Key elements of the Project include:

- A new substation and switching yard (Maragle Substation) located within Bago State Forest and adjacent to Transgrid's existing Transmission Line 64, which forms a 330kV connection between Upper Tumut and Lower Tumut switching stations. The substation and switching station when built will occupy a footprint of about 230 metres (m) wide by 530m long, surrounded by an approximate 80m to 100m wide cleared Asset Protection Zone (APZ).
- Upgrade and widening of an existing access road off Elliott Way to the substation including the construction of new driveway into the Maragle Substation.
- Two new 330kV overhead double-circuit transmission lines from the Snowy 2.0 cable yard to the new substation. Each line is approximately 9km long, between 120m and 150m wide corridor and comprise approximately 42 steel lattice structures up to 75m in height.
- One short overhead 33kV transmission line connection (approximately 300m in length) comprising both steel lattice structures and pole structures, as required between the substation and Line 64
- Construction of approximately 7.5km of new access tracks to the transmission structures and upgrade to existing access tracks where required. The access tracks would remain following the completion of construction to service ongoing maintenance activities along the transmission lines
- Ancillary construction activities, including the establishment of tensioning and pulling sites for conductor and earth wire stringing, crane pads, site compounds and equipment laydown areas, and the transport and haulage of equipment and waste to and from the Project area.

Snowy 2.0 TCP
Construction Environmental Management Plan

2.3. Project site access

The project site for the CSSI is defined in Figure 2-1 and Figure 2-2 below (taken from the CoAs Appendix A). It shows the sites east-west alignment, divided by Talbingo Reservoir.

LV / HV access to and from the project site is defined in Appendix A of the CSSI's Conditions of Approval and includes the following roads:

- Project area west: Snowy Mountains Highway, Hume Highway, Batlow Road, Little Billabong Rd, Tooma Road, Tumbarumba / Wagga Rd, and Elliott Way. Includes lesser roads like Mason Hill Rd, Albury St, Regent St & William St
- Project area east: Snowy Mountains Highway (via both from Cooma and Tumut), Link Road / Goat Ridge Rd and Lobs Hole Ravine Road / Mine Trail Rd. Includes Tantangara Rd for asbestos (if encountered)

Appendix A and other details regarding access are detailed in the Traffic and Transport Management Plan (3200-0645-PLN-022-TTMP).

Snowy 2.0 TCP
Construction Environmental Management Plan

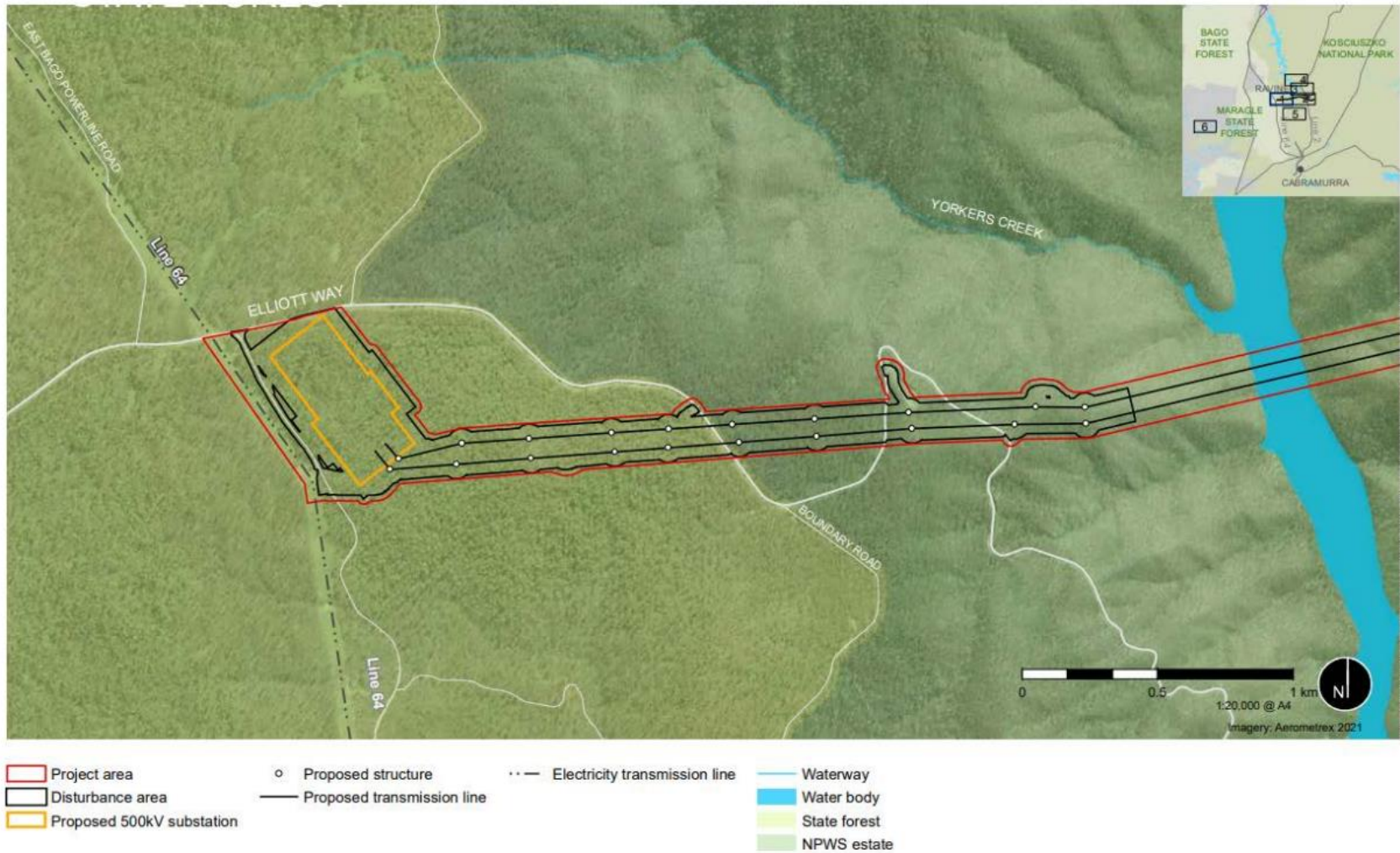


Figure 2-1 Amended Project location and footprint (Map 1 of 2)

Snowy 2.0 TCP
Construction Environmental Management Plan

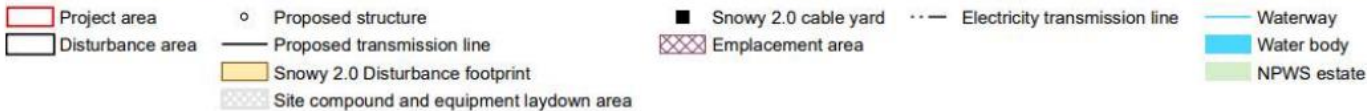
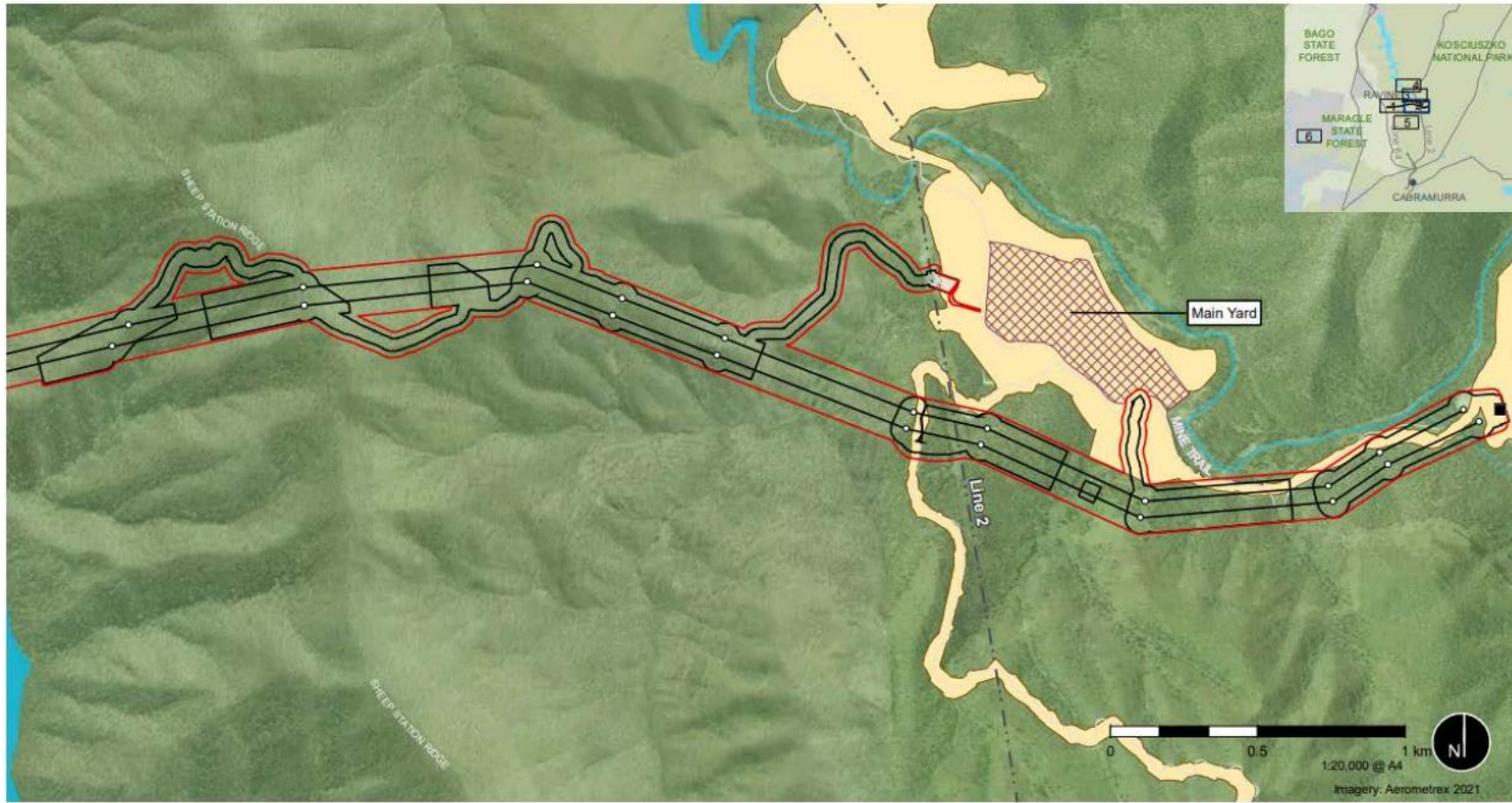


Figure 2-2 Amended Project location and footprint (Map 2 of 2)

Snowy 2.0 TCP
Construction Environmental Management Plan

2.4. Project activities and sequence

The Project is anticipated to involve the following general work methodology and sequencing:

Table 2-1 General Work Methodology and Sequencing

Step	Involved activities
Site preparation and pre-construction activities	<ul style="list-style-type: none"> Site mobilisation only once relevant approvals and 'Possession Of Site' (POS) has been granted. The Department may approve minor preliminary works to Transgrid, prior to POS. Property access arrangements are in place with FCNSW and NPWS, and contractual agreements with construction contractors are to be finalised Surveying and clearly marking out the approved disturbance areas, as well as environmentally sensitive areas Application of appropriate stormwater diversion drainage and erosion and sedimentation controls, prior to soil disturbance Transgrid informing recreational users of KNP, Bago State Forest and Talbingo Reservoir of the construction activities, the extent of work areas and the locations of environmental exclusion areas with Project notifications, including warning signs of construction activities and notifications of access restrictions. Establishment of the construction compound and equipment laydown areas at Maragle Substation and at Lobs Hole Upgrade and widening of the entry from Elliott Way into Maragle Substation
Maragle Substation construction	<ul style="list-style-type: none"> Surveying and clearly marking out the disturbance boundary Geotech (where applicable) Ecology preliminary activities Raising required clearing permits Installation of erosion and sediment controls Installation of required washdown facility Vegetation clearing across the Maragle Substation yard and APZ Installation of fauna crossing poles with motion detection cameras Establishment of site compound and laydown area Spoil testing, movement permits, grubbing and bulk earthworks for Maragle Substation establishment (where required) Earthworks for levelling, benching and trenches for draining, earthing and electrical conduits Civil works including the establishment of concrete foundations for the high voltage equipment and buildings within the switchyard, construction of stormwater drainage and oil containment infrastructure and establishment of cable trenches and installation of subsurface cables Construction of onsite buildings and installation of services including general lighting, power and ventilation Site gravelling, and rehabilitation Construction of security fencing
Transmission line construction	<ul style="list-style-type: none"> Establishment of site compound and laydown area Geotech Application of any required temporary washdown facilities Installation of fauna crossing poles with motion detection cameras

Snowy 2.0 TCP
Construction Environmental Management Plan

Step	Involved activities
	<ul style="list-style-type: none"> • Construction of new access track and upgrades to existing access tracks, which involve: <ul style="list-style-type: none"> ○ Surveying and clearly marking out the disturbance boundary ○ Ecology preliminary activities ○ Clearing permits and access track vegetation clearing (full clear) ○ Installation of erosion and sediment controls ○ Spoil testing, movement permits, grubbing and bulk earthworks for access track establishment ○ Stockpiling topsoil and subsoil resources for re-use in site rehabilitation ○ Laying and compaction of a suitable rock aggregate / road base ○ Placing material at the approaches, and on the bed and banks of the waterway to be crossed to enable access of heavy vehicles hauling plant and equipment between the structures ○ Grading and/or reshaping of existing tracks where required, within the existing access track width (no road widening) ○ Minor excavations followed by laying and compaction of crushed rock or gravel, to improve the existing track surface and drainage. • Midspan Clearing including: <ul style="list-style-type: none"> ○ Surveying and clearly marking out the disturbance boundary ○ Ecology preliminary activities ○ Installation of erosion and sediment controls ○ Clearing permits and midspan clearing (partial clear) ○ Application of glider poles with wildlife cameras • Construction of transmission structures including: <ul style="list-style-type: none"> ○ Surveying and clearly marking out the disturbance boundary ○ Installation of erosion and sediment controls ○ Ecology preliminary activities ○ Clearing permits and tower site clearing (full clear) ○ Spoil testing, movement permits, grubbing and bulk earthworks for tower site establishment ○ Stockpiling topsoil and subsoil resources for re-use in site rehabilitation ○ Augering for tower foundations and concreting of tower footings ○ Structure assembly and tower erection ○ Stringing of conductors and earth wire ○ Clipping in the conductor and ancillary works
Testing and Commissioning	<p>Following construction of the Maragle Substation yard and the transmission connection, commissioning works would be carried out which would generally include testing of all high voltage equipment and ensuring all protection, control and metering equipment is operating correctly. Additionally, all necessary cut-in works to Line 64 would be completed and relevant testing undertaken.</p> <p>The new transmission lines and Maragle Substation yard would then be placed into standby in readiness for Snowy 2.0 to be completed. Once Snowy 2.0 becomes operational, the high voltage equipment would be energised, and the Project placed into service.</p>

Snowy 2.0 TCP
Construction Environmental Management Plan

2.5. Project Program

Construction commenced early 2024 and proposed to take approximately 36 months to complete UGL's component of works. The Project program is outlined below.

Figure 2-3: Construction Program

Activity / Construction Phase	23	2024				2025				2026			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Approvals / Management Plans	█												
330kV Line Works													
Site Mobilisation	█												
Site Establishment	█												
Geotech		█											
Survey		█	█										
Ecology preworks		█	█										
ESC		█	█	█									
Clearing (East & West)		█	█	█									
Site Access Development (E&W)		█	█	█									
Bulk Earthworks / Spoil Movement		█	█	█									
Site Rehabilitation			█	█									
Tower Foundations & Concreting				█	█								
Tower Assembly					█	█							
Tower Erection							█	█					
Earthing								█	█	█			
Stringing									█	█	█		
Climbing deterrents										█	█	█	
Commissioning												█	█
PC Demobilisation													█
330kV Switching Station													
Ecology preworks	█												
Site Access Upgrades	█												
ESC	█	█											
Clearing		█	█										
Access		█	█										
Geotech			█										
Bulk Earthworks			█	█									
Fencing			█	█									
Drainage				█	█								
Foundations					█	█							
Site Rehabilitation						█	█						
Civils & Earthgrid							█	█					
Buildings								█	█				
Electrical									█	█			
Testing & Commissioning											█	█	
Line 64 Upgrade Works													
Connections and Cut-ins												█	█

Snowy 2.0 TCP
Construction Environmental Management Plan

2.6. Project hours

Construction works are expected to be carried out 12 hours per day, seven days per week between the hours of 6 am and 6 pm. Traffic movements to and from the Project area would occur approximately one hour either side of the construction working hours, and would continue throughout the hours of construction (i.e. traffic movements would occur between the hours of 5 am to 7 pm). Where the potential exists for sensitive receivers to be affected, traffic movements to and from site will be restricted to between 6 am and 6 pm, particularly for HVs.

Snowy 2.0 TCP
Construction Environmental Management Plan

3. Planning

3.1. Project environmental obligations

All construction personnel working on the Project have the following general obligations:

- Construct the Project compliant with the Environmental Management Plans and the Project Conditions of Approval.
- The PC to abide with the construction contract and ensure subcontractor Project compliance.
- Minimise pollution of land, air and water.
- Preserve the natural and cultural heritage environment.
- Notify relevant state authorities of a non-Aboriginal or Aboriginal heritage discovery.
- Minimise the occurrence of offensive noise.
- Be a good neighbour to surrounding land users and adjacent Snowy 2.0 work areas.
- Keep the Client informed for subsequent community notifications of Project milestones, upcoming activities and duration of relevant aspects of the works.
- Keep plant and equipment maintained and in good working order.
- Take all feasible and reasonable steps to ensure compliance with the requirements of this CEMP and subplans.

3.2. Legal and other requirements

A register of legal and other requirements for the Project are contained in Appendix C. This register is maintained as a checklist and will be reviewed at regular intervals e.g. during management reviews, and updated with any applicable changes. Any such changes made will be communicated to the wider team where necessary through toolbox talks, specific training and other methods detailed in Section 6. Refer to Appendix E for detail on how and when these legal requirements must be met.

3.3. Conditions of Approval

The full list of CoA from the Infrastructure and EPBC Approval are provided in Appendix A, along with the identified management plan where conditions have been addressed.

3.4. Approvals, permits and licensing

The Project will be undertaken in accordance with the following:

- The Project EIS (Jacobs, February 2021) COA A2(c).
- The Project Submissions Report (SR) (March 2022) COA A2(c).
- The Project Amendment Report (AR) (March 2022) COA A2(c).
- Additional information letters dated 16 August 2022 COA A2(c).
- The Biodiversity Development Assessment Report (Rev 7, 22 August 2022) COA B21(b).
- Project Infrastructure Approval (2nd September 2022).
- Project EPBC Approval (21st October 2022).
- Project EPL 21753 (23rd December 2022) and Licence Variation Notice 1628478 (14 September 2023).

Snowy 2.0 TCP Construction Environmental Management Plan

Should any additional environmental or planning approvals, permits or licences be required the following procedure would be implemented:

- The PC will consult with Transgrid as to who will acquire the required Approval, Licence or Permit.
- If within the PC's scope, the Environmental Manager will identify any relevant parameters, requirements or obligations.
- The Senior Environmental Advisor(s) will consult with the project team and/or the business and seek approval for the required item.
- Once endorsed Site Environmental Advisors will assist with the application, and when issued ensure required conditions are met. This will include tracking the conditions by adding the Approval, Licence or Permit to Synergy.
- If changes are necessary to the CEMP, the procedure in Section 10 will be followed.
- The Project Manager will notify Transgrid in writing of the outcome of the application.

3.5. Check-It planner and planning schedule

The PC have a scheduling tool for meeting environmental obligations referred to as the Check-It Planner and Planning Schedule. The Check-It Planner & Planning Schedule contains various activities where the responsibility and timing for those activities can be tracked. Examples of activities include meetings, inspections, audits and reporting. The Check-It Planner & Planning Schedule will be prepared prior to commencing works when the works programme is finalised, such that the scheduling of environmental outcomes are allowed for. The Check-It Planner & Planning Schedule templates are provided in Appendix E.

4. Environmental Management System

4.1. Environmental Policy

Construction will be undertaken in accordance with UGL’s Environmental Policy. This policy describes the PC’s commitment to managing their environmental and community impact, and delivery of sustainable development and responsible outcomes.

The Environmental Policy is to be displayed at the site office and communicated to staff and other relevant parties via induction and ongoing awareness programs.

A copy of UGL’s Environmental Policy is provided in Appendix B.

A copy of Transgrid’s Environmental Policy is provided in Appendix P.

4.2. Organisational commitment and Leadership

The One HSE Culture Framework is presented in Figure 4-1. The Project will implement the framework and assess cultural maturity at regular intervals. A baseline will be established soon after Project commencement, followed by setting practical and achievable actions for improvement. Performance progress outcomes will be communicated to the workforce.

All PC and Project personnel play a part in creating the One HSE Culture and as such behaviours are defined for supervisors, managers, and everyone. The ‘everyone’ behaviours apply to all, regardless of their role. In addition, employees in supervisory and management roles, should also demonstrate the behaviours relevant to their role.

Figure 4-1 One HSE Culture Framework

THEME	EVERYONE	SUPERVISORS	MANAGERS
Risk management	Understand hazards	Promote risk awareness	Challenge and improve
Standards	Follow rules	Positively reinforce	Set high standards
Communication	Speak up	Encourage the team	Maintain openness
Involvement	Get involved	Involve the team	Provide support

The behaviours underpinning the One HSE Culture Framework are grouped into four broad themes – risk management, standards, communication, and involvement. Each theme is supported by a set of detailed positive (‘I will’) behaviours.

Some examples of how the framework can be used include:

- a) Inductions – to communicate expected behaviours to staff and subcontractors.

Snowy 2.0 TCP
Construction Environmental Management Plan

- b) Audits and reviews – to identify and close gaps in existing culture.
- c) Leadership programs – to build and reinforce the skills needed to achieve desired culture.
- d) Reward and recognition programs – to recognise people or Projects that are demonstrating positive behaviours and contributing to achieving excellence.
- e) Incident reviews – to ensure behavioural aspects of incidents are captured and addressed.

4.3. Environmental Principles, Objectives and targets

The PC commits to the values of Integrity, Accountability, Innovation and Delivery as the strategy for the execution of the works and commits further that the Project will be completed in such a way that our people and the environments that we work within, are managed to avoid adverse impacts.

All environmental management activities will align with the PC and Transgrid Objectives, as detailed in the Project Management Plan. The primary items related to this plan:

- a) Protect the environment.
- b) Implement UGL’s Environmental Management Systems.
- c) All activities will always be conducted in an ethical and responsible manner.

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

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

The performance of the Project against the objectives and targets will be documented in the Project compliance reports, and at least on an annual basis as part of the management review. Environmental objectives and targets for the Project are provided in Table 4-1.

Table 4-1 Project environmental objectives and targets

Objective	Requirement	Reference
Construction of the Project in accordance with environmental approvals	<ul style="list-style-type: none"> • Compliance with statutory approvals 	Audits, construction compliance reporting, management review
Construction of the Project in accordance with approved environmental management plans	<ul style="list-style-type: none"> • Compliance with CEMP and associated Sub-plans • Compliance with relevant environmental procedures 	Audits, construction compliance reporting, management review
Compliance with all legal requirements	<ul style="list-style-type: none"> • No regulatory infringements (PINs or prosecutions) • No formal regulatory warning 	Audits, construction compliance reporting, management review (construction and operation)

Snowy 2.0 TCP
Construction Environmental Management Plan

Objective	Requirement	Reference
Implement rigorous and comprehensive Environmental Management System that meets the requirements of AS/NZS ISO 14001	<ul style="list-style-type: none"> Address incidents, non-conformances and corrective actions within specific timeframes 	Audits, management review
Engage with the affected and broader community, minimise complaints and respond to any complaints within a suitable timeframe	<ul style="list-style-type: none"> Disseminate regular Project updates and other information through the Proponents Project website Record and respond to complaints in accordance with timeframes specified in the EMPs 	Review complaints register, construction compliance report, audits
Continuously improve environmental performance	<ul style="list-style-type: none"> Develop and maintain a program of ongoing environmental training Capture lessons learnt from environmental incidents to minimise repeat issues Encourage and reward innovation and effort throughout the works force 	TARPs, construction compliance reporting, management reviews, and audits
Manage noise and vibration impacts	<ul style="list-style-type: none"> Implementation of feasible and reasonable noise mitigation measures, with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009) Minimise number of noise and vibration complaints from the community and stakeholders 	Audits, monitoring, compliance reporting, complaints register, incident register
Minimise impact on air quality	<ul style="list-style-type: none"> Minimise dust generation Maintain equipment in good condition 	Audits, compliance reporting, complaints register, incident register
Manage soil and water impacts	<ul style="list-style-type: none"> Meet EPL requirements Minimise erosion and sediment generation Prevent polluted or dirty water discharges Manage downstream water quality impacts Protection of groundwater and local aquifers Manage spoil reuse and placement 	Water quality monitoring, ESCPs, audits, compliance reporting, incident register

Snowy 2.0 TCP
Construction Environmental Management Plan

Objective	Requirement	Reference
Minimise impact on flora and fauna	<ul style="list-style-type: none"> No net loss of significant habitat resources No protected fauna mortality No increase in weeds or disease transfer No unauthorized clearing beyond project boundaries Effective rehabilitation and revegetation post construction 	Biodiversity monitoring, audits, 'as-built' clearing verification, compliance reporting, incident reporting
Management of Aboriginal cultural heritage and non-Aboriginal heritage impacts	<ul style="list-style-type: none"> Minimise or avoid impacts to known Aboriginal and non-Aboriginal heritage sites Follow correct procedures for newly discovered heritage items 	Compliance / non-conformance reporting, heritage salvage, unexpected finds, management review
Minimise waste generation and resource impacts	<ul style="list-style-type: none"> Minimise waste generation and dispose of in an appropriate way Minimise resources needed and maximise re-use Minimise impacts to land from naturally occurring asbestos and other contaminants 	Audits, NGRS reporting, waste tracking and disposal records

4.4. CEMP

This CEMP provides the system to manage and control the environmental aspects during pre-construction and construction. It identifies all requirements applicable to Project activities described in Section 2. The CEMP provides the overall framework, system and procedures to ensure the potential for environmental impacts is minimised and legislative requirements are fulfilled. The system and procedures in this CEMP have been developed with consideration of the environmental assessment documents and approvals for the Project. This CEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the Project on the environment.

A document map is provided in Appendix D outlining the CEMP's relationship to the EMS (as discussed in Section 1.2) and environmental subplans discussed below.

4.5. Environmental management subplans

The CEMP and subplan documents are prepared to identify requirements and processes applicable to specific impacts or aspects of the activities described in Section 2. They address the measures identified in the environmental assessment documentation and Project approvals. The subplans are to be read and implemented in conjunction with this CEMP. The sub-plans for the Project, and their consultation and approval requirements, are outlined in Table 4-1 below.

Snowy 2.0 TCP
Construction Environmental Management Plan

Table 4-1 CEMP sub-plan consultation and approval

CEMP sub-plan	Consultation requirements	Approval requirements
Noise and Vibration Management Plan (NVMP)	As per condition B3, the Out of Hours Protocol must be prepared in consultation with Council.	As per condition B3, the Out of Hours Protocol must be approved by the Planning Secretary before commencing works
Soil and Water Management Plan (SWMP)	Prepared in consultation with NPWS, FCNSW, EPA, Water Group, and Department of Primary Industries (DPI)	To the satisfaction of the Planning Secretary (Condition B16)
Spoil Management Plan (SMP) (Appendix of the SWMP)	Prepared in consultation with NPWS, FCNSW, EPA, Water Group, Natural Resources Access Regulator (NRAR) and DPI	To the satisfaction of the Planning Secretary (Condition B8)
Biodiversity Management Plan (BMP)	Prepared in consultation with NPWS, Biodiversity Conservation and Science (BCS), FCNSW and DCCEEW	Approval by DCCEEW before approved before NSW Planning Secretary (EPBC Condition 5) To the satisfaction of the Planning Secretary (Condition B21)
Aboriginal Heritage Management Plan (AHMP) (Appendix of the Heritage Management Plan (HMP))	Prepared in consultation with NPWS and Aboriginal Stakeholders	To the satisfaction of the Planning Secretary (Condition B24)
Historic Heritage Management Plan (HHMP) (Appendix of the HMP)	Prepared in consultation with Heritage Council, Heritage NSW and NPWS	To the satisfaction of the Planning Secretary (Condition B24)
Traffic and Transport Management Plan (TTMP)	Prepared in consultation with FCNSW, NPWS, Transport for NSW (TfNSW), Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police	To the satisfaction of the Planning Secretary (Condition B32)
Visual Impact Management Plan (VIMP)	Prepared in consultation with NPWS and FCNSW	To the satisfaction of the Planning Secretary (Condition B36)
Emergency Plan (EP)	Prepared in consultation with the Local Emergency Management Committee	To the satisfaction of the NPWS, FCNSW, Rural Fire Service (RFS) and Fire and Rescue

Snowy 2.0 TCP
Construction Environmental Management Plan

CEMP sub-plan	Consultation requirements	Approval requirements
		NSW (FRNSW) (Condition B42)
Bushfire Response Plan (BRP) (Appendix of the EP)	Prepared in consultation with the Local Emergency Management Committee as part of the EP	To the satisfaction of NPWS, FCNSW, RFS and FRNSW (Condition B42)
Rehabilitation Plan (RP)	Prepared in consultation with FCNSW, NPWS, BCS, EPA, NSW DPI and TfNSW	To the satisfaction of the Planning Secretary (Condition B48)
Contaminated Land Management Plan (CLMP) (Appendix of the SWMP)	No requirements	No requirements

4.6. Consultation and approval

Consultation has been completed in accordance with the requirements of the Project approvals as outlined in Table 4-3. A summary of the consultation undertaken within the required agencies and stakeholders is provided in each relevant sub-plan.

4.7. UGL Management Systems

Part of UGL's Project management system is Synergy. Synergy is a UGL system that manages and tracks Project events and information including non-conformances, hazards, audits, environmental actions and environmental licensing.

The following is a list of UGL Procedures and Project specific documents that are referenced throughout this CEMP and sub-plans, refer Table 4-2.

Table 4-2 UGL and Project Procedures

Document Number	Document Title
UGLMS-131-337	Emergency Planning Procedure
UGLMS-131-342	Environmental Aspects and Impacts
UGLMS-131-377	Hazardous Chemicals Management
UGLMS-131-387	Waste Management
UGLMS-131-389	Cultural Heritage Management
UGLMS-131-390	Erosion and Sediment Control
UGLMS-131-391	Weed Management
UGLMS-131-401	Noise & Vibration Management
UGLMS-131-544	Pest Management
UGLMS-131-547	Spill Response and Remediation
UGLMS-131-930	Biodiversity Management Procedure

Snowy 2.0 TCP
Construction Environmental Management Plan

Document Number	Document Title
UGLMS-131-809	Site Environmental Plan Procedure
UGLMS-131-331	Incident Management – Reporting and Investigation
UGLMS-131-376	Asbestos and SMF Management
UGLMS-131-740	HSEQ Audit & Assurance Program Management
UGLMS-4-1310	Plant Hazard Identification and Risk Assessment
UGLMS-4-1305	Workplace Inspection Testing and Monitoring Checklist
UGLMS-4-1321	Herbicide and Pesticide Checklist
UGLMS-4-1322	Vehicle Clean-down Checklist
UGLMS-4-1323	Vehicle Washdown Log
UGLMS-4-1324	Dewatering (approval to discharge) Permit
UGLMS-4-1549	Environmental Inspection Weekly Checklist
UGLMS-4-1556	Spill Kit Inspection Checklist
UGLMS-4-1600	Stripping Topsoil and Stockpiling
UGLMS-4-1765	Projects Division Environmental Monthly Report
UGLMS-4-2034	Pre-Clearing Inspection Checklist
UGLMS-4-2035	Post-Clearing Inspection Checklist
UGLMS-4-2036	Permit to Enter Protected or No-Go Areas
UGLMS-4-2038	Cultural Heritage Sign Off
UGLMS-4-2040	Cultural Heritage New Find
UGLMS-4-2138	Site Environmental Plan Template
UGLMS-5-926	Air Quality Management
UGLMS-4-993	CheckIt Planner
N/A	Planning Schedule Template
UGLMS-4-2086	Environmental Aspects and Impacts Register

4.8. Environmental Work Method Statements

Environmental Work Method Statements (EWMS) will be prepared for all activities that carry a high level of environmental risk. EWMS will be prepared prior to the commencement of relevant construction activities on site and will incorporate relevant mitigation measures and controls from management sub plans. EWMS will be prepared to identify and assess risks, ensure sound environmental practices are implemented, and to minimise the risk of environmental incidents or system failures. EWMS are to be designed to communicate requirements, actions, processes and controls to construction personnel using plans, diagrams and simply written instructions.

EWMS will be tailored to site activities and include all relevant environment risks and mitigations identified for each task. EWMS will include but not be limited to:

- Dewatering

Snowy 2.0 TCP Construction Environmental Management Plan

- Access Points and Tracks Construction
- Water Quality Monitoring
- Clearing and Grubbing
- Temporary Bridge Construction
- Maragle Switchyard Construction
- Weed Management (survey and management)
- Geotechnical Activities
- Tower Foundation Activities
- Tower Installation
- Tower Pad Construction
- Stringing

All Project personnel and sub-contractors undertaking a task governed by an EWMS must participate in training on the EWMS and acknowledge that they have read and understood their obligations prior to commencing work.

Regular monitoring, inspections and auditing against compliance with the EWMS will be undertaken by Project management, quality, and environmental personnel to ensure that all controls are being followed, and that any non-conformances are recorded and corrective actions implemented.

4.9. Hold points

The PC will meet the requirements of the relevant Hold Points and submit this to authorized PC personnel or Transgrid management prior to works commencing. The Hold Points will be applied to specific Inspection Test Plans (ITPs), Permits and/or Approvals. The works will not commence until the Hold Point has been approved or released, or the relevant Permit or Approval has been signed. Hold Points, ITPs, Permits and Approvals ensure all required surveys, assessments, controls and measures have been completed prior to the works commencing. A Hold Point, Permit or Approval request may be required for such matters as:

- Contractual or approval signoffs, and commencement / recommencement of works
- Undertaking works in 'no disturbance', 'environmentally sensitive', or 'heritage' locations
- Vegetation clearing
- Unexpected finds of heritage or contaminated land
- Out of hours works (including oversized deliveries)
- Movement of spoil (including PAF and NOA requirements, if applicable)
- Spill management & contaminated material disposal
- Dewatering.

4.10. Site Environmental Plans

To aid in the identification and protection of significant environmental features associated with the Project, Site Environmental Plans (SEPs) have been prepared for the Project. The plans document the management measures and responsibilities for each environmental aspect. The SEPs also detail the site-specific monitoring requirements, incident notification and emergency response locations, and have been prepared in consideration of suitability to as many project construction personnel as possible. This documented process will ensure:

Snowy 2.0 TCP
Construction Environmental Management Plan

- a) Environmental hazards and risks identified are considered when developing the SEPs.
- b) Work is carried out in accordance with the SEPs.
- c) Workers comply with the SEPs.
- d) SEPs are provided to each work front by way of a work pack.
- e) SEPs are regularly reviewed by the subcontractor and CM against required criteria, particularly prior to the start of new works.

The SEP template is provided as Appendix F. The prepared SEPs for the Project are provided separately to Transgrid via Teambinder (document control). The SEPs are considered a 'live' document and subject to multiple revisions. The project Environmental Manager will regulate all revisions of this document.

4.11. Roles and Responsibilities

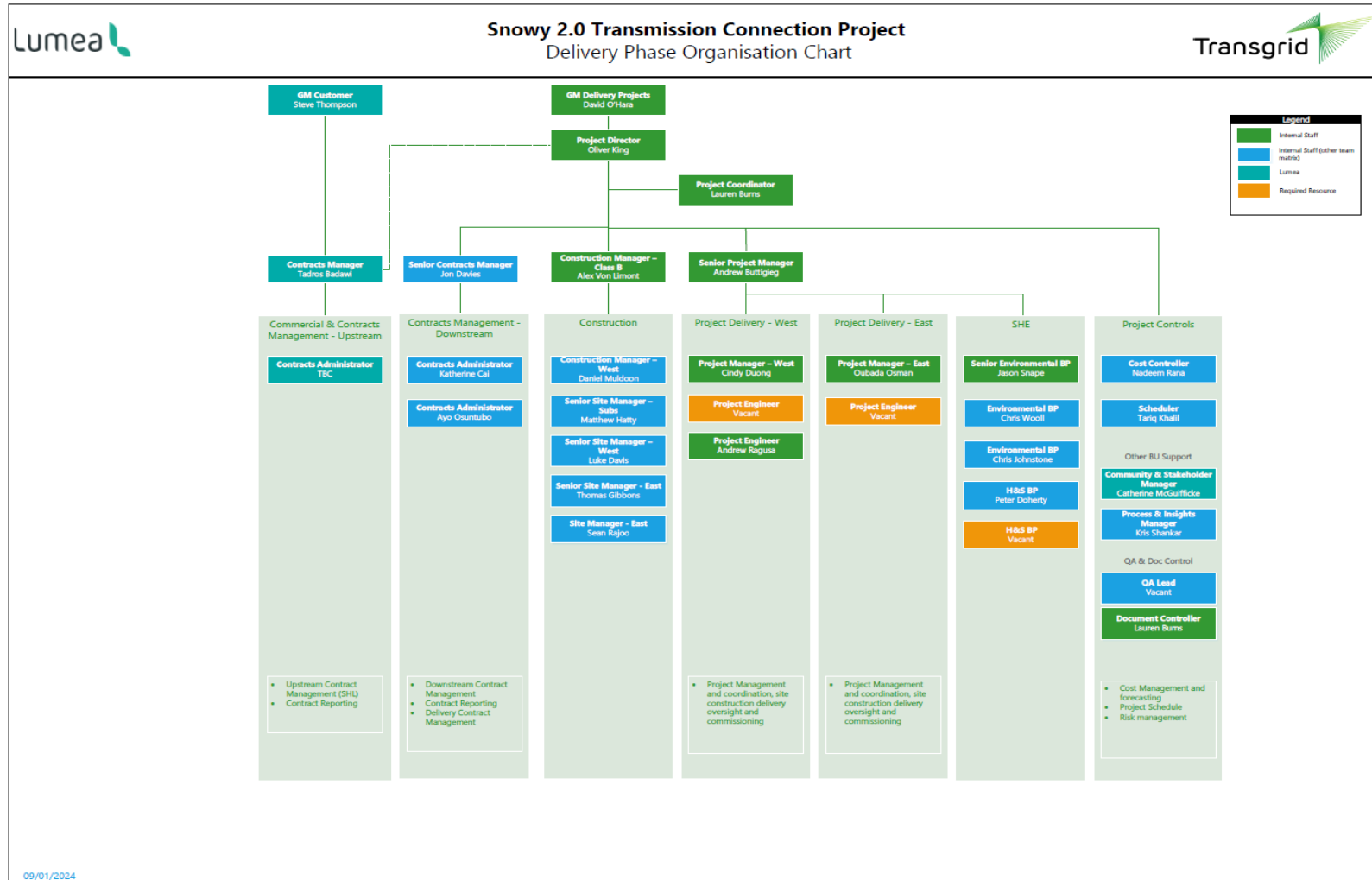
This section provides detail on the key roles and responsibilities of the Proponent (Transgrid), the proponents Principal Contractors (UGL and UGL/CPB Joint Venture), and Relevant Stakeholders.

4.11.1. Organisational Structure and Contacts

A summary of both the proponent and PC's organizational structure are indicated below, illustrating the key roles and the relationships between team members. CEMP updates will ensure these charts remain current. Emergency Contacts are noted at the start of this CEMP and in Section 8.

Snowy 2.0 TCP Construction Environmental Management Plan

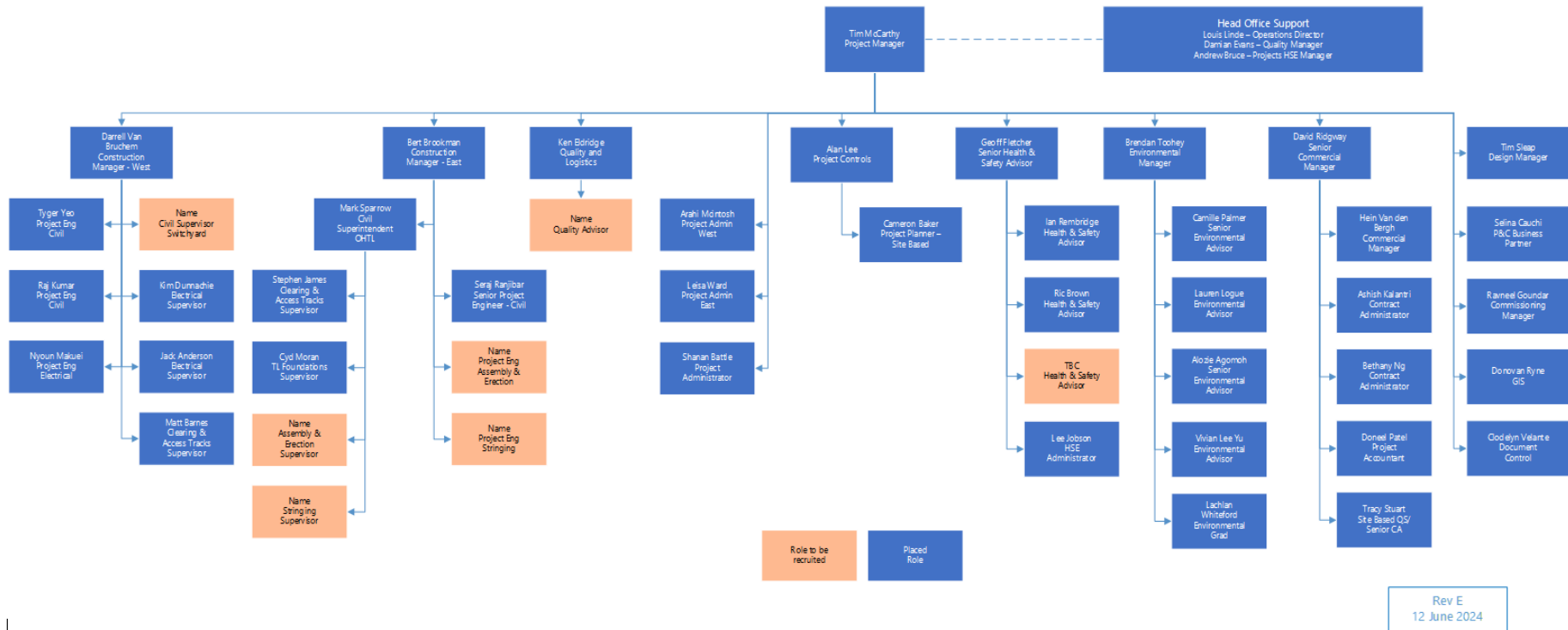
Figure 4-2 Transgrid's Organisational Chart



Snowy 2.0 TCP Construction Environmental Management Plan

Figure 4-3 UGL's Organisational Chart

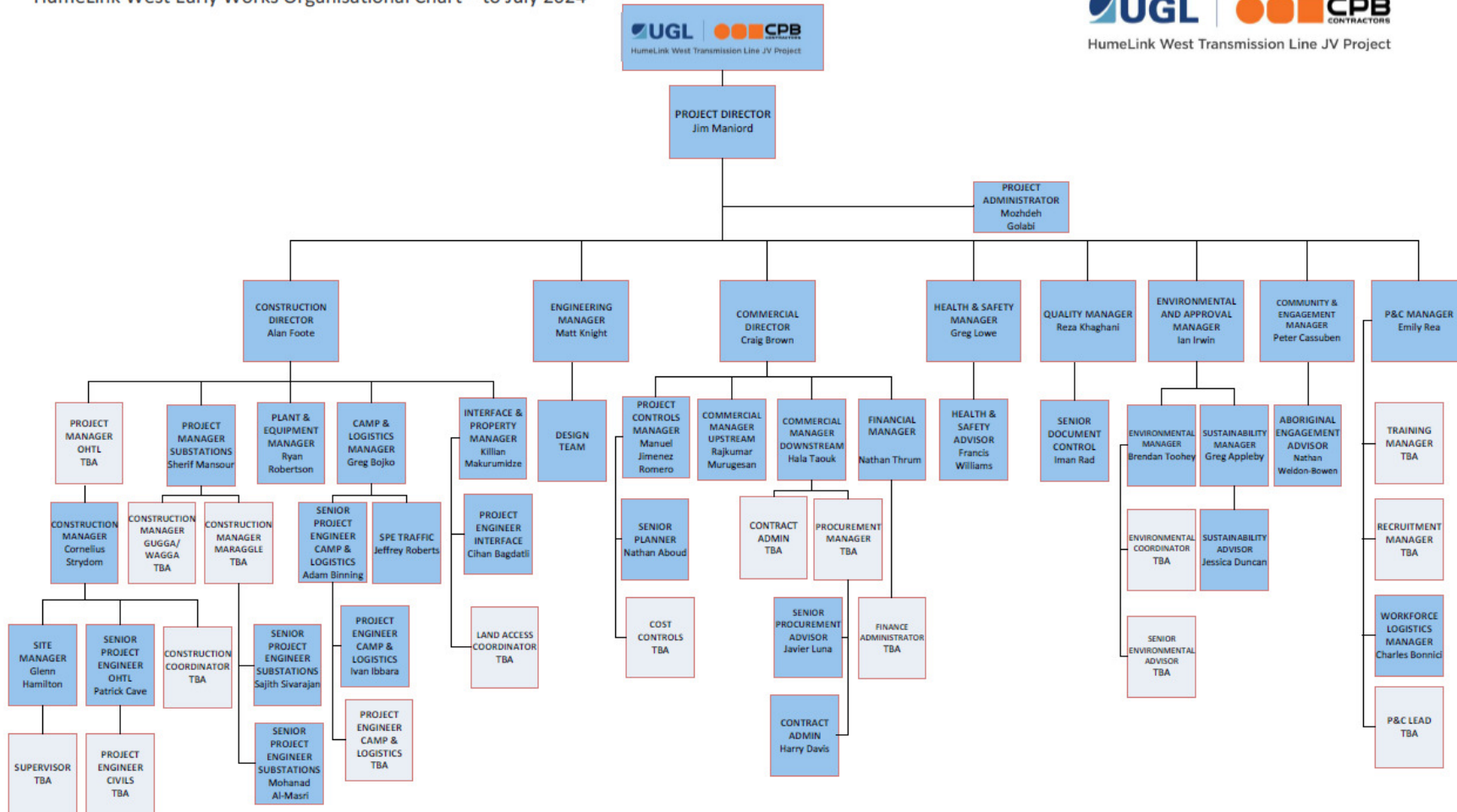
Snowy 2.0 Connection Project Organisation Chart



Snowy 2.0 TCP Construction Environmental Management Plan

Figure 4-4 UGL/CPB's Organisational Chart

ECI Stage 2 Organisation Chart
HumeLink West Early Works Organisational Chart – to July 2024



Snowy 2.0 TCP
Construction Environmental Management Plan

4.11.2. Transgrid Environmental Accountabilities and Responsibilities

The responsibilities of Transgrid include:

- Engaging with all relevant stakeholders and authorities to determine Project environmental requirements; and acquiring Project environmental approvals including relevant licensing and permits.
- Fulfilling the Proponent’s obligations under the CoAs for the Project works.
- Providing the PC’s visibility and transparency to Project environmental requirements and commitments, to enable outcomes.
- Advising or enabling environmental requirements and considerations in a timely manner.
- Reviewing and endorsing the Project CEMP, its subplans, and associated environmental documents for approval or update.
- Initiating and participating in Project meetings, workshops, and consultations to facilitate outcomes throughout the Project.
- Setting up and managing a Project complaint handling and resolution process, as detailed by the Project CoAs.
- Making Project approvals and environmental documents publicly accessible, as detailed by the Project CoAs.
- Regularly monitoring environmental performance, and maintaining visibility on work sites for environmental compliance.
- Advising the Department and Stakeholders on Project environmental performance.
- Duty to Notify and timely reporting of environmental incidents and non-compliances to the Department, and as otherwise required.
- Ensuring all Project activities (including those performed by UGL) are carried out in an environmentally responsible way, without environmental harm, and in compliance with the Project CoAs.
- Engaging independent environmental auditing, and disclosure of findings to the Department, as detailed by the Project CoAs.
- Engaging a contract Superintendent that is familiar with the Projects environmental requirements and that in the event of contractual ambiguity or discrepancy an informed interpretation will be made, and UGL instructed accordingly.
- Advising the Department and Stakeholders of key timeframes and dates associated with the works.
- Validating the capabilities, proficiencies and performance of parties engaged for the works.
- Engaging, nominating, and supporting project staff for the works, as required by the CoAs.

4.11.3. Principal Contractor’s Roles and Responsibilities

The responsibilities of the PC are provided in Table 4-4.

Table 4-4 Project roles and responsibilities

PC roles	Requirements relevant to the role
PC’s General Manager / Managing Director / Divisional Managers	<ul style="list-style-type: none"> • Ensuring UGL’s Environmental Management System and standards are followed for the Project works.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> • Ensuring UGL’s Environmental Management System and standards are followed for the Project works • Overall environmental performance and reporting of the PC’s works. • Familiarization and support for the Project environmental requirements and commitments, including environmental management plan endorsement. • Engagement with the Project environmental hazards and risks, and subsequent mitigations. • Enabling systems and resources for the delivery of Project outcomes. • Encouraging, and where necessary participating in management walkthroughs to check environmental compliance. • Reviewing Project environmental audits and ensuring corrective actions are addressed as required. • Assigning a capable team to deliver the Project environmental outcomes, and addressing training needs where deficiencies are encountered. • Regular communication with team members to remain connected with Project HSE matters. • Timely intervention to resolve Project environmental non-compliance matters, if not adequately addressed by the Project team. • Connecting with incident investigations and supporting corrective and preventative actions as determined.
PC’s Project Manager / Project Director	<ul style="list-style-type: none"> • Familiarisation with the Project requirements including the review and endorsement of Project environmental management plans and subsequent updates. • Establishing an effective working relationship with all parties, and leading and managing the Project for required environmental outcomes. • Ensuring a risk management framework (including processes) are implemented to ensure environmental risks are identified and managed in accordance with the CEMP and the corporate EMS. • Resourcing the Project team effectively and ensuring environmental awareness, proficiency and competency within teams and subcontractor engagements. • Advising the Project team of scope or timeframe changes, including variations or new works. • Ensuring effective lines of communication with the proponent, the business, the Project team, stakeholders, and subcontractors. • Ensuring all Project personnel receive environmental inductions and training to ensure competency.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> • Managing environmental matters to the contract, including the mitigation of environmental harm, and resolving non-compliances as best practicable. • Duty to Notify environmental harm and non-compliances to the Proponent (Transgrid) if and when identified, and within required timeframes. • Ensuring all environmental incidents and non-compliances are fully investigated and corrected, and preventative measures applied where practicable. • Encouraging HSE site culture as detailed by the EMS and Project management plans. • Scheduling and attending Project meetings and engaging with environmental matters. • Regularly checking environmental performance and advising relevant parties. Also intervening on environmental matters where performance is sub-par. • Reporting to the Client (Transgrid), at least monthly the environmental performance of construction activities as detailed by the Contract. • Supporting and participating in environmental site inspections with the client, regulators, stakeholders, or subcontractors as required. • Keeping the Proponent (Transgrid) advised on complaints received and mitigations applied. • Enabling procurement, resources, and systems such that required Project outcomes can be achieved, and intervening when they aren't. • Supporting the implementation of agreed Project environmental controls to occur within a timely manner. • Arranging any environmental approvals, licenses, permits and/or exemptions not acquired by the Proponent (Transgrid), but relevant to the Project scope. • Ensuring relevant environmental expectations and newly identified risks from the Proponent and/or authorities are promptly communicated to Project personnel. • Facilitating access and resources for Departmental visits, and periodic Project compliance audits. • Applying timeframes and schedules to environmental outcomes and keeping the Client (Transgrid) advised.
PC's Construction Director and/or Managers (Line & Subs)	<ul style="list-style-type: none"> • Familiarization with and support for the Project environmental requirements, including the Project environmental management plans, approvals, and Duty of Care towards the environment.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> • Providing onsite leadership and establishment of HSE site culture. • During Project works, frequently interfacing with the site teams and the Project Manager, on a range of Project matters, including environmental management. • Communicating new or relevant environmental issues to the Project team for mitigation or compliance. • Providing feedback to the Project team when performance outcomes are not being met. • Engaging with Project relevant environmental meetings and site inspections. • Monitoring general environmental performance and regularly advising the Project Manager. • Promptly advising the Proponent (Transgrid) and the Project Manager of any environmental incident and non-compliance matters. • Minimizing environmental risk and acting to prevent or mitigate environmental harm should situations arise (e.g. stop work), and promptly seeking assistance from HSE Project support. • Regularly engaging with the HSE Project team for advice and support regarding environmental compliance. • Ensuring effective environmental management across the Project works, including subcontractor activities. • Enabling or encouraging resources to achieve environmental outcomes. • Scheduling works responsibly such that planned activities aren't subject to elevated environmental risk (e.g. storms). • Participating in incident investigations, and reviewing all incident reports. • Ensuring environmental standards are met and maintained by all Project personnel, and supporting team training where improvement is required. • Facilitating Departmental visits and periodic Project compliance audits. • Reviewing reports and audit findings, and timely closeout of non-compliances and opportunities for improvement.
<p>PC Environmental Manager and Environmental Advisors</p>	<ul style="list-style-type: none"> • Ensuring the PC's commitment to the environmental management of the works under contract, and regulatory approvals are realized. • Supporting and finalizing all required environmental documents and approvals for site activities as advised by the Proponent (Transgrid). • Implementing the Environmental Management Plans for the works including the applications of mitigations assigned.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> • Facilitating the review and update of the Environmental Management Plans as obligated. • Developing site specific environmental plans for the benefit of work crews engaging with environmental aspects. • Developing or improving environmental forms, guidelines, procedures, or checklists where gaps exist. • Maintaining and completing required environmental registers required by the Project. • Utilizing the UGL EMS to support environmental monitoring and outcomes. • Facilitating environmental inductions, training and awareness as required, including with subcontracted personnel. • Arranging environmental equipment and resources to sufficiently address environmental risk, as supported by the Construction Manager, or as otherwise delegated under contract. • Promoting workplace environmental culture and awareness through posters, toolbox talks, pre-starts, access to environmental documentation and person to person discussions. • Enabling Project personnel and the Client to access the environmental management plans and contract environmental requirements, at all times. • Establishing working relationships with construction personnel for environmental outcomes. • Having regular communication with the Project and Construction Managers to advise environmental performance and offer support for environmental outcomes. • Frequently assessing work areas for environmental compliance (site inspections) and addressing non-conformances identified with relevant parties. • Checking environmental controls for required outcomes and address deficiencies. • Attending all high-risk environmental activities and ensuring mitigations have been applied. • Engaging effectively with supervisors and leading hands-on environmental issues to ensure environmental commitments or improvements are realized by work crews and subcontractors. • Arranging environmental corrective actions with the construction team and applying timeframes and tracking for closeout. Relevant items to be entered into Synergy.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> • Maintaining environmental scheduling for key environmental outcomes via the UGL CheckIt planner. • Ensuring environmental incident readiness and capability to respond, particularly with regard to spill management. • Supporting environmental incident events for immediate mitigation, and notification of such events to required parties. • Leading or participating in environmental incident investigations, and ensuring incidents are entered into Synergy. • Aiding incident remedial activities and motivating preventative actions to ensure incident closeout. • Performing or facilitating environmental monitoring and sampling as required by the Project. • Verifying environmental works, hold points and invoicing as required. • Supporting monthly environmental reporting. • Engaging in environmental risk management and mitigation, starting with the Aspects / Impacts register. • Addressing or advising on environmental hazards encountered by supervisors and work crews. • Facilitating regulated waste and recycling outcomes. • Attending and engaging with Project environmental meetings. • Facilitating the collection of NGRS data for corporate reporting. • Advising the Project Manager and Client of complaints received and maintaining a register. • Keeping up to date with environmental laws, permit conditions, and scope changes to ensure items aren't missed. • Gathering supporting evidence for upcoming audits, and supporting the auditing process as best practicable. • Managing Regulatory or Stakeholder interactions with the Project. • Engaging with Project shutdowns and demobilization to ensure all relevant environmental requirements are met.
PC's Project Engineers	<ul style="list-style-type: none"> • Familiarization with their responsibilities in the Environmental Management Plans and the EMS. • Ensuring works are designed to fulfil the environmental requirements of the Project, and that environmental standards, legislative requirements and codes of practice in design are applied to the works. • Developing sound work practices and minimization of environmental risk, as part of the work schedule.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> Managing design changes and queries for environmental outcomes. Ensure that relevant environmental and sustainability requirements are met in procuring materials and services, and that subcontractors are held accountable towards achieving their environmental outcomes. Engaging and liaising with Project environmental support on environmental matters. Visiting site or seeking assistance to ensure design requirements don't clash with site constraints. Raising any environmental issues or concerns in a timely manner, such that they can be addressed.
UGL Project Supervisors & Leading hands	<ul style="list-style-type: none"> Requiring employees to report environmental non-conformances, near misses, and incidents to UGL Environmental Advisors and Project Management. Checking for environmental approvals and permits before engaging in site disturbance. Promoting employee awareness to the Project Environmental Management Plans and EMS and incorporating requirements into work areas and activities. Promoting 'Zero Harm' and 'Duty of Care' agendas with work crews and subcontractors and encouraging communication with the UGL Environmental Advisors. Planning and ensuring preventative behaviours and field mitigations are applied to lessen the likelihood of environmental issues and incidents. Checking employees for site compliance and environmental awareness (e.g. inductions, weed hygiene, spill kits, etc.). Regularly engaging work crews in discussions about environmental risks and issues, such as during toolbox and pre-start sessions. Offering improvements or efficiencies towards environmental compliance to the UGL Environmental Advisors. Daily inspection of work areas for environmental compliance, and addressing problems identified. Checking risk management processes are being followed by work crews, such as EWMS & pre-start checks. Assisting with updates to the Progressive Erosion & Sediment Control Plans and how they integrate with site activities. Maintaining work areas for environmental compliance particularly in regard to waste, chemical and sediment management.

Snowy 2.0 TCP
Construction Environmental Management Plan

PC roles	Requirements relevant to the role
	<ul style="list-style-type: none"> Facilitating work crew training and workshopping activities for the discussion on environmental outcomes (e.g. toolbox discussions). Attending site meetings and receiving environmental information provided. Coordinating with emergency and incident response to manage work crew egress and preventing environmental harm where reasonable & practicable. Advising delays or work changes to management such that environmental factors can be considered.
All workers & Sub-contractors	<ul style="list-style-type: none"> Adhering to Zero Harm and Duty of Care principals, and following Project environmental compliance requirements. Reporting environmental incidents, near misses and non-conformances to UGL Project management. Attending required environmental awareness, induction and training sessions. Engaging in environmental risk management and mitigation processes (e.g. EWMS), and speaking up when risks are not sufficiently addressed. Applying relevant controls, and environmental mitigations to works performed. Checking plans and works packages when unsure of environmental matters, or asking for assistance. Assist managers and supervisors in applying environmental measures when requested. Providing assistance (as capable) when addressing environmental matters or incidents. Providing insight and information to incident investigations and non-conformances. Returning environmental records for reporting purposes. Disposing of waste in the correct manner.

4.12. Subcontractor Management

Subcontractors and their employees will be required to comply in full with the requirements of the CEMP and relevant environmental requirements as it applies to site environmental management and control. Subcontractors' personnel are considered equivalent to the PC's Project personnel in all aspects of environmental management and control. Their responsibility in this respect mirrors those of the PC's personnel.

In accordance with Subcontractor HSE Document Approval Process, Subcontractors are appointed and reviewed to determine suitability. Specifically, this process ensures that Subcontractors' Safe Work Method Statements (SWMS) have been assessed and are appropriate for the tasks being conducted.

Snowy 2.0 TCP Construction Environmental Management Plan

The Project Manager is accountable for ensuring that a digital quality management system is used to record approval of Subcontractor documentation, plant and equipment prior to commencing on site.

Subcontractors working on the Project will be required to:

- Undertake environmental awareness training (refer to Section 6.3).
- Observe sub-contract and statutory requirements relating to environmental protection and other environmental legislation and to follow instructions issued by UGL management.
- Nominate site representatives to liaise with the PC's representatives with respect to, and take responsibility for, environmental requirements for the site activities.
- Adhere to UGL's environment management system as it applies to their operations on the site.
- Undertake remedial actions identified in the weekly environmental inspections of their work areas.
- Co-operate fully with the site emergency incident procedures and consultative arrangements.
- Follow procedures incorporated in the CEMP.

Subcontractor engagement is to be consistent with corporate and client expectations, the UGLMS, the Contract Specification, the Environmental Management Plans, and the CoAs. It will include tender assessment and selection processes, of which past environmental performance will be considered.

The CPC's will provide subcontractors with the environmental requirements of the works under contract, and subcontractors will need to demonstrate a willingness and capability to abide with the requirements, either by submitting their own environmental documentation for consideration if the risk is sufficiently high; or by signing onto the PC's CEMP. The proponent will also validate subcontractors engaged and raise for discussion any concerns identified.

The PC's Construction Managers, Supervisors and Environmental Advisors will check subcontractors at mobilisation to ensure prevention, mitigation and compliance measures and resources are met, and deficiencies will be promptly addressed.

Subcontractors will be inducted and trained in the capacity by which they are engaged, consistent with other personnel on the Project. The PC will maintain records of this.

The PC will frequently check subcontractor environmental performance and hold subcontractors accountable for their incidents, near misses and matters of non-conformance by immediately addressing such matters for discussion and improvement.

5. Environmental risk Assessment and Management

The management of environmental impacts for the Project will follow a risk-based approach to determine the severity and likelihood of an activity's impact on the environment, and to prioritise its significance. This process considers potential regulatory and legal risks also taking into consideration the concerns of community and other stakeholders.

Risk assessments are undertaken at various stages of the Project and documented in management plans, EWMS and other Project documents. The objectives of these risk assessments are to:

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

An environmental risk assessment, presented as an Environmental Impacts and Aspects Register, has been completed for the Project and is included as Appendix G. This risk assessment details the environmental aspects identified for the Project, the initial risk category prior to assigning mitigations, and reference to the appropriate document which details the controls assigned. Risk assessments for the Project are based on AS/NZS 4360:1999, the Australian Standard for risk assessments.

The PC will maintain the environmental risk register to address risks specific to the scope. Risks during construction will be reviewed on a monthly basis, and will also be reviewed in response to incidents, changes in legal requirements, change in Project scope, findings of inspections and audits, and management reviews. Regular updates of the risk register will be provided to Transgrid for their awareness.

5.1. Hierarchy of Controls

The PC will use the hierarchy of controls to manage hazards such that risks to workers and the environment are eliminated as far as reasonably practicable. Where risk is difficult to eliminate, then controls to mitigate the risks as best practicable will be implemented. The hierarchy of controls are:

- a) Eliminate the hazard
- b) Substitute the hazard with a control to minimise the potential for environmental harm
- c) Isolate the hazard to minimise the risk of environmental harm
- d) Engineer an appropriate control to minimise the risk of environmental harm
- e) Administer the hazard by using a control such as a checklist, signage, or a procedure.

When hazards cannot be eliminated, evidence will be available that demonstrates how a risk-based decision was made to minimise the potential for harm. There will be levels of authorisation followed to approve work where residual risk remains.

5.2. Environmental Mitigations

Environmental management sub-plans have been established to outline the mitigation measures for environmental hazards and risks that may be encountered during construction works. Each sub-plan details the following:

Snowy 2.0 TCP
Construction Environmental Management Plan

- a) Environmental objectives and associated targets.
- b) Applicable legislation and project approval conditions.
- c) Guidelines, standards, and other references.
- d) Mitigation measures to be implemented.
- e) Responsibility allocation to implement the mitigation measures.
- f) Relevant reference documents.

5.2.1. Biodiversity Mitigation measures

The Biodiversity Development Assessment Report (BDAR) prepared by Jacobs (August 2022) outlines the following mitigation measures extracts that are to be addressed in the CEMP:

- BIO3 The CEMP will replicate the requirements detailed in the BMP for all safeguards /mitigation measures particularly pre-clearing and clearing during construction (including B104-B108).
- BIO4 Specific measures to mitigate the impact to individual Masked Owl adults, chicks and eggs will be specified in the CEMP and BMP.
- BIO5 Hazard trees identified from the LiDAR assessment will be flagged for removal, and any other adjacent and important habitat trees and features, also identified for retention and to avoid disturbance during the felling activity will be clearly marked and included within Site Environmental Plans.

The full mitigation measures can be found in the BMP. BIO3 and BIO4 have been fully addressed within the BMP and are not represented in the CEMP. BIO5 is addressed in the BMP, additionally through the preparation of the SEPs addressed in Section 4.10 of this CEMP.

6. Environmental Training and Awareness

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

6.1. Environmental Site Inductions

Prior to working on site, all personnel and subcontractors will undertake a project environmental induction as part of the site induction. This is done to ensure all personnel involved in the Project are aware of the requirements of the CEMP, and to ensure the implementation of environmental management measures. There may also be induction or awareness briefings imposed by other parties relating to site access or overlapping works, particularly in locations such as Lobs Hole where Snowy 2.0 / FGJV works are underway. All required personnel will make themselves available for such briefings.

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

The Project Manager is accountable for ensuring that all employees and contractor employees attend an induction prior to starting work, whilst Environmental Advisors or appropriate delegate will deliver the inductions. Records of all inductions and copies of relevant qualifications and or licences will be retained for the life of the Project.

All staff attending site will be required to attend a health and safety, quality and environment induction prior to starting work on the Project. The environment section covers core issues including, but not limited to:

- Relevant details of the CEMP including purpose and objectives.
- Requirements of due diligence and duty of care.
- Conditions of environmental licences, permits and approvals.
- Potential environmental emergencies on site, and the emergency response procedures.
- Reporting and notification requirements for pollution and other environmental incidents or reportable events, including identification of contaminated land and damage and maintenance to environmental controls.
- High risk activities and associated environmental safeguards.
- Controls when working in or near environmentally sensitive areas.
- Specific environmental management requirements and responsibilities.
- Mitigation measures for the control of environmental issues.
- Incident response and reporting requirements.
- The existence of EWMS for high-risk activities.
- Information relating to the location of environmental constraints.
- Key environmental issues represented in the EMPs.
- Site specific matters relating to:
 - Site flagging and clearing protocols.
 - Biodiversity flora / fauna monitoring.
 - Requirements for spoil excavation and movement.

Snowy 2.0 TCP Construction Environmental Management Plan

- Erosion and sediment controls, and surface water management (including drainage and basins).
- Management of contaminated material.
- Monitoring and possible management of pests and predators.
- Obligations under the *Biosecurity Act 2015* to prevent the spread of weeds and pathogens during construction.
- Responsibilities under the following legislation and permits:
 - National Parks and Wildlife Act 1974.
 - Protection of the Environment Operations Act 1997.
 - Contaminated Land Management Act 1997.
 - Fisheries Management Act 1994.
 - Water Management Act 2000.
- Noise, vibration and air quality management controls.
- Requirement to maintain surrounding property access for residences, business owners, and their visitors, and to minimise disruptions to these properties for the duration of construction.
- Location of refuse bins, washing, refuelling and maintenance of vehicles, plant and equipment.
- Waste minimisation and disposal protocols.
- Boundaries for vegetation clearing, fauna and fauna habitat management, including awareness of threatened fauna species and fauna rescue.
- Incident management processes.
- Environmental emergencies including pollution incidents, floods and bushfires.
- Community awareness and response, as well as complaints resolution.
- Site-specific training will be provided to personnel engaged in activities or areas of higher risk, including but not limited to:
 - Works within KNP and State Forests.
 - Working in and near waterways.
 - Areas of heritage sensitivity.
 - Biodiversity requirements.

A record of all environmental inductions will be maintained and kept on-site in hard copy or in a database. The Project Manager may authorise amendments to the induction at any time. Possible reasons for changes to the induction may be Project modifications, legislative changes or amendments to this CEMP or related documentation.

An induction register is kept on site as part of the Project Quality System to demonstrate compliance with CEMP activities.

6.2. Toolbox Talks, environmental training and Awareness

The Project Manager is accountable to ensure that all Project personnel are competent to perform tasks that affect the performance and effectiveness of the environmental management system.

Specific consideration shall be given to those personnel who are promoted or placed in supervisory positions during the course of the Project to ensure that they are provided with suitable training to manage their Environmental responsibilities.

Snowy 2.0 TCP Construction Environmental Management Plan

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

Toolbox talks will include details of EWMS for relevant personnel and will also be tailored to specific environmental issues relevant to upcoming works.

Toolbox talks will include, but not be limited to:

- A description of the activity and the area
- Identification of the environmental issues and risks for the area.
- Outline the mitigation measures for the works and the area.
- Details of EWMSs for relevant personnel.

Relevant environmental issues include but are not limited to:

- No Go & Exclusion Areas.
- Erosion and sedimentation controls.
- Spoil management.
- Dewatering (including onsite reuse and permitting).
- Noise & Vibration Requirements.
- Biodiversity (flora/fauna).
- Emergency and spill response including location of emergency spill kits and training in their use.
- Emergency response.
- Aboriginal and historic heritage.
- Clearing protocols and requirements.
- Working in or near waterways.
- Waste storage and segregation.
- Dust control.
- Management of contaminated materials and unexpected finds, including Naturally Occurring Asbestos (NOA) if encountered.

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

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management, or those undertaking an activity with a high risk of environmental impact. Topics covered may include those detailed above, or others deemed necessary in the lead up to or during construction.

All environmental monitoring and testing will be conducted by persons who are appropriately qualified and trained.

Training records will be kept onsite.

6.3. Environmental awareness Training

Staff and sub-contractors working on site will be provided with environmental training that will be incorporated into toolbox talks and into inductions. Formal qualifications for specialist staff may be required in relation to activities such as animal handling and the application of specific erosion and sediment control measures. The aim will be to achieve a level of awareness and competency

Construction Environmental Management Plan | SSI-9717

Version: Rev 6

UNCONTROLLED WHEN PRINTED

Snowy 2.0 TCP
Construction Environmental Management Plan

appropriate to their assigned activities.

Targeted environmental awareness training will be provided to individuals, or groups of workers with a specific authority or responsibility for environmental management, or those undertaking an activity with a high risk of environmental impact. This training will generally be prepared and delivered by a Senior Environmental Advisor or delegate. The target groups and suggested topics for this training are detailed in Table 6-1.

Another way to inform construction personnel will be through the development and distribution of awareness material. These will typically take the form of a poster, booklet, plans, work packs and/or similar and will be distributed to engineers, leading hands, foreman and others with a responsibility for managing specific work locations or activities. This documentation will be used to inform the broader workforce through either daily pre-start meetings (see section below), at the work front, or provision in worker crib facilities.

Refresher environmental awareness training will be undertaken as required, but not less than 6 monthly intervals, based on environmental risks, and turnover of personnel. Refresher environmental awareness training will be recorded on the Environmental Training Register.

A training register will be kept on site as part of Project Quality System to demonstrate compliance with CEMP activity training records.

Table 6-1 Example Environmental Training Schedule.

Training	Senior Managers	Supervisors	Engineers	Environmental Staff	Foreman	Leading Hands	Sub-Contractors	Administrative Staff
Project Inductions	✓	✓	✓	✓	✓	✓	✓	✓
Project Approvals, Compliance, Inspections & Reporting	✓	✓	✓	✓	✓	✓	✓	
Protected Flora / Fauna and Biodiversity Monitoring	✓	✓	✓	✓	✓	✓	✓	
Clearing & Ecology Requirements	✓	✓	✓	✓	✓	✓	✓	
Biosecurity & Weed Hygiene Awareness	✓	✓	✓	✓	✓	✓	✓	
Soil / Spoil Management (including PAF)	✓	✓	✓	✓	✓	✓	✓	
Contaminated Materials Management (including NOA, waste & NGERS requirements)	✓	✓	✓	✓	✓	✓	✓	
Heritage Awareness	✓	✓	✓	✓	✓	✓	✓	

Snowy 2.0 TCP
Construction Environmental Management Plan

Training	Senior Managers	Supervisors	Engineers	Environmental Staff	Foreman	Leading Hands	Sub-Contractors	Administrative Staff
Noise, Dust and OOHW	✓	✓	✓	✓	✓	✓	✓	
Chemical Handling, Storage, and Spill Management	✓	✓	✓	✓	✓	✓	✓	
Erosion and Sedimentation Control & Water Quality	✓	✓	✓	✓	✓	✓	✓	
Seed Collection & Site Rehabilitation	✓	✓	✓	✓	✓	✓	✓	
Environmental Risk Management & Mitigation	✓	✓	✓	✓	✓	✓	✓	
Traffic and Community	✓	✓	✓	✓	✓	✓	✓	
Hot works & Bushfire Awareness	✓	✓	✓	✓	✓	✓	✓	
Emergency Procedures	✓	✓	✓	✓	✓	✓	✓	✓

6.4. Daily Prestart Meetings

Pre-start meetings are a frequently run process for informing the workforce of the day’s activities, safe work practices, environmental protection requirements, work area restrictions, other activities that may influence the works, managing changed conditions, and/or risks and hazards that may be relevant to the day’s tasks.

The Supervisors will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift), or where changes occur during a shift. Daily pre-start meetings are generally succinct in nature and take about 10–20 minutes.

The environmental component of pre-starts will be determined by the CM, relevant Supervisor and / or environmental personnel, and will include any environmental issues that could potentially be affected by the day’s activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

Pre-start topics, dates delivered, and a register of attendees will be recorded and kept on site as part of the Project Quality System to demonstrate compliance with CEMP activities.

7. Communication

7.1. Internal Communication

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

The methods of communication on-site will include:

- Pre-start meetings
- Inductions
- Toolbox talks
- Alerts, bulletins and / or initiatives
- EWMS.

Site Environmental Advisors will attend Project meetings and discuss project environmental performance. Site Environmental Advisors will also highlight matters of environmental concern and propose corrective and preventative actions to promptly address issues identified.

Fortnightly environmental inspections will be scheduled with a Site Environmental Advisor and relevant Project staff. The purpose of these inspections will be to communicate ongoing environmental performance and to identify any issues to be addressed.

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

Further internal communication regarding environmental issues and aspects, will be through awareness training as described in Section 6.3.

7.2. External Communication

7.2.1. Agencies and Authorities

Project environmental staff have the responsibility to report on the ongoing environmental performance of the Project to Transgrid. Transgrid have the responsibility to advise DPHI and any other relevant authorities. The Environmental Manager / Advisors will report regularly to Transgrid on progress, and any key environmental matters and ultimately to DPHI through the monitoring and reporting requirements listed in Section 9.

The Project Manager/Director and Construction Manager/Director are the two 24-hour contacts. They have the authority to halt the progress of the works if necessary. They are the key emergency response personnel during an environmental site emergency with assistance from HSE project staff.

TransGrid is the authorised contact person for communications with the client, DPHI, EPA and any other relevant authorities on environmental matters. The Construction Manager may seek advice from the project Environmental Managers or Advisors when dealing with environmental matters. The CM might also delegate the Environmental Manager or Advisor to provide environmental advice directly. Transgrid will be included (or otherwise advised) of all correspondence with any regulatory Authorities, unless agreed otherwise.

It is intended that regulatory site visits will be requested and scheduled by the relevant agencies ahead of time, such that Transgrid and the PC can be sufficiently represented. Where circumstances

Snowy 2.0 TCP Construction Environmental Management Plan

or events determine otherwise, it will be at the PC's discretion as to whether site access is permitted, unless otherwise authorised. Visiting regulatory parties are requested to support each visit with a report, or correspondence advising environmental outcomes of the visit. Where this is not provided the PC will promptly provide Transgrid with correspondence on such matters.

7.2.2. Community and Stakeholders

Community consultation and notification will be undertaken by Transgrid throughout the life of the Project. The PC will provide relevant information as required, regarding the Project to facilitate Transgrid's community communication.

7.3. Interface Management Plan

The PC's Interface Management Plan (IMP) outlines interface protocols for managing the various interactions between Transgrid, Snowy Hydro, FGJV and subcontractors during the construction phase of the project. The IMP will be used as a guiding document when dealing with works and access in overlapping areas. The PC will ensure the IMP is kept current for the duration of the project works and communicated to relevant site personnel.

7.4. Complaints procedure

External complaints are defined as complaints received from parties outside the normal lines of communication.

Complaints and enquiries regarding the works are typically received through Transgrid. However, project complaints may be received by the PC. The PC will pass on all complaints to Transgrid in accordance with the PC's 'Community Management' procedure and 'Customer Complaint & Feedback' procedure. Transgrid will advise on how to address the complaint.

Records of all complaints received will include the following details:

- Date and time of the complaint
- Method by which the complaint was made
- Any contact details of the complainant
- The nature of the complaint
- Action taken in relation to the complaint and any follow-up
- Any monitoring to confirm that the complaint has been satisfactorily resolved
- If no action taken, reasons why.

This information will be included in the complaints register, as provided in Appendix H. The information contained within the register will be made available to Transgrid and agencies (EPA) on regular occasion and on request. The records of complaints must be kept for at least 4 years after the complaint was made.

Attempts will be made to resolve all complaints as soon as practicable. All complaints will be notified to the PC Construction Manager/Director immediately who will advise investigation of the matter and notify Transgrid within two (2) hours of the receipt of the complaint. An initial written summary of the complaint will be provided to Transgrid within 24 hours of a complaint being received. Following investigation and determination of possible prevention or remedial measures, the complainant will be advised, and measures will be applied as required. A further detailed response will be advised to

Snowy 2.0 TCP
Construction Environmental Management Plan

Transgrid within 10 days, including steps taken to resolve the issue(s). All complaints will be closed off as best practicable in the Complaints Register & Synergy with regard to relevant timeframes, which includes final feedback to the complainant if requested.

The Environmental Advisors will be considerate of applying an adaptive approach to complaints where appropriate, such that complaints aren't reoccurring. This generally involves engaging construction staff for complaint awareness and situational buy-in, often communicated during toolbox discussions.

Snowy 2.0 TCP
Construction Environmental Management Plan

8. Environmental Incidents and Emergencies

8.1. Emergency Contact Details

The PC's emergency contact details for key Project personnel and emergency services are listed in Table 8-1 to Table 8-3, to be updated as required during Construction. All Project emergency contacts are provided in Appendix I. Evacuation routes and assembly areas can be found in the Project Emergency Response Plan.

Table 8-1 Project emergency contacts -Stage 1

Role	Personnel	Contact Details
Operations Manager	Louis Linde	0493 818 783
Project Manager	Tim McCarthy	0455 087 248
Construction Manager (& Chief Warden) WEST	Darrell Van Bruchem	0447 307 244
Construction Manager (& Chief Warden) EAST	Bert Brookman	0488 358 821
Environmental Manager	Brendan Toohey	0488 951 736
Senior Environmental Advisor	Alozie Agomoh	0475 558 532
Senior Environmental Advisor	Camille Palmer	0438 177 874
Site Environmental Advisor	Lauren Logue	0474 055 199
Site Environmental Advisor	Vivian Lee Yu	0447 824 930
Site Environmental Graduate	Lachlan Whiteford	0427 772 512
Safety Advisor (& Emergency Evacuation Coordinator / First Aid)	Ian Rembridge	0466 517 794
Senior Safety Advisor (& Emergency Evacuation Coordinator / First Aid)	Geoff Fletcher	0499 459 077

Table 8-2 Project emergency contacts -Stage 2

Role	Personnel	Contact Details
Project Director	Tim Burns	0417 759 637
Construction Director	Vince Newton	TBC
Environmental Manager	Jeremy Slattery	0421 827 231
Senior Environmental Advisor	Ron Billyard	0475 558 532
Senior Environmental Advisor	TBA	
Site Environmental Advisor	Lauren Logue	0474 055 199
Site Environmental Advisor	TBA	

Snowy 2.0 TCP
Construction Environmental Management Plan

Role	Personnel	Contact Details
Safety Advisor (& Emergency Evacuation Coordinator / First Aid)	TBA	
Senior Safety Advisor (& Emergency Evacuation Coordinator / First Aid)	TBA	

Table 8-3 Emergency service contacts

Name / Organisation	Contact
Emergency (Police, Fire, Ambulance)	000
Tumbarumba Police	6948 2044
Fire & Rescue NSW (Tumbarumba)	6948 2164
NSW SES	132 500
Transgrid Complaint Number (Community Engagement Manager)	1800 222 537
Transgrid Emergency Number	1800 027 253
Snowy Hydro Operations (Emergencies Only)	(02) 6453 2999
NSW EPA (Pollution Hotline)	131 555
Tumut Health Service	6947 0800
Tumbarumba Hospital	6948 9600
Cooma Hospital	6455 3222
Snowy Valleys Council	1300 275 782
Medical Centre (Tumbarumba)	6948 2052
WIRES NSW	1300 094 737
NPWS	1800 629 104
FCNSW (Tumut Office)	02 6947 3911
LAOKO (Snowy Mountains Wildlife Rescue)	6456 1313
SONA (Saving our Native Animals)	0431 218 608
RSPCA NSW	1300 278 358

Snowy 2.0 TCP
Construction Environmental Management Plan

8.2. Emergency and incident preparedness

The following plans relating to emergency and incident response have been prepared for the Project:

- Emergency Response Plan.
- Flood Response Procedure.
- Bushfire Response Plan.
- Traffic and Transport Management Plan (including Heavy Vehicle Salvage Plan, Snow & Ice Management Plan, and Marine Transport Management Plan).
- Soil and Water Management Plan (Spill Response Procedure).

During the course of construction, the following preventative strategies will be implemented onsite:

- Daily inspections of active work sites.
- Completion of Environmental Inspection Checklist (weekly).
- Issue and prompt close-out of non-compliance notices (as required).
- Scheduled servicing and timely repair of plant & equipment.
- Ongoing environmental training.
- Access for emergency services vehicles will be maintained throughout the site at all times.
- Environmental audits of worksites, subcontractors and general compliance.

Spill kits will be available at the main site office, each work site and where liquid substances are stored. Spill kits and other emergency supplies (e.g. bunds, booms) will also be located at site compounds, laydown areas and on refuelling vehicles.

Personnel involved in emergency response activities will be provided with specific training. As a minimum for environmental response, Project allocated light vehicles and light trucks / HV shall carry a vehicle spill kit to provide immediate response to an event. 240L hydrocarbon spill kits will also be available at both east and west work fronts and the Maragle Substation Yard. Hydrocarbon spills are noted as the most likely type of occurrence on the works.

Consulting with emergency services, NPWS, FCNSW and NSW Police as required throughout construction to ensure that any potential impacts to emergency services are identified and appropriately managed, as part of quarterly EMCC meetings

An up-to-date list of emergency response personnel and relevant organisations (emergency services, EPA, etc.) will be maintained at the main office and site compounds.

8.3. Environmental Incidents

An environmental incident is defined as an unplanned event impacting or potentially impacting the environment with consequences.

Various environmental incidents may have the potential to occur on site, which may include but not be limited to the following:

- Spills of fuels, oils, chemicals and other hazardous materials.
- Unauthorised discharge from sediment basins or other containment devices.
- Unauthorised clearing or clearing beyond the extent of the Project boundary or premises.
- Inadequate installation and subsequent failure of temporary erosion and sediment controls.
- Unauthorised damage or interference to threatened species, threatened ecological communities or critical habitat.

Snowy 2.0 TCP Construction Environmental Management Plan

- Unauthorised harm or desecration to Aboriginal objects and Aboriginal places.
- Unauthorised damage or destruction to any State or locally significant relic or Heritage item.
- Unauthorised excavation or reclamation works within a watercourse.
- Potential contamination of waterways or land.
- Accidental starting of a fire or a fire breaking out of containment.
- Any potential breach of legislation, including a potential breach of a condition of an environment protection licence, approvals, or any agency permit condition.
- Works done that are not covered by the Project approvals, or not found to be consistent with the approval, or done without a modification of the approval.
- Works undertaken that are not in accordance with the Environmental Assessment documents.
- Unauthorised dumping of waste.

In accordance with The PC's 's Incident Management Procedure, should an incident occur, the Supervisor will ensure that work ceases in that affected area and that the site is not disturbed until the appropriate level of investigation is conducted to ensure that any potential evidence is preserved.

8.4. Incident Notification and Duty to Notify

All workers (employees and contractors) are responsible for ensuring timely and effective initial internal reporting of incidents that they are involved with or witness. Refer to the relevant PC Project WHSMP for guidance relating to safety incidents.

Transgrid are to be informed of any environmental incidents within 2 hours verbally, and within 24 hours in writing. Incident reports will include lessons learnt from each environmental incident and proposed measures to prevent the occurrence of a similar event. All efforts will be undertaken immediately to avoid and reduce impacts of incidents, and ensure suitable controls are put in place. Incidents will be closed out as quickly as possible, taking all required action to resolve each environmental incident.

The PC must liaise with Transgrid prior to agency notification of any incident (i.e., EPA). Within 7 days of the date of the incident, the PC must provide the client and/or any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

8.4.1. Incident Reporting in accordance with the conditions

The PC will immediately notify Transgrid of an incident which arises through the Infrastructure and EPBC Approval.

Infrastructure Approval

In accordance with Condition C7 of the infrastructure Approval, the Planning Secretary and NPWS must be notified via the Major Projects website portal immediately after Transgrid becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.

Non-compliances will be reported in accordance with Section 9.5 of this CEMP.

All written requirements of the Planning Secretary or relevant public authority, which may be given at any point in time, to address the cause or impact of an incident must be complied with, within any timeframe specified by the Planning Secretary or relevant public authority.

The written notification requirements as outlined in Appendix A of the Project approval are outlined in Table 8-4 below.

Snowy 2.0 TCP
Construction Environmental Management Plan

Table 8-4 Written incident notification requirements

#	WRITTEN INCIDENT NOTIFICATION REQUIREMENTS
1	A written incident notification addressing the requirements set out below must be notified to the Department via the Major Projects website within seven days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under condition C7 or, having given such notification, subsequently forms the view that an incident has not occurred.
2	Written notification of an incident must: <ul style="list-style-type: none"> (a) Identify the development and application number; (b) Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); (c) Identify how the incident was detected; (d) Identify when the applicant became aware of the incident; (e) Identify any actual or potential non-compliance with conditions of consent; (f) Describe what immediate steps were taken in relation to the incident; (g) Identify further action(s) that will be taken in relation to the incident; and (h) Identify a Project contact for further communication regarding the incident.
3	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4	The Incident Report must include: <ul style="list-style-type: none"> (a) A summary of the incident; (b) Outcomes of an incident investigation, including identification of the cause of the incident; (c) Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) Details of any communication with other stakeholders regarding the incident.

EPBC Approval

In accordance with Condition 25 of the EPBC approval, Transgrid must notify DCCEEW-Cth electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The following must be specified in the notification:

- Any condition or commitment made in a plan which has been or may have been breached.
- A short description of the incident and/or potential non-compliance and/or actual non-compliance.

Snowy 2.0 TCP Construction Environmental Management Plan

The location (including co-ordinates), date, and time of the incident and/or potential non-compliance and/or actual non-compliance.

Transgrid must provide DCCEEW-Cth in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify:

- Any corrective action or investigation which the approval holder has already taken.
- The potential impacts of the incident and/or non-compliance and/or non-compliance.
- The method and timing of any corrective action that will be undertaken by the approval holder.

8.4.2. Incident Reporting in accordance with the POEO Act

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

- If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.

If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000 (Material Harm).

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

- NSW EPA as the appropriate regulatory authority on 131 555 or (02) 9995 5555.
- The Environment Protection Authority (EPA).
- Safe Work NSW (formerly WorkCover) on 13 10 50.
- Fire and Rescue NSW on 000 or for Mobiles Only 112.

Notification to Transgrid of incidents causing or threatening material harm to the environment is to be immediately advised after the person becomes aware of the incident, Transgrid will immediately notify relevant authorities. Written details will be provided to the EPA within 7 days of the date on which they became aware of the incident.

In accordance with the Project EPL (21753), Transgrid must notify the EPA within 24 hours by phone or in writing of any results from monitoring required by the EPL that exceed the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG) and NSW Water Quality Objectives and caused by activities carried out by or on behalf of Transgrid.

Where an incident involves an Aboriginal or heritage site, relevant authorities such Heritage NSW and Registered Aboriginal Parties will be notified by Transgrid, and their input sought in closing out the incident.

8.5. Incident investigation and reporting

All incidents are to be investigated (to the appropriate level of classification) to ensure all causes, contributory factors and corrective actions are identified. The Project Manager and Environmental Manager and, depending on the classification in consultation with HSE Manager will decide who will lead investigations.

The PC has an Incident Investigation Process that is linked to Synergy. ICAM investigations may apply to more serious events.

Snowy 2.0 TCP
Construction Environmental Management Plan

Investigations are to commence within 24 hours of the incident occurring and the report on the investigation is to be completed within 3 days detailing only the facts relating to the incident. In the event that the PC is unable to complete the investigation within the stipulated 3 days timeframe, they may request an extension of time, which will be subject to approval by TransGrid.

Where lessons are learnt from the investigation, the CEMP may be revised to include revised procedures or requirements. An alert may also be circulated to share lessons learned.

9. Inspections, Monitoring, Auditing and Reporting

9.1. Environmental Inspections

Copies of all environmental inspection reports prepared by the PC’s environmental and site staff, including those undertaken with Transgrid, will be kept with the Project records and closed out within the agreed timeframes.

Throughout the Project, Environmental Advisors will be responsible for carrying out weekly environmental and rainfall inspections using forms specified in Table 9-1

Sub-contractors will attend inspections in relevant areas as required. Environmental Advisors will facilitate debriefing session following such inspections.

At the completion of an inspection, the Environmental Advisor will prepare the following:

- A site inspection report.
- A site inspection action plan listing deficiencies and corrective actions required.
- Sub-contractor notices for major / serious deficiencies.

All deficiencies must be promptly advised to the applicable parties, actioned, verified and closed out within an appropriate timeframe based on risk exposure associated with each deficiency. Required actions with elevated risk exposure will be tracked in UGL ‘Synergy’ for close out assurance.

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

Table 9-1 Inspection schedule

Activity	Frequency	Responsibility	Record
UGL Environmental Site Inspection	Weekly	Environmental Advisors	Site Inspection Weekly Checklist (Appendix J)
Client Environmental Site Inspection	Fortnightly	Transgrid Environmental Manager UGL Environmental Advisor(s)	Transgrid Site Inspection Report
Pre-rainfall inspection	Within 24 hours of the start of a forecasted rainfall event (or on the following working day) Rainfall event being greater than 50% potential for 10mm or more with 24 hours	Environmental Advisors	Pre-rainfall Inspection Checklist (Appendix K)
Post-rainfall inspection	Within 24 hours of rainfall event occurring	Environmental Advisors	Post-rainfall Inspection Checklist (Appendix K)

Snowy 2.0 TCP
Construction Environmental Management Plan

Activity	Frequency	Responsibility	Record
Pre-works inspection	Prior to commencement of work on each roster.	Supervisor	Workplace Inspection Testing and Monitoring Checklist
Daily worksite fauna checks	Daily during construction (active worksites only)	Site Supervisor / Leading Hand	Site Diary
Pre-clearing fauna checks	Daily during clearing	Project Ecologist(s)	BMP Clearing Procedure - Appendix B.2 Pre-Clearing Checklist & Report
Post-clearing fauna checks	Immediately post clearing	Project Ecologist(s)	BMP Clearing Procedure - Appendix B.3 Post-Clearing Checklist
Limb by Limb ('L x L') fauna / hollow checks	During clearing, when triggered (e.g. multiple hollows in trees >130cm DBH)	Project Ecologist(s)	Clearing Records & Post Clearing Report
Active breeding places checks (Nest tree checks – includes YBGs)	Prior to clearing	Project Ecologist(s)	Clearing Records & Pre-Clearing Report
Frog Habitat & Impact Monitoring	Habitat Monitoring – Annually (during the late Spring and summer season) Stochastic Event Monitoring - Rainfall events based (>50 mm within 24 hours)	Site Environmental Representatives and / or Ecologist(s)	Monitoring Records & Frog Monitoring Report
Weed / Pathogen Hygiene Checks	As required	Qualified Personnel	Hygiene Declarations (counter-signed)
Tower Nest Checks	Once prior to stringing	Stringing Supervisor	Daily Diary

Snowy 2.0 TCP
Construction Environmental Management Plan

9.2. Environmental Monitoring Requirements

Monitoring and associated reporting will be undertaken during works in order to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP, and to address specific requirements. The monitoring requirements for required aspects are included in the relevant environmental management subplans. A summary of these requirements is provided as an environmental monitoring program for the Project, included in Appendix L.

Monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under EPBC approval are to be prepared in accordance with DCCEEW-Cth's:

- Guidelines for biological survey and mapped data (2018), or any subsequent official version or as otherwise specified by the Minister in writing.
- Guide to providing maps and boundary data for EPBC Act projects (2021), or any subsequent official version or as otherwise specified by the Minister in writing.

All monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) under the EPBC approval are required to be submitted electronically to DCCEEW-Cth within 12 months of the approval.

Monitoring required under the EPL (21753) is outlined in the Project Water Quality Monitoring Program, in Appendix F of the SWMP. In accordance with the EPL, all records required to be kept by the licence must be:

- In a legible form, or in a form that can readily be reduced to a legible form.
- Kept for at least 4 years after the monitoring or event to which they relate took place.
- Produced in a legible form to any authorised officer of the EPA who asks to see them.

The following records must be kept in respect of any samples required to be collected for the purposes of the EPL:

- The date(s) on which the sample was taken.
- The time(s) at which the sample was collected.
- The point at which the sample was taken.
- The name of the person who collected the sample.

The Environmental Inspection Weekly Checklist and Environmental Monthly Report templates are provided in Appendix J and Appendix K respectively.

9.3. Auditing

Environmental audits will be carried out in accordance with UGLMS-131-740 HSEQ Audit & Assurance Program Management Procedure and to the Audit Summary Table below (Table 9-2). The Check-it Planner / Planning Schedule (Appendix E) will provide further detail on the timings of the audits required.

The audits conducted on this Project will address the following areas:

- Compliance with the CEMP.
- Compliance with legal and other requirements (e.g. licence and Project approval conditions).
- All monitoring and operational reports required by any licences are adequate.
- Environmental mitigation measures specified in the CEMP are being implemented and are effective.

Snowy 2.0 TCP Construction Environmental Management Plan

- Environmental training records are in order.
- Environmental reports are being completed and acted on.
- Environmental events are being recorded and acted on.
- Environmental targets are being achieved.

The CEMP and Legal Compliance audits are to be documented and recorded by UGL in Synergy.

9.3.1. Internal Audits

Internal environmental audits are to be carried out within three (3) months of commencing work onsite and then at least every six (6) months after that (Refer Table 9-2). These audits will be contract, systems, and/or risk-based, and verify whether the works comply with the CEMP, sub-plans and approval requirements. More frequent auditing may occur if environmental checks indicate major deficiencies with environmental management of the site.

Internal audits will be initiated by either the PC, CIMIC and/or Transgrid in accordance with the UGLMS and/or Contract Specification. Internal audit reports will be submitted to Transgrid within ten (10) business days of the audit completion. All audit outcomes will be distributed internally and entered into Synergy for tracking and closeout purposes.

9.3.2. Independent external audits

External environmental auditing will be undertaken in accordance with approval / agency requirements, Transgrid expectations, and the project Contract Specification. This will include as a minimum independent compliance audits to the CSSI (C10) and EPBC (Part B 29).

Independent compliance audits will be undertaken by a Transgrid nominated / department approved auditor, and be advised and supported by Transgrid (as the Proponent). Final audit reports will be received by all parties including the relevant agency, and within required timeframes, and when finalised be made available publicly on Transgrids website.

All non-conformances and opportunities for improvement will be communicated to relevant persons with actionable items entered into Synergy for tracking and closeout purposes. Such compliance audits must receive due attention, and the PC is encouraged to initiate lead-in compliance checking before such audits occur. Details of independent compliant auditing as follows:

Infrastructure Approval

In accordance with Condition C10 of the infrastructure Approval, Independent Audits of the Project must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020), to the following frequency:

- Within 3 months of commencing construction, then at 6 monthly intervals from the initial audit or otherwise agreed by the Secretary.

Within 3 months of commencement of operations, then at 3 year intervals or otherwise agreed by the Secretary.

The proposed independent auditor for the Project must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.

In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the PC must:

- Review and respond to each Independent Audit Report prepared under condition C10 of the Project approval.
- Submit the response to the Planning Secretary.

Snowy 2.0 TCP
Construction Environmental Management Plan

- Make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. Unless otherwise agreed by the Planning Secretary.

Independent Audit Reports and the PC’s response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.

EPBC Approval

In accordance with Condition 28 of the EPBC Approval, Transgrid must ensure that an independent audit of compliance with the conditions, is conducted for every five-year period following the commencement of the Action until this approval expires, unless otherwise specified in writing by the Minister.

For each independent audit, Transgrid must:

- Provide the name and qualifications of the nominated independent auditor, the draft audit criteria, and proposed timeframe for submitting the audit report to the department prior to commencing the independent audit.
- Only commence the independent audit once the nominated independent auditor, audit criteria and timeframe for submitting the audit report have been approved in writing by the department.
- Submit the audit report to the department for approval within the timeframe specified and approved in writing by the department.
- Publish each audit report on the website within 15 business days of the date of the department’s approval of the audit report.
- Keep every audit report published on the website until this approval expires.

Each audit report must report for the five-year period preceding that audit report.

Each audit report must be completed to the satisfaction of the Minister and be consistent with the department’s *Environment Protection and Biodiversity Conservation Act 1999* Independent Audit and Audit Report Guidelines (2019), or any subsequent official version.

Table 9-2 presents auditing requirements that are applicable to the Project.

Table 9-2 Audit summary table.

	Audit	Requirement	Timing	Responsibility	Report Recipient
1	Internal Audit	Verify compliance with the UGLMS, specifications, risks and construction documentation	First audit within 3 months of commencement of construction, and then at 6 monthly intervals thereafter	PC Environmental Manager	Transgrid
2	External independent audit – Infrastructure Approval	Verify compliance with approval and legal requirements, construction documentation and any other	Within 3 months of commencing construction At 6 monthly intervals during construction from the date of the initial independent audit or as	Transgrid	DPHI

Snowy 2.0 TCP
Construction Environmental Management Plan

	Audit	Requirement	Timing	Responsibility	Report Recipient
		commitments.	otherwise agreed by the Secretary Within 3 months of commencement of operations.		
3	External independent audit – EPBC Approval	Verify compliance with approval conditions	Every 5 years following the commencement of the action	Transgrid	DCCEEW-Cth

Snowy 2.0 TCP
Construction Environmental Management Plan

9.4. Reporting

Table 9-3 sets out the reporting requirements applicable to the Project, timing of the reporting, responsibilities for managing preparation of the reports and the intended recipient(s).

Additional reporting may be necessary as the works progress. In such a circumstance, Table 9-3 will be amended to reflect these changes.

Table 9-3 Project environmental reporting requirements

Report	Requirement	Timing	Responsibility	Report Recipient
Monthly Environmental Report. Formalised in meeting minutes with the client.	For incorporation in Project Monthly Reports including environmental statistics (i.e. incidents, regulatory action, complaints on environmental issues), regulatory and authority considerations, monitoring program performance, key environmental issues, environmental controls implemented, details of any non-compliances and actions undertaken to address the non-compliance, and any predicted environmental impacts for the following month. Template is provided in Appendix M.	Monthly	PC Project Manager, PC Environmental Manager	Transgrid
Transgrid Environmental Inspection Report	Response to matter raised in Transgrid site inspections.	As required. Typically, every two weeks for Transgrid inspection reports.	Transgrid	Transgrid & UGL
Compliance Tracking Report	Prepared on a 6-monthly basis, commencing prior to any works being carried out on the	Prepared 3 months after commencement	PC Project Manager,	Transgrid / DPHI

Snowy 2.0 TCP
Construction Environmental Management Plan

Report	Requirement	Timing	Responsibility	Report Recipient
	<p>construction site, compliance tracking reports providing the following details for the six months:</p> <p>(a) Compliance with the relevant, licences / permits approval conditions, Environmental Assessment documents, safeguards and management measures;</p> <p>(b) Environmental performance for environmental issues including air quality, noise, soil and water, biodiversity, traffic, vibration, heritage, waste, incidents and community;</p> <p>(c) Copies of environmental records and monitoring results;</p> <p>(d) Record of inspections;</p> <p>(e) Record of any internal audits;</p> <p>(f) Evidence of any approval or permits obtained for works during the reporting period;</p> <p>(g) Complaint register and complaints resolution; and</p> <p>(h) Summary of non-compliances for the reporting period.</p> <p>The final compliance tracking report must be submitted within 20 days of the date of</p>	<p>then on a 6-monthly basis.</p> <p>The final compliance tracking report must be submitted within 20 days of the date of Construction Completion of the UGL's Work.</p>	<p>PC Environmental Manager, PC Environmental Advisors</p>	

Snowy 2.0 TCP
Construction Environmental Management Plan

Report	Requirement	Timing	Responsibility	Report Recipient
	<p>Construction Completion of the UGL's Work. The final compliance tracking report must also provide details of how the relevant Environmental Assessment document requirements have been closed out.</p>			
<p>EPBC Annual Compliance Reporting</p>	<p>Prepared on an annual basis following the date of approval or as otherwise agreed to in writing by the Minister. The Report will be prepared in accordance with DCCEEW Annual Compliance Report Guidelines (2014), or any subsequent official version.</p> <p>Each compliance report must include:</p> <ul style="list-style-type: none"> • Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents. • One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared. • A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented. 	<p>On an annual basis.</p>	<p>Transgrid with assistance from PC Project Manager, PC L Environmental Manager, & PC Environmental Advisors</p>	<p>Transgrid / DCCEEW-Cth</p>

Snowy 2.0 TCP
Construction Environmental Management Plan

Report	Requirement	Timing	Responsibility	Report Recipient
	<p>The Transgrid and UGL must:</p> <ol style="list-style-type: none"> a. Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required. b. Notify the department electronically, within 5 business days of the date of publication that a compliance report has been published on the website. c. Provide the weblink for the compliance report in the notification to the department. d. Keep all published compliance reports required by these conditions on the website until the expiry date of this approval. e. Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public. f. If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to the department within 5 business days of its publication on the website and notify the department in writing what exclusions 			

Snowy 2.0 TCP
Construction Environmental Management Plan

Report	Requirement	Timing	Responsibility	Report Recipient
	and redactions have been made in the version published on the website.			
EPL Monitoring Report	<p>Prepared by a suitably qualified and experienced person and include, but not be limited to:</p> <ul style="list-style-type: none"> a. Results of all water quality monitoring undertaken in the preceding six (6) month period b. Results of all weather monitoring undertaken in the preceding six (6) month period c. Assessment of historical trends in all water sampling data for each monitoring point inclusive of the current six (6) month period d. Identification of instances where the water quality objective triggers for each relevant pollutant were exceeded at receiving water locations and/or where the predicted discharge water quality was exceeded at sediment basin discharge points e. Include details of any actions taken by the Licensee in response to exceedances identified under point (d), including but not limited to: <ul style="list-style-type: none"> i. additional monitoring ii. remedial actions; and 	6 monthly unless otherwise agreed in writing by the EPA	Transgrid with assistance from PC Environmental Manager & PC Environmental Advisors	EPA

Snowy 2.0 TCP
Construction Environmental Management Plan

Report	Requirement	Timing	Responsibility	Report Recipient
	iii. activation of trigger, action, response plans (TARPs); f. Recommendations for future actions in relation to monitoring and/or management			
EPL Annual Returns	Report on compliance with EPL, including: <ul style="list-style-type: none"> • A Statement of Compliance • A Monitoring and Complaints Summary • A Statement of Compliance - Licence Conditions • A Statement of Compliance - Load based Fee • A Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan • A Statement of Compliance - Requirement to Publish Pollution Monitoring Data • A Statement of Compliance - Environmental Management Systems and Practices. 	Within 60 days of the anniversary of the EPL.	Transgrid with assistance from PC Environmental Manager & PC Environmental Advisors	EPA

Snowy 2.0 TCP
Construction Environmental Management Plan

9.5. Non-conformity, corrective and preventative actions

Any member of the Project team may raise a non-conformance or improvement opportunity. Environmental non-conformances might include:

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

UGL's management system shall be used to monitor and verify:

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

Environmental non-conformances will be dealt with through the Incident Management Procedure detailed in Section 8.

For each non-conformance identified a corrective and/or preventative action (or actions) must be implemented. In addition, any environmental management improvement opportunities can be initiated as a result of incidents or emergencies, monitoring and measurement, audit findings or other reviews. Improvement opportunities may also result in the implementation of corrective / preventative actions.

Corrective / preventative actions and improvement opportunities, will be entered into the UGL's quality system database (Synergy) and include detail of the issue, action required and timing and responsibilities. The record will be updated with a date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required.

Non-conforming activities may be stopped, if necessary, by an Environmental Advisor or delegate. The works will not commence until a corrective / preventative action has been put in place. In such circumstances a non-conformance report must be prepared in accordance with the Quality Management Plan.

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management are also documented in the Quality Management Plan.

10. Review and improvement

10.1. Revision of the CEMP

A document review process ensures that environmental documentation including this CEMP is updated as appropriate for the specific works that are occurring on-site. Reviews of the CEMP are expected to be triggered by:

- Formal system audits.
- Client audits.
- Additional environmental aspect / impact assessment (and related risk).
- Unsatisfactory environmental performance.
- Environmental near misses and incidents.

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of the Environmental Manager to prepare the revised documents in consultation with Transgrid.

The Environmental Manager must review, and if necessary, revise the strategies, plans, and programs required under the Infrastructure Approval to the satisfaction of the Planning Secretary, in accordance with condition C2 of the Infrastructure Approval, and within 3 months of the:

- Submission of an incident report under condition C7.
- Submission of an independent audit report under condition C10.
- Any modification to the conditions of the consent.
- Issue of direction of the Planning Secretary under condition A2, which requires a review.

Where any revisions to the approved management plans, strategies or programs are made, the revised document will be issued to Transgrid for certification / acceptance of the changes prior to submission to DPHI for approval. In accordance with condition C3, revised strategies, plan or programs may be prepared without undertaking consultation with all parties nominated under the applicable condition in this approval. Any updates to other management plans which form part of the environmental management system however were not required by the approval, are to be submitted to Transgrid for review and certification / acceptance.

Only the Environmental Manager, Environmental Advisors or delegate, have the authority to change any of the environmental management documentation.

The approved CEMP will be held in the site office and be available upon request.

10.2. Continuous improvement

Continuous improvement of this CEMP will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance.
- Determine the cause or causes of non-conformances and deficiencies.
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies.

Snowy 2.0 TCP
Construction Environmental Management Plan

- Document any changes in procedures resulting from process improvement.
- Make comparisons with objectives and targets.

11. Document management

11.1. Environmental records

All documentation pertaining to environmental matters will be managed in accordance with the Quality Management System document approval, identification, storage, protection, retention, distribution, revision, retrieval and when appropriate disposal. The PC will:

- Appoint adequate resources to ensure environmental documents are current and available.
- Provide a document control system that assists users to locate environmental documents.
- Ensure changes to environmental documents are communicated and change management process is used.
- Ensure users are consulted during the development of, and any subsequent changes to, environmental documents.
- Implement a documented process for controlling and storing environmental records.
- Define what environmental records are required and communicate these requirements to responsible persons.
- Ensure environmental records, in both electronic and hardcopy forms, are preserved from loss, damage and unauthorised access.
- Identify and comply with environmental record retention times.

A Project environmental filing structure is provided in Appendix N.

11.2. Document and Data Control

The PC will coordinate the preparation, review and distribution, as appropriate, of the environmental management plans as well as the CoA, and environmental assessment documents. During the Project, the environmental documents will be stored at the main site compound and electronically.

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

The procedure will also ensure that documentation is:

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

11.3. Record Keeping

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

- All monitoring, inspection and compliance reports / records.
- Correspondence with public authorities.
- Induction and training records.
- Reports on environmental incidents, non-conformances, complaints and follow-up action.
- Environmental events and investigation reports, and trends.

Snowy 2.0 TCP
Construction Environmental Management Plan

- Environmental monitoring data.
- Waste quantity reports, and regulated waste documentation where required.
- Weed Hygiene Checklists.
- Community engagement information.

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

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDICES

APPENDIX A Project Conditions of Approval

Snowy 2.0 TCP
Construction Environmental Management Plan

NSW Project Infrastructure Approval (DPE, 2nd September 2022)

ID	Condition	Plan	Comments
SCHEDULE 2 - PART A ADMINISTRATIVE CONDITIONS			
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT			
A1	In meeting the specific performance measures and criteria of this approval, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction, operation, rehabilitation, upgrading or decommissioning of the development.	CEMP and subplans	
TERMS OF APPROVAL			
A2	The development must be carried out: (a) in compliance with the conditions of this approval; (b) in accordance with all written directions of the Planning Secretary; (c) generally in accordance with the EIS; and (d) generally in accordance with the Development Layout in Appendix 2.	CEMP and subplans	
A3	The Proponent must comply with any requirement/s of the Planning Secretary arising from the Department's assessment of: (a) any strategies, plans or correspondence that are submitted in accordance with this approval; (b) any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and (c) the implementation of any actions or measures contained in these documents.	EMS, CEMP and subplans	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments																
A4	The conditions of this approval and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(d). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) and A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	Noted																	
A5	Any document that must be submitted within a timeframe specified in or under the terms of this approval may be submitted within a later timeframe agreed with the Planning Secretary. This condition does not apply to the immediate written notification required in respect of an incident under condition C7.	Noted, EMS																	
LIMITS ON APPROVAL																			
A6	<p>The Proponent must comply with the restrictions in Table 1 below.</p> <p>Table 1 Restrictions on Approval</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #D3D3D3;">Matter</th> <th style="background-color: #D3D3D3;">Kosciuszko National Park</th> <th style="background-color: #D3D3D3;">Bago State Forest</th> <th style="background-color: #D3D3D3;">Total</th> </tr> </thead> <tbody> <tr> <td>Maximum Disturbance Area</td> <td>81 ha</td> <td>44 ha</td> <td>125 ha</td> </tr> <tr> <td>Maximum Native Vegetation Full Clearing</td> <td>37 ha</td> <td>34 ha</td> <td>71 ha</td> </tr> <tr> <td>Maximum Native Vegetation Partial Clearing</td> <td>38 ha</td> <td>9.2 ha</td> <td>47.2 ha</td> </tr> </tbody> </table>	Matter	Kosciuszko National Park	Bago State Forest	Total	Maximum Disturbance Area	81 ha	44 ha	125 ha	Maximum Native Vegetation Full Clearing	37 ha	34 ha	71 ha	Maximum Native Vegetation Partial Clearing	38 ha	9.2 ha	47.2 ha	CEMP and BMP	
Matter	Kosciuszko National Park	Bago State Forest	Total																
Maximum Disturbance Area	81 ha	44 ha	125 ha																
Maximum Native Vegetation Full Clearing	37 ha	34 ha	71 ha																
Maximum Native Vegetation Partial Clearing	38 ha	9.2 ha	47.2 ha																
LAPSE OF A <i>The areas in Table 1 relate to direct disturbance and clearing and do not include the indirect impacts of this disturbance and clearing.</i>																			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
A7	This approval will lapse if the Proponent does not physically commence the development within 5 years of the date on which it is granted.	EMS	
EVIDENCE OF CONSULTATION			
A8	<p>Where conditions of this approval require consultation with an identified party, the Proponent must:</p> <p>(a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and</p> <p>(b) provide details of the consultation undertaken including:</p> <p>(i) the outcome of that consultation, matters resolved and unresolved; and</p> <p>(ii) details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed the matters not resolved.</p>	CEMP and subplans	
PROTECTION OF PUBLIC INFRASTRUCTURE			
A9	<p>Unless the Proponent and the applicable authority agree otherwise, the Proponent must:</p> <p>(a) undertake any works on or in the vicinity of public infrastructure in consultation with the applicable public authority or service provider responsible for the public infrastructure;</p> <p>(b) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and</p> <p>(c) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.</p> <p>(d) This condition does not apply to any damage to roads caused as a result of general road usage which is expressly provided for in the conditions of this approval.</p>	EMS	
DEMOLITION			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
A10	The Proponent must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures (Standards Australia, 2001), or its latest version.	N/A	No demolition works are proposed.
STRUCTURAL ADEQUACY			
A11	<p>All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with the relevant requirements of the BCA; and where the BCA is not applicable, to the relevant Australian Standard.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Under Part 6 of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works. • The EP&A Regulation sets out the requirements for the certification of the development. 	Design	
COMPLIANCE			
A12	The Proponent must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the development.	CEMP	
OPERATION OF PLANT AND EQUIPMENT			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
A13	All plant and equipment used on site, or in connection with the development must be: (a) maintained in a proper and efficient condition; (b) operated in a proper and efficient manner; and (c) kept free of weeds, seeds and pathogens when entering or leaving the site.	NVMP, BMP	
APPLICABILITY OF GUIDELINES			
A14	References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.	Noted	
A15	However, consistent with the conditions of this approval and without altering any limits or criteria in this approval, the Planning Secretary may, when issuing directions under this approval in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	Noted	
SCHEDULE 2 - PART B ENVIRONMENTAL CONDITIONS - GENERAL			
NOISE AND VIBRATION			
B1	Unless the Planning Secretary agrees otherwise, road upgrades, construction, upgrading and decommissioning activities may only be undertaken between 6 am to 6 pm.	NVMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B2	<p>The following construction, upgrading and decommissioning activities may be carried out outside the hours specified in condition B1 above:</p> <ul style="list-style-type: none"> (a) the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; or (b) emergency work to avoid the loss of life, property or to prevent material harm to the environment; or (c) activities that are inaudible at sensitive receivers that do not require traffic movements on local roads; or (d) road upgrades required by the relevant roads authority/manager to be undertaken outside the construction hours specified in condition B1; or (e) works carried out in accordance with an Out-of-Hours Work Protocol approved in accordance with condition B3. 	NVMP	
B3	<p>An Out-of-Hours Work Protocol must be prepared to identify a process for the consideration, management and approval of works which are outside the hours defined in condition B1. The Protocol must be approved by the Planning Secretary before commencing these works. The Protocol must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with Council; (b) provide a process for the consideration of out-of-hours works against the relevant construction noise, traffic noise and vibration criteria, including the determination of low and high-risk activities; (c) identify an approval process that considers the risk of activities, proposed mitigation, management, and coordination, (d) identify Department and Council arrangements for approved out of hours work. 	NVMP - Out-of-Hours Work Protocol	
Construction and Decommissioning			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B4	The Proponent must take all reasonable and feasible steps to minimise the construction, upgrading or decommissioning noise of the development in the locations where the noise is audible to sensitive receivers, including any associated traffic noise	NVMP	
B5	The Proponent must implement mitigation measures with the aim of achieving the road traffic noise assessment criteria for land uses from NSW Road Noise Policy (DECCW, 2011).	NVMP	
AIR QUALITY			
B6	In addition to the performance outcomes, commitments and mitigation measures specified in the EIS, the Proponent must take all reasonable steps to: (a) minimise the off-site dust, fume, blast emissions and other air pollutants of the development; and (b) minimise the surface disturbance of the site.	SWMP	
SOIL AND WATER			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
Permanent Spoil Emplacement Areas			
B7	<p>Apart from the spoil that is provided to the NPWS for use in other parts of the Kosciuszko National Park, Forestry Corporation for use in other parts of State Forest, sent off-site, used to construct temporary or permanent infrastructure for the development or Snowy 2.0 Main Works (in accordance with that infrastructure approval, or used to rehabilitate the site or the Snowy 2.0 Main Works site, the Proponent must ensure that any spoil disposed within Kosciuszko National Park are emplaced in the following emplacement areas:</p> <ul style="list-style-type: none"> (a) Ravine Bay; or (b) GF01; or (c) Lobs Hole; or (d) Tantangara for spoil containing naturally occurring asbestos only. <p>Note: The location of these emplacement areas is shown in the figures in Appendix 2.</p>	SWMP	
Spoil Management Plan			
B8	<p>Prior to the commencement of construction, the Proponent must prepare a Spoil Management Plan to the satisfaction of the Planning Secretary for the development. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person in consultation with the NPWS, FCNSW, EPA, Water Group, NRAR and DPI; (b) include a description of the measures that would be implemented to: <ul style="list-style-type: none"> (i) minimise the spoil generated by the development; (ii) maximise the reuse of non-reactive spoil on site and in other parts of the Kosciuszko National Park, Bago State Forest and/or offsite; (iii) minimise the water quality impacts of the temporary spoil stockpiles; 	SMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(c) provide an overarching framework for the management of all spoil generated on site, including the testing, classification, handling, temporary storage, chain of custody and disposal of spoil – that complies with the spoil management requirements in condition B7 above;</p> <p>(d) include a detailed plan for managing the temporary spoil stockpiles of the development, which includes suitable triggers for remedial measures (if necessary) and describes the contingency measures that would be implemented to address any water quality risks;</p> <p>(e) investigating, assessing and managing contaminated land and soils in the development area;</p> <p>(f) investigation, assessing and managing the potential for naturally occurring asbestos, potentially acid forming material and other hazardous materials in the development area;</p> <p>(g) include a detailed plan for managing and the disposal of all the reactive or contaminated spoil generated on site, including the contingency measures that would be implemented if the volumes of this spoil are greater than expected and unsuitable for land disposal;</p> <p>(h) include a program to monitor and publicly report on:</p> <p>(i) the management of spoil on site;</p> <p>(ii) progress against the detailed completion criteria and performance indicators.</p> <p>Following the Planning Secretary’s approval, the Proponent must implement the approved Spoil Management Plan.</p>		
Water Supply			
B9	The Proponent must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.	SWMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the development.		
Erosion and Sedimentation			
B10	<p>The Proponent must:</p> <ul style="list-style-type: none"> (a) minimise erosion and control sediment generation; (b) take all reasonable and feasible measures to prevent a discharge to waters. This may include, but need not be limited to: <ul style="list-style-type: none"> (i) adopt enhanced erosion and sediment controls, taking into consideration the best available information from the Snowy 2.0 Main Works project; (ii) minimising the volume of dirty water generated onsite; and (iii) exploring and implementing beneficial reuse opportunities such as irrigation and dust suppression. 	ESCP	
Pollution of Waters			
B11	Unless otherwise authorised by an EPL the Proponent must ensure the development does not cause any water pollution, as defined under Section 120 of the POEO Act.	SWMP	
B12	<p>The Proponent must:</p> <ul style="list-style-type: none"> (a) ensure that appropriate components of the substation are suitably banded; (b) ensure that all liquid waste captured by the substation's spill oil containment system is classified, transported, and disposed of at a facility that can lawfully accept the waste; and 	SWMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	(c) minimise any spills of hazardous materials or hydrocarbons, and clean up any spills as soon as possible after they occur.		
B13	The Proponent must ensure that any groundwater dewatering activities do not discharge to watercourses.	SWMP	
Riparian Areas			
B14	<p>The Proponent must ensure:</p> <p>(a) all activities on waterfront land are constructed in accordance with the Guidelines for Controlled Activities on Waterfront Land (2012), unless DPE Water agrees otherwise; and</p> <p>(b) the geomorphic condition of the major rivers and distributary channels crossed by the development is not impacted.</p>	SWMP	
Flooding			
B15	<p>The Proponent must ensure that the development:</p> <p>(a) does not materially alter the flood storage capacity, flows or characteristics in the development area or off- site; and</p> <p>(b) is designed, constructed and maintained to reduce impacts on surface water, localised flooding and groundwater at the site, unless otherwise agreed by either FCNSW or NPWS.</p>	SWMP	
Water Management Plan			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B16	<p>Prior to the commencement of construction, the Proponent must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This sub-plan must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person in consultation with the EPA, FCNSW, NPWS, the Water Group and NSW DPI; (b) include provisions for: <ul style="list-style-type: none"> (i) detailed baseline data on surface water flows and quality in the watercourses that could be affected by the development, and a program to augment this baseline data over time; (ii) detailed criteria for determining surface water impacts of the development (flows, quality and flooding), including criteria for triggering remedial action (if necessary); and (iii) a description of the measures that would be implemented to minimise the surface water impacts of the development and comply with the relevant water management requirements in conditions B10 to B15 are complied with; and (c) managing flood risk during construction. <p>Following the Planning Secretary’s approval, the Proponent must implement the Water Management Plan.</p>	SWMP	
BIODIVERSITY			
Restrictions on Clearing and Habitat			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B17	<p>Unless otherwise agreed with the Planning Secretary, the Proponent must:</p> <ul style="list-style-type: none"> (a) ensure that no more than: <ul style="list-style-type: none"> (i) 9.35 ha of Caladenia montana species habitat (ii) 89.06 ha of Gang-gang Cockatoo (breeding) species habitat (iii) 10.86 ha of Masked Owl (breeding) species habitat (iv) 117.29 ha of Eastern Pygmy-possum species habitat (v) 59.03 ha of Yellow-bellied Glider species habitat; and (vi) 1.67 ha of Booroolong Frog species habitat (vii) is cleared for the development; and (b) minimise: <ul style="list-style-type: none"> (i) the impacts of the development on hollow-bearing trees; (ii) the impacts of the development on threatened species; and (iii) the clearing of native vegetation and key habitat. 	BMP	
Biodiversity Offset Package			
B18	<p>Prior to carrying out any development that would impact on biodiversity values outside Kosciuszko National Park, the Proponent must prepare a Biodiversity Offset Package (Package) that is consistent with the EIS, in consultation with BCS, to the satisfaction of the Planning Secretary in writing. The Package must include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> (a) details of the specific biodiversity offset measures to be implemented and delivered in accordance with the EIS; 	Biodiversity Offset Package	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(b) the cost for each specific biodiversity offset measures, which would be required to be paid into the Biodiversity Conservation Fund if the relevant measures is not implemented and delivered (as calculated in accordance with Division 6 of the Biodiversity Conservation Act 2016 (NSW)) and the offset payment calculator that was established as of 9 August 2021;</p> <p>(c) the timing and responsibilities for the implementation and delivery of measures required in the Package; and</p> <p>(d) confirmation that the biodiversity offset measures will have been implemented and delivered by no later than 1st September 2024.</p> <p>Following approval, the Proponent must implement and deliver the Biodiversity Offset Package.</p>		
B19	<p>Prior to carrying out any development outside of the Kosciuszko National Park that could impact the biodiversity values requiring offset, the Proponent or its nominee must lodge a bank guarantee with a total value of \$24,869,236, in accordance with the Deed of Agreement with the Planning Secretary executed on 1st September 2022. The Proponent must comply with the terms of the Deed.</p> <p>Note: this condition provides security to the Minister for the performance of the Proponent’s obligations under this approval in relation to biodiversity offsets and release funds for payment into the Biodiversity Conservation Trust in the event that the biodiversity offsets (either in whole or part) are not delivered in accordance with the Package by the Proponent</p>	Biodiversity Offset Package	
Biodiversity Offset Package (Kosciuszko National Park)			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B20	<p>Prior to carrying out any development that could impact the biodiversity values inside Kosciuszko National Park, the Proponent or its nominee must pay \$10,586,027 to the NPWS to offset the residual biodiversity impacts.</p> <p>Notes:</p> <ul style="list-style-type: none"> • The NPWS will use these funds and any interest generated by these funds to enhance the biodiversity values of the Kosciuszko National Park. However, in limited circumstances where it is not possible to address all of the residual impacts of the development within Kosciuszko National Park, the NPWS may use some of these funds to ensure suitable conservation actions are carried outside the park. • To ensure accountability, the NPWS will: <ul style="list-style-type: none"> - develop and implement a detailed program for the allocation of these funds to specific projects, focusing on the ecosystems and species affected by the development; and - monitor, evaluate and publicly report on the progress of the implementation of the detailed program and the effectiveness of the specific projects; • The NPWS will develop and implement a specific program in consultation with DCCEW and BCS to carry out conservation actions to address the residual biodiversity impacts of the development on the following Commonwealth listed species and communities: <ul style="list-style-type: none"> - Booroolong Frog. 	Biodiversity Offset Package	
Biodiversity Management Plan			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B21	<p>Prior to carrying out any development that could impact biodiversity values, unless the Planning Secretary agrees otherwise, the Proponent must prepare a Biodiversity Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <p>(a) be prepared by a suitably qualified and experienced biodiversity expert/s in consultation with NPWS, BCS, FCNSW and DCCEEW;</p> <p>(b) be prepared in accordance with the Biodiversity Development Assessment Report (Revision 7, dated 22 August 2022);</p> <p>(c) include a description of the measures that would be implemented to:</p> <p>(i) ensure the development does not adversely affect the native vegetation and habitat outside the disturbance footprint;</p> <p>(ii) minimise the clearing of native vegetation and habitat within the disturbance area;</p> <p>(iii) minimise the impacts of the development on threatened flora and fauna species within the disturbance area and its surrounds, including the:</p> <ul style="list-style-type: none"> • <i>Caladenia montana</i>; • Gang-gang Cockatoo; • Masked Owl; • Eastern Pygmy-possum; • Yellow-bellied Glider; and • Booroolong Frog <p>(iv) minimise the potential indirect impacts on threatened flora and fauna species, migratory species and 'at risk' species;</p> <p>(v) minimise potential fauna strike in sensitive habitat areas on the road network within the site, including reducing speed limits between sunset and sunrise;</p>	BMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(vi) minimise the impacts on fauna on site, including undertaking pre-clearance surveys;</p> <p>(vii) protect native vegetation and key fauna habitat outside the approved disturbance area; (viii) monitor the areas of partial clearance within three months of the commencement of construction and provision of a verification report to confirm if any changes are required to the construction vegetation clearing protocols;</p> <p>(ix) maximise the salvage of resources within the disturbance area for reuse in the restoration of vegetation and habitat on site, including native vegetative material, hollow logs, ground timber, and topsoil containing vegetative matter and native seed bank;</p> <p>(x) collect seeds within the approved disturbance area for use in the ecological rehabilitation of the site;</p> <p>(xi) minimise the spread of weeds, pathogens and feral pests on site, and import or export of these matters to or from the site;</p> <p>(xii) minimise the generation and dispersion of sediment to watercourses, particularly the Sheep Station Creek, Lick Hole Gully, Cave Gully, Wallaces Creek and Yarrangobilly River;</p> <p>(xiii) minimise the light spill from night works, including using directional and LED lighting; and</p> <p>(xiv) minimise bushfire risk.</p> <p>(d) include construction clearing and operation vegetation management protocols</p> <p>(e) include a strategy to address:</p> <p>(i) management of activities within the 50 m exclusion zone of the Yarrangobilly River and its tributaries;</p> <p>(ii) a trigger action response plan identifying actions to be implemented should any water quality criteria be exceeded focusing on the extent to which exceedances might affect the Booroolong Frog; and</p>		

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(f) include a program to monitor, evaluate and publicly report on the effectiveness of these measures.</p> <p>Following the Planning Secretary's approval, the Proponent must implement the Biodiversity Management Plan.</p>		
HERITAGE			
Protection of Heritage Items			
B22	<p>The Proponent must ensure the development does not cause any direct or indirect impacts on:</p> <p>(a) any Aboriginal heritage items located outside the approved construction envelope (see Appendix 3); and</p> <p>(b) any of the historic heritage items outside the construction envelope (see Appendix 3).</p>	HMP	
B23	<p>Prior to carrying out any activity that could harm heritage items, the Proponent must:</p> <p>(a) salvage and relocate all heritage items identified for salvage and relocation to a suitable alternative location, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010);</p> <p>(b) undertake archival recording, test excavation and/or salvage of the historic items listed in Table 5 and Table 7 of Appendix 3 if these items are to be affected by the development.</p>	HMP	
Heritage Management Plan			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B24	<p>Prior to carrying out any development that could directly or indirectly impact the heritage items identified in Appendix 3, the Proponent must prepare a Heritage Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <p>(a) be prepared in consultation with Heritage Council, Heritage NSW, NPWS and Aboriginal Stakeholders;</p> <p>(b) include a description of the measures that would be implemented for:</p> <p>(i) protecting the heritage items identified in Table 1 of Appendix 3, including fencing off the heritage items (where required) prior to carrying out any development that could harm the heritage items, and protecting any items located outside the approved construction envelope;</p> <p>(ii) salvaging and relocating the heritage items identified in condition B24;</p> <p>(iii) where impacts cannot be avoided to R56 and R120, details of the proposed archaeological research design and excavation methodology, and findings of the Final Archaeological Excavation Report, in accordance with the relevant Heritage Council guidelines;</p> <p>(iv) minimising and managing the impacts of the development on heritage items within the construction envelope, including a strategy for the long-term management of any heritage items or material collected during the test excavation or salvage works;</p> <p>(v) a contingency plan and reporting procedure if:</p> <ul style="list-style-type: none"> • heritage items outside the approved construction envelope are damaged; • previously unidentified heritage items are found; or • Aboriginal skeletal material is discovered; <p>(vi) ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that records are kept of these inductions; and</p>	HMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(vii) ongoing consultation with Aboriginal stakeholders during the implementation of the plan; and</p> <p>(c) include a program to monitor and publicly report on the effectiveness of these measures and any heritage impacts of the development; and</p> <p>(d) include a program to publish;</p> <p>(i) any detailed archival records required under the conditions of this approval; and</p> <p>(ii) the findings of any excavations and salvage works.</p> <p>Following the Planning Secretary’s approval, the Proponent must implement the Heritage Management Plan.</p>		
TRAFFIC AND TRANSPORT			
Designated Heavy and Over-Dimensional Vehicle Routes			
B25	<p>All over-dimensional vehicles associated with the development must only travel to and from the site via the Primary Access Routes described in the EIS, as identified in the figure in Appendix 3, unless the Planning Secretary agrees otherwise.</p> <p>Note: The Proponent is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over- dimensional vehicles on the road network.</p>	TTMP	
B26	<p>All heavy and light vehicles associated with the development:</p> <p>(a) must travel to and from the site via the Primary Access Route described in the EIS, as identified in the figure in Appendix 4; and</p> <p>(b) may travel to and from the site via the Secondary Access Routes and Water Supply Routes, subject to the requirements in condition B31, to the satisfaction of the relevant roads authority/manager.</p>	TTMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	unless the Planning Secretary agrees otherwise.		
Transport Strategy			
B27	<p>Prior to commencing construction in Project Area West, the Proponent must prepare a Transport Strategy, in consultation with the relevant roads authority/manager, to the satisfaction of the Planning Secretary, which:</p> <ul style="list-style-type: none"> (a) identifies the location and type of any necessary road upgrades (including roads, intersections, crossing points, bridges and access points), including consideration of relevant amenity impacts; (b) ensures that any road upgrades comply with the Austroads Guide to Road Design (as amended by TfNSW supplements), unless the relevant road authority agrees otherwise; (c) includes a detailed assessment of potential impacts of any necessary road upgrades (such as heritage and biodiversity impacts), including consideration of appropriate mitigation measures; (d) identifies whether intersections, crossing points and access points would be permanent or temporary; and (e) includes measures or notifying, seeking feedback from and addressing the concerns of impacted residents along the route; 	Transport Strategy	
B28	Prior to commencing construction in Project Area West, the proponent must implement the road upgrades and the mitigation measures identified in the Transport Strategy in condition B27, to the satisfaction of the relevant roads authority/manager.	Transport Strategy	
Road Maintenance			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B29	<p>The Proponent must:</p> <p>(a) undertake an independent dilapidation survey to assess the:</p> <p>(i) existing condition of all local roads on the transport route shown in the figure in Appendix 4 (including local road crossings) prior to construction, upgrading or decommissioning works; and</p> <p>(ii) condition of all local roads on the transport route (including local road crossing):</p> <ul style="list-style-type: none"> • within 1 month of the completion of construction, upgrading or decommissioning works, or within a timeframe agreed to by the relevant roads authority/manager; • on an annual basis during construction, or within a timeframe agreed to by the relevant roads authority/manager; <p>(b) repair (or pay the full costs associated with repairing) any damage to local roads on the transport route (including local road crossings):</p> <p>(c) rehabilitate and/or make good any development related damage:</p> <p>(i) identified during the construction and/or decommissioning works if it could endanger road safety, as soon as possible after it is identified but within 7 days at the latest, unless the relevant road authority/manager agrees otherwise; and</p> <p>(ii) identified in any dilapidation survey completed after the construction, upgrading or decommissioning works within 2 months of the completion of the survey to the satisfaction of the relevant roads authority/manager</p>	TTMP	
Vehicle Restrictions			
B30	<p>The Proponent must:</p> <p>(a) restrict development-related vehicle speeds on Lobs Hole Ravine Road, Mine Trail Road and within the site to 30 km/h between sunset and sunrise, unless the Planning Secretary agrees otherwise;</p>	TTMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	(b) restrict the use of Elliott Way inside KNP to no more than 8 heavy vehicles per day, for water cartage purposes only from the Snowy Hydro T2 Tailbay site; (c) restrict development-related vessel speeds on Talbingo Reservoir to current TfNSW speed limits.		
Bridge Crossing – Sheep Station Creek			
B31	The Proponent must ensure that any temporary and the permanent bridge over Sheep Station Creek is designed and constructed to comply with the relevant requirements of the: (a) Relevant Austroads Standards (such as elevating them above the 1% AEP flood level); (b) Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018); and (c) Policy and Guidelines for Fish Habitat Conservation (DPI, 2013) and Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries, 2003).	Design, SWMP	
Traffic and Transport Management Plan			
B32	Prior to commencing construction or road upgrades identified in condition B27 (whichever comes first), the Proponent must prepare a Traffic Management Plan for the development in consultation with FCNSW, NPWS, TfNSW, Snowy Valleys Council, Snowy Monaro Regional Council and NSW Police, and to the satisfaction of the Planning Secretary. This plan must include: (a) details of the transport route to be used for all development-related traffic; (b) details of the road upgrade works required by condition B27 of this approval; (c) details of the measures that would be implemented to comply with the transport management requirements in conditions B25 to B30 above; (d) details of the measures that would be implemented to:	TTMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(i) minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including:</p> <ul style="list-style-type: none"> • a description of the proposed dilapidation surveys required by condition B29 of this approval; • a description of the proposed measures for managing traffic flow around the work sites, construction compounds and accommodation camp; • scheduling heavy vehicle movements to avoid peak periods; • minimising convoy lengths; • reducing the speeds of development-related traffic at key intersections along the Snowy Mountains Highway, including the Link Road intersection; • temporary traffic controls, including detours and signage; • procedures for stringing cables and transmission lines across roads and Talbingo Reservoir; • notifying the local community about development-related traffic impacts; • procedures for receiving and addressing complaints from the community about development related traffic; • minimising potential cumulative traffic impacts with other projects in the area; • minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queueing on the public road network; • minimising impacts to the public using Talbingo Reservoir and any water related infrastructure such as the O'Hares campground boat ramp; • implementing measures to minimise development-related traffic on the public road network outside standard construction hours; • minimising dirt and debris tracked on to the public road network from development related traffic; 		

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<ul style="list-style-type: none"> • details of the employee shuttle bus service, including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service; • encouraging car-pooling or ride sharing by employees; • scheduling the haulage vehicle movements to minimise convoy lengths or platoons; • responding to local climate conditions that may affect road safety, such as snow, ice, fog, dust, wet weather and flooding; • ensuring loaded vehicles entering or leaving the site have their loads covered or contained and leave site in a forward direction; • responding to any emergency repair or maintenance requirements; • provisions for maintaining access to the site for FCNWS, NPWS and emergency vehicle access to the site at all times; • a traffic management system for managing over-dimensional vehicles; and • fatigue management; <p>(ii) minimise the impacts of the road and intersection upgrades of the development;</p> <p>(iii) provide sufficient parking on site for all vehicles and ensure vehicles associated with the development do not park on the public road network;</p> <p>(iv) maintain all roads and water-related infrastructure on site in a safe and serviceable condition;</p> <p>(v) minimise the traffic noise impacts of the development;</p> <p>(e) details of the haulage of spoil to be disposed within Kosciuszko National Park in accordance with condition B7;</p> <p>(f) ensure any vessel or structure occupying waters must display appropriate shapes and lights in accordance with the Marine Safety (Domestic Commercial Vessel) National Law 2012;</p>		

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(g) include a detailed:</p> <ul style="list-style-type: none"> (i) Heavy Vehicle Salvage Plan; (ii) Driver’s Code of Conduct; (iii) Marine Transport Management Plan; (iv) Snow & Ice Traffic Management Plan; (v) Communication Strategy to keep the public informed about the impacts of the development; <p>(h) include a program to:</p> <ul style="list-style-type: none"> (i) ensure drivers working on the development receive suitable training on the code of conduct and any other relevant obligations under the Traffic Management Plan; (ii) record and track vehicle movements; and (iii) monitor and publicly report on the effectiveness of these measures. <p>Following the Planning Secretary’s approval, the Proponent must implement the Traffic Management Plan.</p>		
Long-Term Road Strategy – Kosciuszko National Park			
B33	<p>Within 2 years of the commencement of construction, unless the Planning Secretary agrees otherwise, the Proponent must prepare a Long-Term Road Strategy for the development to the satisfaction of NPWS. This strategy must:</p> <ul style="list-style-type: none"> (a) identify the road network within the Kosciuszko National Park required for the development during operations, including the detailed specifications for this road network; (b) identify which roads within the Kosciuszko National Park can be narrowed or closed following construction and then rehabilitated; 	Long-Term Road Strategy	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>(c) include a detailed program for the rehabilitation of these roads, which can be incorporated into the Rehabilitation Management Plan for the development; and</p> <p>(d) identify future road maintenance and funding responsibilities for the long-term road network following construction.</p> <p>Following NPWS's approval, the Proponent must implement the Long-Term Road Strategy.</p>		
VISUAL AMENITY			
Visual Appearance			
B34	<p>The Proponent must:</p> <p>(a) take reasonable steps to minimise the visual impacts of the development;</p> <p>(b) ensure all transmission towers blend into the surrounding landscape as far as possible and minimises the potential for glare and reflection by either:</p> <p>(i) painting towers with a colour that; and/or</p> <p>(ii) pre-dulling towers with a finish that;</p> <p>(c) ensure the visual appearance of ancillary facilities (including paint colours), blends in as far as possible with the surrounding landscape; and</p> <p>(d) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.</p>	Design, VIMP	
Lighting			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B35	<p>The Proponent must:</p> <p>(a) take all reasonable steps to minimise the off-site visual impacts of the development; and</p> <p>(b) ensure that any external lighting associated with the development:</p> <ul style="list-style-type: none"> • is installed as low intensity lighting (except where required for safety or emergency purposes); • does not shine above the horizontal; and • complies with Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting 	Design, VIMP, EMS	
Visual Impact Management Plan			
B36	<p>Prior to the commencement of construction, the Proponent must prepare a Visual Impact Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <p>(a) be prepared in consultation with FCNSW and the NPWS;</p> <p>(b) describe the measures that would be implemented to comply with condition B34 above; and</p> <p>(c) include detailed plans for minimising the visual impacts of the following permanent infrastructure:</p> <p>(i) Maragle switchyard and substation;</p> <p>(ii) transmission line, towers and easement.</p> <p>Following the Planning Secretary’s approval, the Proponent must implement the Visual Impact Management Plan for the development.</p>	VIMP	
PARK VALUES			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B37	<p>The Proponent must make the following payments to NPWS for residual impacts of the development on park values:</p> <ul style="list-style-type: none"> (a) \$1 million prior to carrying out any development; (b) \$1 million within 1 year of commencing construction; (c) \$1 million within 2 years of commencing construction; (d) \$1 million within 3 years of commencing construction; (e) \$1 million within 4 years of commencing construction; <p>unless the Planning Secretary agrees otherwise.</p> <p>Note: The NPWS will use these funds and any interest generated by these funds to enhance the park values of the Kosciuszko National Park. The NPWS will:</p> <ul style="list-style-type: none"> • develop a detailed program for the allocation of these funds to specific projects; • monitor, evaluate and publicly report on the spending of these funds and the effectiveness of these projects. 	VIMP	
B38	<p>Within 6 months of the commencement of construction, the Proponent will prepare an Additional Easement Rehabilitation Strategy to the satisfaction of NPWS, to undertake the following infrastructure projects, that addresses:</p> <ul style="list-style-type: none"> (a) Providence Portal substation to Tantangara Dam – removal of transmission line, replacement with a standalone supply or underground line between the Snowy 2.0 Tantangara intake/portal area and Tantangara Dam area and rehabilitation of the easement; (b) Eucumbene Portal to Happy Jacks transmission – transmission lines being removed and replaced by an alternative standalone power supply and rehabilitation of the easement; and (c) timing for each program of works. 	Easement Rehabilitation Strategy	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	Following approval, the Proponent must implement the Additional Easement Rehabilitation Strategy.		
HAZARD AND RISK			
Dangerous Goods			
B39	The Proponent must ensure that the storage, handling, and transport of dangerous goods is undertaken in accordance with the relevant Australian Standards and guidelines, particularly AS1940 The storage and handling of flammable and combustible liquids and AS/NZS 1596:2014 The storage and handling of LP Gas, the Dangerous Goods Code, and the EPA's Storing and Handling of Liquids: Environmental Protection – Participants Manual.	SWMP	
Electric and Magnetic Fields			
B40	The Proponent must ensure that the design, construction and operation of the development is managed to comply with the applicable electric and magnetic fields (EMF) limits in the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to time-varying electric and magnetic fields (1Hz – 100 kHz) (ICNIRP, 2010).	Design	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
Operating Conditions			
B41	<p>The Proponent must:</p> <ul style="list-style-type: none"> (a) minimise the fire risks of the development, including managing vegetation fuel loads on-site; (b) ensure that the development; <ul style="list-style-type: none"> (i) complies with the relevant asset protection requirement sin the RFS’s Planning for Bushfire Protection 2019 (or equivalent) and Standards for Asset Protection Zones; (ii) is suitably equipped to respond to any fire on site, including provision of a 20,000 litre water supply tank fitted with a 65 mm Storz fitting and a FRNSW compatible suction connection located at each of the construction compounds; (iii) incorporates the recommendations of a fire risk assessment as per Transgrid’s design standards; (c) ensures that buildings within the compounds comply with Australian Standard AS3959-2018 Construction of buildings in bushfire-prone areas (or equivalent) and RFS’s Planning for Bushfire Protection 2019; (d) ensure any fire trails or asset protection zones associated with the development are wholly contained within the approved disturbance area; (e) develop procedures to manage potential fires on site, in consultation with the RFS, FRNSW, FCNSW and NPWS; (f) assist the RFS, FRNSW, FCNSW, NPWS and emergency services as much as practicable if there is a fire in the vicinity of the site; and (g) notify the relevant local emergency management committee following completion of construction of the development, and prior to commencing operations. 	EP	
Emergency Plan			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B42	<p>Prior to commencing construction, the Proponent must prepare and implement a comprehensive Emergency Plan and detailed emergency procedures for the development, in consultation with the Local Emergency Management Committee and to the satisfaction of the NPWS, FCNSW, RFS and FRNSW. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by NPWS and FCNSW; (b) be consistent with: <ul style="list-style-type: none"> (i) the Department’s Hazardous Industry Planning Advisory Paper No. 1, ‘Emergency Planning’, (ii) Kosciuszko National Park Fire Management Strategy 2008-2013 (NPWS, 2008), (iii) FCNSW Guidelines including the Code of Practice for Timber Harvesting in Softwood Plantations 2022; (iv) RFS’s Planning for Bushfire Protection 2019 (or equivalent); (v) RFS’s Development Planning – A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan (RFS, 2014); (vi) the Fire and Rescue NSW Act 1989; and (vii) the Work Health and Safety (WHS) Act 2011; (c) include evacuation protocols for the site; (d) describe the measures that would be implemented to: <ul style="list-style-type: none"> (i) minimise the risk of bushfire on site; (ii) protect the assets on site from bushfires; (iii) respond to any bushfires on or in the vicinity of the site; (iv) minimise flood risks on site, including flooding response procedures; 	EP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	(v) minimise the risk of landslips on site, including landslip response procedures; (vi) evacuate the site in an emergency; and (e) include details on how live transmission infrastructure can be safely isolated in an emergency. The Proponent must implement the Emergency Plan for the duration of the development.		
WASTE			
B43	Excluding the spoil generated by the development from within KNP, waste generated during construction, operation, upgrading and decommissioning must be dealt with in accordance with the following priorities: (a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced; (b) where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and (c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.	SWMP	
B44	The importation of waste and storage, treatment, processing, reprocessing or disposal of such waste must comply with the <i>Protection of the Environment Operations Act 1997</i> , the Protection of the Environment Operations (Waste) Regulation 2014, and orders or exemptions under the regulation.	SWMP	
B45	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste.	SWMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B46	All waste that is removed from site must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal docket retained for audit purposes.	SWMP	
REHABILITATION			
B47	<p>The Proponent must:</p> <ul style="list-style-type: none"> (a) rehabilitate all parts of the site within the Kosciuszko National Park to comply with the rehabilitation objectives in Table 2 and the ecological rehabilitation objectives in Table 3; (b) rehabilitate the Bago State Forest site to comply with the rehabilitation objectives in Table 2; (c) complete the rehabilitation of the site, including the removal of all temporary infrastructure, creation of landforms, narrowing of roads within 3 years of completing construction; (d) complete the ecological rehabilitation of the site, apart from areas used for operations, within 20 years of completing construction; (e) complete the final rehabilitation of the site, including the removal of all remaining infrastructure within 3 years of decommissioning the development; and (f) complete the ecological rehabilitation of the areas used for operations within 20 years of decommissioning the development. 	RP	
Rehabilitation Management Plan			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
B48	<p>Within 12 months following commencement of construction, the Proponent must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared by a suitably qualified and experienced person in consultation with the NPWS, FCNSW, BCS, EPA, NSW DPI and TfNSW; (b) be consistent with the Spoil Management Plan, Long-Term Road Strategy and Visual Mitigation Management Plan; (c) include a conceptual plan for the rehabilitation of the whole site; (d) include the detailed program for the rehabilitation of roads in the Kosciuszko National Park in accordance with the approved Long-Term Road Strategy; (e) include a topsoil balance for the site, which includes a strategy for: <ul style="list-style-type: none"> (i) maximising the reuse of topsoil on site (provided it is suitable for reuse); (ii) using other suitable growth media; and (iii) importing additional topsoil to the site (if necessary); (f) include a native seed collection and propagation program in accordance with Florabank (www.florabank.org.au) and/or NPWS guidelines for the site, which includes a strategy for: <ul style="list-style-type: none"> (i) maximising the collection and use of native seed resources from the site prior to disturbance; (ii) collecting seed from the surrounding area, including other parts of the Kosciuszko National Park (with the approval of the NPWS); and (iii) prioritising the use of local sources of seed for the ecological rehabilitation of the site; (g) include a detailed ecological rehabilitation management plan for the development that: <ul style="list-style-type: none"> (i) provides an overarching description of the proposed ecological rehabilitation works, identifying the: 	RP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<ul style="list-style-type: none"> • plant community types to be established; and • area of land to be established for each plant community type; <p>(ii) provides maps showing the proposed location of each plant community type;</p> <p>(iii) describes the detailed measures that would be implemented to comply with the ecological rehabilitation objectives in Table 3;</p> <p>(h) identify the key risks to the successful completion of the rehabilitation and describe the contingency measures that would be implemented to address these risks;</p> <p>(i) include detailed completion criteria and performance indicators for the rehabilitation of the development (having regard) to the criteria and indicators in Table 3, including criteria for triggering remedial action (if necessary); and</p> <p>(j) include a program to monitor and publicly report on:</p> <ul style="list-style-type: none"> (i) the rehabilitation of the site; (ii) the implementation of the each of the detailed plans, including the effectiveness of the proposed mitigation and contingency measures; and (iii) progress against the detailed completion criteria and performance indicators. <p>Following the Planning Secretary’s approval, the Proponent must implement the Rehabilitation Management Plan.</p>		
SCHEDULE 2 - PART C - ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
ENVIRONMENTAL MANAGEMENT STRATEGY			
C1	<p>Prior to commencing development, the Proponent must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:</p> <ul style="list-style-type: none"> (a) provide the strategic framework for environmental management of the development; (b) identify the statutory approvals that apply to the development; (c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; (d) set out the procedures that would be implemented to: <ul style="list-style-type: none"> (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development; (ii) receive, handle, respond to, and record complaints; (iii) resolve any disputes that may arise; (iv) respond to any non-compliance; (v) respond to emergencies; and (e) include: <ul style="list-style-type: none"> (i) references to any strategies, plans and programs approved under the conditions of this approval; and (ii) a clear plan depicting all the monitoring to be carried out in relation to the development, including a table summarising all the monitoring and reporting obligations under the conditions of this approval. <p>Following the Planning Secretary’s approval, the Proponent must implement the Environmental Management Strategy.</p>	EMS, CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
REVISION OF STRATEGIES, PLANS AND PROGRAMS			
C2	<p>The Proponent must review and, if necessary, revise the strategies, plans or programs required under this approval to the satisfaction of the Planning Secretary within 3 months of the:</p> <ul style="list-style-type: none"> (a) the submission of an incident report under condition C7; (b) the submission of an Independent Audit under condition C10; (c) the approval of any modification of the conditions of this approval; or (d) the issue of a direction of the Planning Secretary under condition A2 which requires a review. 	EMS, CEMP	
STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS			
C3	<p>With the approval of the Planning Secretary, the Proponent may:</p> <ul style="list-style-type: none"> (a) prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program); (b) combine any strategy, plan or program required by this approval (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and (c) update any strategy, plan or program required by this approval (to ensure the strategies, plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development). <p>If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this approval.</p>	EMS, CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
	<p>If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.</p> <p>If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this approval if those requirements are not applicable to the particular stage.</p>		
NOTIFICATIONS			
Notification of Department			
C4	<p>Prior to commencing development, construction, operations, upgrading or decommissioning of the development or, the Proponent must notify the Department in writing via the Major Projects website portal and NPWS and FCNSW of the date of commencing the relevant phase.</p> <p>If any of these phases of the development are to be staged, then the Proponent must notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.</p>	EMS, CEMP	
Final Layout Plans			
C5	<p>Prior to commencing construction, the Proponent must submit detailed plans of the final layout of the development to the Department via the Major Projects website, including:</p> <p>(a) details on siting of transmission towers and ancillary facilities; and</p> <p>(b) showing comparison to the approved layout and approved vegetation clearing.</p> <p>The Proponent must ensure that the development is constructed in accordance with the Final Layout Plans.</p>	Design Layout Plans	
Works as Executed Plans			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
C6	Prior to commencing operations, the Proponent must submit plans that confirm the constructed layout of the development and showing comparison to the final layout plans to the Planning Secretary, via the Major Projects website.	As Built Plans	
Incident Notification			
C7	The Department and the NPWS must be notified via the Major Projects website portal immediately after the Proponent becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 5.	EMS, CEMP	
Non-Compliance Notification			
C8	The Planning Secretary and the NPWS must be notified in writing via the Major Projects website portal within seven days after the Proponent becomes aware of any non-compliance.	EMS, CEMP	
C9	<p>A non-compliance notification must identify the development and the application number for it, set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.</p> <p>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</p>	EMS, CEMP	
INDEPENDENT ENVIRONMENTAL AUDIT			
C10	Independent Audits of the development must be conducted and carried out at the frequency described and in accordance with the Independent Audit Post Approval Requirements (2020), unless otherwise agreed or directed by the Planning Secretary.	EMS, CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
ACCESS TO INFORMATION			
C11	<p>The Proponent must:</p> <ul style="list-style-type: none"> (a) make the following information and documents publicly available on its website as relevant to the stage of the development: <ul style="list-style-type: none"> (i) the EIS; (ii) the final layout plans for the development; (iii) current statutory approvals for the development; (iv) approved strategies, plans or programs required under the conditions of this approval; (v) the proposed staging plans for the development if the construction, operation and/or decommissioning of the development is to be staged; (vi) a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this approval; (vii) how complaints about the development can be made; (viii) any independent environmental audit, and the Proponent's response to the recommendations in any audit; and (ix) any other matter required by the Planning Secretary; and (b) keep such information up to date. 	EMS, CEMP	
APPENDIX 5 - WRITTEN INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS			
Written Incident Notification Requirements			

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
1	A written incident notification addressing the requirements set out below must be notified to the Department via the Major Projects website within seven days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under condition C7 or, having given such notification, subsequently forms the view that an incident has not occurred.	EMS, CEMP	
2	Written notification of an incident must: (a) identify the development and application number; (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); (c) identify how the incident was detected; (d) identify when the Proponent became aware of the incident; (e) identify any actual or potential non-compliance with conditions of approval; (f) describe what immediate steps were taken in relation to the incident; (g) identify further action(s) that will be taken in relation to the incident; and (h) identify a project contact for further communication regarding the incident.	EMS, CEMP	
Incident Report Requirements			
3	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.	EMS, CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Plan	Comments
4	The Incident Report must include: (a) a summary of the incident; (b) outcomes of an incident investigation, including identification of the cause of the incident; (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) details of any communication with other stakeholders regarding the incident.	EMS, CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

Commonwealth EPBC Project Approval (DCCEEW, 21st October 2022)

Id	Condition	Plan	Comment
Part A - Conditions specific to the action			
1	To minimise the impacts of the action on protected matters, the approval holder must: <ul style="list-style-type: none"> a. not clear more than: <ul style="list-style-type: none"> i. 1.67 ha of habitat for Booroolong Frog; and ii. 118.34 ha of habitat for Spot-tailed Quoll; and b. minimise the impacts of the Action on hollow-bearing trees. 	BMP	
2	The approval holder must not clear outside the project area.	BMP	
3	To mitigate impacts on protected matters, the approval holder must implement conditions B21, B41 and C1 of the State Infrastructure Approval, in so far as they relate to monitoring, mitigating and avoiding impacts to protected matters.	EMS CEMP BMP SWMP EP	

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
4	<p>The Biodiversity Management Plan required under condition B21 of the State Infrastructure Approval must:</p> <ul style="list-style-type: none"> a. be consistent with relevant statutory documents; b. demonstrate how the approval holder will minimise erosion and control sediment generation; c. demonstrate how the approval holder will take all reasonable and feasible measures to prevent any discharge to waters; d. in respect of all watercourses which contain habitat for Booroolong Frog, as indicated by the areas within the yellow polygons designated 'Booroolong Frog' within the designated 'Study area' in the map at Attachment B, specify: <ul style="list-style-type: none"> i. what and how detailed baseline data on surface water flows and quality will be collected prior to the commencement of the Action; and ii. a program to augment data regarding surface water flows and quality data over time; e. specify detailed criteria for determining surface water impacts (in respect of flows, quality and flooding) of the Action on the Booroolong Frog, including criteria for triggering remedial action (if necessary); f. specify a monitoring program capable of detecting any specified criteria for triggering remedial action, if they occur; and g. include a description of the measures that will be implemented to minimise the surface water impacts of the Action on the Booroolong Frog. 	BMP	
5	<p>The approval holder must submit the Biodiversity Management Plan and Environmental Management Strategy required by conditions B21 and C1 of the State Infrastructure Approval to the department for the Minister's approval before they are approved by the NSW Planning Secretary.</p>	BMP EMS	
6	<p>The approval holder must implement the Biodiversity Management Plan and Environmental Management Strategy approved by the Minister until the end date of this approval, unless otherwise agreed by the Minister in writing.</p>	BMP EMS	Noted

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
7	To offset the impacts of the Action on protected matters , the approval holder must implement conditions B18, B19 and B20 of the State Infrastructure Approval .	BMP	Transgrid responsibility
8	The approval holder must notify the department in writing within 10 business days of making a biodiversity offset payment to the NSW National Parks and Wildlife Service. Each notification must state the date of payment, the amount paid, and the component of the biodiversity offset obligations in respect of which the payment is made.	Biodiversity Offset Package	Noted
SUBMISSION AND PUBLICATION OF PLANS			
9	The approval holder must submit all plans required by these conditions electronically to the department.	EMS	
10	Unless otherwise agreed to in writing by the Minister, the approval holder must publish each plan on the website within 15 business days of the date: <ul style="list-style-type: none"> a. the plan is approved by Secretary of the NSW Department of Planning and Environment as required under a state/territory government condition which must be complied with in accordance with these EPBC Act conditions. 	EMS	
11	The approval holder must keep all published plans required by these conditions on the website until the expiry date of this approval.	EMS	
12	The approval holder is required to exclude or redact sensitive ecological data from plans published on the website or otherwise provided to a member of the public.	BMP	
13	If sensitive ecological data is excluded or redacted from a plan in accordance with condition 12, the approval holder must notify the department in writing what exclusions and redactions have been made in the version published on the website.	EMS	

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
Part B- Administrative Conditions			
NOTIFICATION OF DATE OF COMMENCEMENT OF THE ACTION			
14	The approval holder must notify the department electronically of the date of commencement of the Action, within 5 business days of commencement of the Action.	EMS	
15	If the commencement of the Action does not occur within 5 years from the date of this approval, then the approval holder must not commence the Action without the prior written agreement of the Minister.	EMS	
COMPLIANCE RECORDS			
16	The approval holder must maintain accurate and complete compliance records.	EMS CEMP	
17	If the department makes a request in writing, the approval holder must provide electronic copies of compliance records to the department within the timeframe specified in the request. <i>Note: Compliance records may be subject to audit by the department, or by an independent auditor in accordance with section 458 of the EPBC Act, and/or be used to verify compliance with the conditions. Summaries of the results of an audit may be published on the department's website or through the general media.</i>	EMS	
18	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the department's Guidelines for biological survey and mapped data (2018), or any subsequent official version or as otherwise specified by the Minister in writing.	CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
19	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the department's Guide to providing maps and boundary data for EPBC Act projects (2021), or any subsequent official version or as otherwise specified by the Minister in writing.	CEMP	
20	The approval holder must submit all monitoring data (including sensitive ecological data), surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the department within 12 months of the approval.	CEMP	
ANNUAL COMPLIANCE REPORTING			
21	The approval holder must prepare a compliance report for each 12-month period following the date of this approval, or as otherwise agreed to in writing by the Minister.	CEMP	
22	Each compliance report must be consistent with the department's Annual Compliance Report Guidelines (2014), or any subsequent official version	CEMP	
23	Each compliance report must include: <ul style="list-style-type: none"> a. Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents. b. One or more shapefile showing all clearing of any protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared. c. A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented. 	CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
21	<p>The approval holder must:</p> <ul style="list-style-type: none"> g. Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required. h. Notify the department electronically, within 5 business days of the date of publication that a compliance report has been published on the website. i. Provide the weblink for the compliance report in the notification to the department. j. Keep all published compliance reports required by these conditions on the website until the expiry date of this approval. k. Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public. l. If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to the department within 5 business days of its publication on the website and notify the department in writing what exclusions and redactions have been made in the version published on the website. <p><i>Note: Compliance reports may be published on the department's website.</i></p>	CEMP	
REPORTING NON-COMPLIANCE			
25	<p>The approval holder must notify the department electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan.</p>	CEMP	
26	<p>The approval holder must specify in the notification:</p> <ul style="list-style-type: none"> a. Any condition or commitment made in a plan which has been or may have been breached. b. A short description of the incident and/or potential non-compliance and/or actual non-compliance. c. The location (including co-ordinates), date, and time of the incident and/or potential non-compliance and/or actual non-compliance. <p><i>Note: If the exact information cannot be provided, the approval holder must provide the best information available.</i></p>	CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
27	<p>The approval holder must provide to the department in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify:</p> <ul style="list-style-type: none"> a. Any corrective action or investigation which the approval holder has already taken. b. The potential impacts of the incident and/or non-compliance and/or non-compliance. c. The method and timing of any corrective action that will be undertaken by the approval holder. 	CEMP	
INDEPENDENT AUDIT			
28	<p>The approval holder must ensure that an independent audit of compliance with the conditions is conducted for every five-year period following the commencement of the Action until this approval expires, unless otherwise specified in writing by the Minister.</p>	CEMP	
29	<p>For each independent audit, the approval holder must:</p> <ul style="list-style-type: none"> a. Provide the name and qualifications of the nominated independent auditor, the draft audit criteria, and proposed timeframe for submitting the audit report to the department prior to commencing the independent audit. b. Only commence the independent audit once the nominated independent auditor, audit criteria and timeframe for submitting the audit report have been approved in writing by the department. c. Submit the audit report to the department for approval within the timeframe specified and approved in writing by the department. d. Publish each audit report on the website within 15 business days of the date of the department's approval of the audit report. e. Keep every audit report published on the website until this approval expires. 	CEMP	

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
30	Each audit report must report for the five-year period preceding that audit report.	CEMP	
31	Each audit report must be completed to the satisfaction of the Minister and be consistent with the department's <i>Environment Protection and Biodiversity Conservation Act 1999</i> Independent Audit and Audit Report Guidelines (2019), or any subsequent official version.	CEMP	
COMPLETION OF THE ACTION			
32	The approval holder must notify the department electronically 60 business days prior to the expiry date of this approval, that the approval is due to expire.	EMS	
33	Within 20 business days after the completion of the Action, and, in any event, before this approval expires, the approval holder must notify the department electronically of the date of completion of the Action and provide completion data	EMS	
CHANGES TO STATE INFRASTRUCTURE DEVELOPMENT			
34	The approval holder must notify the department in writing of any proposed change to the State Infrastructure Approval that may relate to protected matters within 2 business days of formally proposing a change and within 5 business days of becoming aware of any proposed change.	NA	Noted
35	The approval holder must notify the department in writing of any change to the State Infrastructure Approval conditions that may relate to protected matters, within 10 business days of a change to conditions being finalised.	NA	Noted
REVISION OF ACTION MANAGEMENT PLANS			

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
36	The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.	NA	Noted
37	The approval holder may choose to revise an action management plan approved by the Minister under condition 5 or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act, if the taking of the Action in accordance with the RAMP would not be likely to have a new or increased impact.	NA	Noted
38	<p>If the approval holder makes the choice under condition 37 to revise an action management plan without submitting it for approval, the approval holder must:</p> <ul style="list-style-type: none"> a. Notify the department electronically that the approved action management plan has been revised and provide the department with: <ul style="list-style-type: none"> i. an electronic copy of the RAMP; ii. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP; iii. an explanation of the differences between the approved Action management plan and the RAMP; iv. the reasons the approval holder considers that taking the Action in accordance with the RAMP would not be likely to have a new or increased impact; and v. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the department. b. Subject to condition 40, implement the RAMP from the RAMP implementation date. 	NA	Noted
39	The approval holder may revoke its choice to implement a RAMP under condition 37 at any time by giving written notice to the department. If the approval holder revokes the choice under condition 37, the	NA	Noted

Snowy 2.0 TCP
Construction Environmental Management Plan

Id	Condition	Plan	Comment
	approval holder must implement the action management plan in force immediately prior to the revision undertaken under condition 37.		
40	<p>If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the Action in accordance with the RAMP would be likely to have a new or increased impact, then:</p> <ul style="list-style-type: none"> a. Condition 37 does not apply, or ceases to apply, in relation to the RAMP. b. The approval holder must implement the action management plan specified by the Minister in the notice. 	NA	Noted
41	<p>At the time of giving the notice under condition 40, the Minister may also notify that for a specified period of time, condition 37 does not apply for one or more specified Action management plans. <i>Note: Conditions 37, 38, 39 and 40 are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised Action management plan, at any time, to the Minister for approval</i></p>	NA	Noted

NSW EPA Environment Protection Licence 21753 (23rd December 2022)

ID	Condition	Responsibility	Plan
1 - ADMINISTRATIVE CONDITIONS			
A1.1	<p>This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2.</p> <p>There are four stages to the scheduled development works of which the following stages are authorised by this licence:</p>	TG / PC	EMS CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan						
	Construction of high-voltage overhead transmission lines, new substation, grid connection between the new substation and existing Line 64, and construction facilities such as construction compounds and access tracks.								
A1.2	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1" data-bbox="490 919 1460 1031"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Extractive activities</td> <td>Extractive activities</td> <td>> 30000 - 50000 T annually extracted or processed</td> </tr> </tbody> </table> <p>Note: A variation to this condition has been applied. See EPL Variation below</p>	Scheduled Activity	Fee Based Activity	Scale	Extractive activities	Extractive activities	> 30000 - 50000 T annually extracted or processed	TG / PC	EMS CEMP
Scheduled Activity	Fee Based Activity	Scale							
Extractive activities	Extractive activities	> 30000 - 50000 T annually extracted or processed							

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan						
A2.1	<p>The licence applies to the following premises:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>SNOWY 2.0 TRANSMISSION CONNECTION PROJECT</td> </tr> <tr> <td>KOSCIUSZKO NATIONAL PARK & BAGO STATE FOREST</td> </tr> <tr> <td>KOSCIUSZKO</td> </tr> <tr> <td>NSW 2642</td> </tr> <tr> <td>PREMISES DEFINED BY: SNOWY 2.0 TRANSMISSION CONNECTION INFRASTRUCTURE APPROVAL SSI 9717 (02 SEPTEMBER 2022): APPENDIX 1 - SCHEDULE OF LANDS</td> </tr> </tbody> </table>	Premises Details	SNOWY 2.0 TRANSMISSION CONNECTION PROJECT	KOSCIUSZKO NATIONAL PARK & BAGO STATE FOREST	KOSCIUSZKO	NSW 2642	PREMISES DEFINED BY: SNOWY 2.0 TRANSMISSION CONNECTION INFRASTRUCTURE APPROVAL SSI 9717 (02 SEPTEMBER 2022): APPENDIX 1 - SCHEDULE OF LANDS	TG / PC	EMS CEMP
Premises Details									
SNOWY 2.0 TRANSMISSION CONNECTION PROJECT									
KOSCIUSZKO NATIONAL PARK & BAGO STATE FOREST									
KOSCIUSZKO									
NSW 2642									
PREMISES DEFINED BY: SNOWY 2.0 TRANSMISSION CONNECTION INFRASTRUCTURE APPROVAL SSI 9717 (02 SEPTEMBER 2022): APPENDIX 1 - SCHEDULE OF LANDS									
A3.1	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <p>a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</p> <p>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	TG / PC	EMS CEMP						
2 – DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND									

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan																			
P1.1	<p>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #D9E1F2;"> <th style="text-align: center;">EPA ID No.</th> <th style="text-align: center;">Type of Monitoring Point</th> <th style="text-align: center;">Location Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Surface Water – YORKERS CREEK</td> <td>Yorkers Creek Upstream labelled YK-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Surface Water – YORKERS CREEK</td> <td>Yorkers Creek at Western end of alignment labelled YK-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Surface Water – YORKERS CREEK</td> <td>Yorkers Creek downstream (d/s) labelled YK-IS (d/s) in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Surface Water – NEW ZEALAND GULLY</td> <td>New Zealand Gully labelled NZG-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Surface Water – TUMUT RIVER</td> <td>Tumut River u/s O'Hares Creek labelled TR-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)</td> </tr> </tbody> </table>		EPA ID No.	Type of Monitoring Point	Location Description	1	Surface Water – YORKERS CREEK	Yorkers Creek Upstream labelled YK-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)	2	Surface Water – YORKERS CREEK	Yorkers Creek at Western end of alignment labelled YK-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)	3	Surface Water – YORKERS CREEK	Yorkers Creek downstream (d/s) labelled YK-IS (d/s) in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)	4	Surface Water – NEW ZEALAND GULLY	New Zealand Gully labelled NZG-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)	5	Surface Water – TUMUT RIVER	Tumut River u/s O'Hares Creek labelled TR-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)	TG / PC	SWMP
	EPA ID No.	Type of Monitoring Point	Location Description																			
	1	Surface Water – YORKERS CREEK	Yorkers Creek Upstream labelled YK-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)																			
	2	Surface Water – YORKERS CREEK	Yorkers Creek at Western end of alignment labelled YK-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)																			
	3	Surface Water – YORKERS CREEK	Yorkers Creek downstream (d/s) labelled YK-IS (d/s) in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)																			
	4	Surface Water – NEW ZEALAND GULLY	New Zealand Gully labelled NZG-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)																			
5	Surface Water – TUMUT RIVER	Tumut River u/s O'Hares Creek labelled TR-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)																				

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition		Responsibility	Plan
6	Surface Water – LICK HOLE GULLY	Lick Hole Gully d/s alignment labelled LHG-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		
7	Surface Water – SHEEP STATION CREEK	Sheep Station Creek labelled SSC-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		
8	Surface Water – CAVE GULLY	Cave Gully labelled CG-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		
9	Surface Water – YARRANGOBILLY RIVER	Yarrangobilly River at alignment labelled YR1-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		
10	Surface Water – YARRANGOBILLY RIVER	Yarrangobilly River d/s alignment labelled YR2-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		
11	Surface Water – WALLACES CREEK	Wallaces Creek u/s alignment labelled WC-RS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		
12	Surface Water – WALLACES CREEK	Wallaces Creek labelled WC-IS in the document titled "Construction Water Quality Monitoring Program and Methodology Snowy 2.0 Transmission Connection Project" (DOC 22/918656-1)		

3 – LIMIT CONDITIONS

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	TG / PC	EMS CEMP
4 – OPERATING CONDITIONS			
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	TG / PC	SWMP SMP
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	TG / PC	CEMP
O3.1	All operations and activities occurring at the premises must be carried out in a manner that minimises or prevents the emission of dust from the premises.	TG / PC	SWMP ESCP
O4.1	The licensee must assess, classify and manage any waste generated at the premises in accordance with the Waste Classification Guidelines 2014 and the Act. Waste needs to be transported to a place that can lawfully accept that waste.	TG / PC	SWMP
O5.1	Location and geochemistry The Licensee must ensure that all samples collected for spoil characterisation are:	TG / PC	SWMP SMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
	a. representative of the material currently being extracted from the specific area; b. is not skewed by veins; and c. corresponds to the material placed on the emplacement area		
O5.2	All treatment of spoil including but not limited to the temporary storage of spoil, and treatment of Potentially Acid Forming (PAF) material and material at risk of resulting in Acid Mine Drainage or Neutral Mine Drainage, must be undertaken in a manner that: a. achieves permanent neutralisation of the material b. prevents pollution of waters; and c. prevents contamination of land	TG / PC	SWMP SMP
O5.3	The Licensee must validate that all treated spoil material meets the requirements of condition O5.2.	TG / PC	SWMP SMP
5 – MONITORING AND RECORDING CONDITIONS			
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	TG / PC	SWMP SMP BMP
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	TG / PC	SWMP SMP BMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan		
M1.3	<p>The following records must be kept in respect of any samples required to be collected for the purposes of this licence:</p> <p>a) the date(s) on which the sample was taken;</p> <p>b) the time(s) at which the sample was collected;</p> <p>c) the point at which the sample was taken; and</p> <p>d) the name of the person who collected the sample.</p>	TG / PC	SWMP SMP BMP		
M2.1	<p>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p>	TG / PC	SWMP SMP BMP		
M2.2	<p>Water and/ or Land Monitoring Requirements</p> <p>Analysis requirements for surface water monitoring is to include both total and dissolved concentrations for inorganics, metals and metalloids.</p> <p>Point 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</p>		TG / Principal ContractorPC SWMP SMP BMP		
	Pollutant	Units of measure		Frequency	Sampling Method
	Aluminium	milligrams per litre		Monthly	Grab sample
	Ammonia	milligrams per litre		Monthly	Grab sample
	Arsenic	milligrams per litre		Monthly	Grab sample
Cadmium	milligrams per litre	Monthly	Grab sample		

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition				Responsibility	Plan
	Chromium	milligrams per litre	Monthly	Grab sample		
	Copper	milligrams per litre	Monthly	Grab sample		
	Cyanide	milligrams per litre	Monthly	Grab sample		
	Dissolved Oxygen	percent	Monthly	In situ		
	Electrical conductivity	microsiemens per centimetre	Monthly	In situ		
	Iron	milligrams per litre	Monthly	Grab sample		
	Lead	milligrams per litre	Monthly	Grab sample		
	Manganese	milligrams per litre	Monthly	Grab sample		
	Mercury	milligrams per litre	Monthly	Grab sample		
	Nickel	milligrams per litre	Monthly	Grab sample		
	Nitrogen (total)	milligrams per litre	Monthly	Grab sample		
	Nitrogen Oxides	milligrams per litre	Monthly	Grab sample		
	pH	pH	Monthly	In situ		
	Phosphorus (total)	milligrams per litre	Monthly	Grab sample		
	Reactive Phosphorus	milligrams per litre	Monthly	Grab sample		
	Silver	milligrams per litre	Monthly	Grab sample		
	Total dissolved solids	micrograms per litre	Monthly	Grab sample		

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition					Responsibility	Plan
	Total Hardness	micrograms per litre	Monthly	Grab sample			
	Total Kjeldahl Nitrogen	milligrams per litre	Monthly	Grab sample			
	TSS	milligrams per litre	Monthly	Grab sample			
	Turbidity	nephelometric turbidity units	Monthly	In situ			
	Zinc	milligrams per litre	Monthly	Grab sample			
M3.1	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.					TG / PC	SWMP SMP BMP
M4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.					TG	CEMP
M4.2	<p>The record must include details of the following:</p> <ul style="list-style-type: none"> a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken. 					TG	CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	TG	CEMP
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	TG	CEMP
M5.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	TG	CEMP
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	TG	CEMP
M5.3	The preceding two conditions do not apply until immediately from the date of the issue of this licence.	TG	CEMP
6 – REPORTING CONDITIONS			
R1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance - Environmental Management Systems and Practices. 	TG	CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
	At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.		
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	TG	CEMP
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <p>a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and</p> <p>b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.</p>	TG	CEMP
R1.4	<p>Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</p> <p>a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</p> <p>b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</p>	TG	CEMP
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	TG	CEMP
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	TG	CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
R1.7	<p>Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</p> <p>a) the licence holder; or</p> <p>b) by a person approved in writing by the EPA to sign on behalf of the licence holder.</p>	TG	CEMP
R2.1	<p>Notifications must be made by telephoning the Environment Line service on 131 555.</p> <p>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</p>	TG	CEMP
R2.2	<p>The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.</p>	TG	CEMP
R3.1	<p>Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <p>a) where this licence applies to premises, an event has occurred at the premises; or</p> <p>b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.</p>	TG	CEMP
R3.2	<p>The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.</p>	TG	CEMP
R3.3	<p>The request may require a report which includes any or all of the following information:</p> <p>a) the cause, time and duration of the event;</p>	TG	CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
	<p>b) the type, volume and concentration of every pollutant discharged as a result of the event;</p> <p>c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;</p> <p>d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;</p> <p>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</p> <p>f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</p> <p>g) any other relevant matters.</p>		
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	TG	CEMP
R4.1	The licensee must notify the EPA within 24 hours by phone or in writing of any results from monitoring required by condition M2 that exceed the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG) and NSW Water Quality Objectives and caused by activities carried out by or on behalf of the Licensee.	TG	CEMP
R4.2	The licensee must submit an Environmental Monitoring Report every six (6) months to the EPA, unless otherwise agreed in writing by the EPA.	TG	CEMP
R4.3	<p>The Environmental Monitoring Report must be prepared by a suitably qualified and experienced person and include, but not be limited to:</p> <p>a) results of all water quality monitoring undertaken in the preceding six (6) month period;</p>	TG	CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

ID	Condition	Responsibility	Plan
	b) results of all weather monitoring undertaken in the preceding six (6) month period; c) assessment of historical trends in all water sampling data for each monitoring point inclusive of the current six (6) month period; d) identification of instances where the water quality objective triggers for each relevant pollutant were exceeded at receiving water locations and/or where the predicted discharge water quality was exceeded at sediment basin discharge points; e) include details of any actions taken by the Licensee in response to exceedances identified under point (d), including but not limited to: <ul style="list-style-type: none"> i. additional monitoring ii. remedial actions; and iii. activation of trigger, action, response plans (TARPs); f) recommendations for future actions in relation to monitoring and/or management		
7 – GENERAL CONDITIONS			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	TG / PC	CEMP
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	TG / PC	CEMP
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	TG / PC	CEMP
G2.1	Each monitoring point in condition P1.1 must be clearly marked by a sign that indicates the EPA point identification number.	TG / PC	CEMP

Snowy 2.0 TCP
Construction Environmental Management Plan

NSW EPA Environment Protection Licence Variation 21753 (14th September 2023)

Id	Condition	Responsibility	Plan
Part A - Conditions specific to the action			
A1.2	<p>By this notice the EPA varies licence No. 21753. The attached licence document contains all variations that are made to the licence by this notice</p> <p>The following variations have been made to the licence:</p> <ul style="list-style-type: none"> Condition A1.2: Extractive activities > 30000-50000 T annually extracted or processed has increased to > 100000-500000 T annually extracted or processed. Note: Under the Protection of the Environment Operations Act, the approved extractive limit for the project is 561,231 Tonnes has been added to the licence 	TG / PC	SWMP SMP

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX B Environmental System Certification and Policy

Snowy 2.0 TCP
Construction Environmental Management Plan



Environment Policy

UGL management systems and processes underpin our commitment to achieving our One HSE Culture based on Risk Management, Standards, Communication and Involvement.

We prioritise environmental risk management by

- Taking steps to prevent pollution, conserve natural resources, protect cultural heritage, minimise waste and drive energy efficiency.
- Ensuring our operations, products and services comply with applicable legal and other requirements.
- Regular reviews of performance, identifying and implementing corrective and preventive actions that contribute to continually improving the environmental performance of our operations, products and services.

We set and reinforce high standards by

- Setting objectives and targets to reduce environmental risk and improve sustainability.
- Making continual improvements in environmental performance and protecting the environment.
- Implementing environmental systems and processes in accordance with ISO 14001 to minimise environmental impacts, comply with legal and other obligations and improve environmental outcomes.
- Monitoring and evaluating performance to ensure environmental compliance and obligations are achieved.

We promote open communication by

- Communicating with our employees, clients, suppliers, contractors and community on our environmental performance.

We foster involvement by

- Providing appropriate environmental training to assist in meeting our objectives and reducing any adverse impacts on the environment.
- Promoting sustainable practices within our supply chain and reduce our broader environmental impacts.
- Requiring suppliers and subcontractors to operate in an environmentally responsible manner and adhere to relevant environmental requirements.

Managing Director UGL:

(Doug Moss)

Date:

27/01/2021

one HSE CULTURE

integrity | accountability | innovation | delivery | SAFETY

A MEMBER OF THE CIMIC GROUP

Snowy 2.0 TCP
Construction Environmental Management Plan



Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX C Legal Register

Act	Activity / aspect	Requirement	Reference	Applicable ?
General				
<i>Protection of the Environment Operations Act 1997</i>	Harming the environment	Do not risk harming the environment by wilfully or negligently: disposing of waste unlawfully causing any substance to leak, spill or otherwise escape (whether or not from a container); or emitting an ozone depleting substance.	S115 S116 S117	Yes
<i>Protection of the Environment Operations Act 1997.</i>	Notification of Pollution incidents	Notify the EPA, NSW Ministry of Health via local Public Health Unit, Safe Work NSW, Local authority and Fire and Rescue NSW immediately of pollution incidents where material harm to the environment is caused or threatened.	S148	Yes
<i>National Parks and Wildlife Act 1974</i>	Undertaking activities within a National Park	All activities on reserved land must be consistent with the objects and purpose of the NPW Act. All activities within KNP must be consistent with the KNP Plan of Management,		Yes
<i>Forestry Act 2012</i>	Undertaking activities within a State Forest	Ensure all necessary access and property rights to construct, operate and maintain the transmission connection assets in perpetuity.		Yes
<i>Dangerous Goods (Road and Rail Transport) Act 2008</i>	Hazards and risks	Ensure that dangerous goods are transported in a safe manner.	S9	Yes

Snowy 2.0 TCP
Construction Environmental Management Plan

Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Pesticides Act 1999</i>	Hazards and risks	Use pesticides in an environmentally sensitive manner. Do not use an unregistered pesticide without a permit. Read the label or permit for the pesticide. Use registered pesticides in accordance with instructions on the label. Do not use any restricted pesticide unless authorised by a certificate of competency or a pesticide control order under the Act. Compliance with pesticide codes of practice is required.	S12 S13 S14 S15 S17	Yes
<i>National Greenhouse and Energy Reporting Act, 2007 and Regulations 2008</i>	Greenhouse gas emissions	Accounting and reporting of greenhouse gases produced and energy consumed during construction. Applicability dependent on thresholds.	-	Yes
<i>Privacy and Personal Information Protection Act 1998 (NSW)</i>	Community Liaison	Legislation relevant to community liaison.	-	Yes
<i>Environmental Planning and Assessment Act 1979</i>	All	Comply with approved conditions.	Part 4, s4.10	Yes

Snowy 2.0 TCP
Construction Environmental Management Plan

Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Environment Protection Biodiversity Conservation Act 1999 (Commonwealth)</i>	All	Comply with approved conditions.	N/A	Yes
Water				
<i>Water Management Act 2000</i>	Water access and use	<p>Do not take water from a water source (a lake, river or estuary or place where water occurs naturally on or below the surface of the ground and includes coastal waters) without an access licence and allocation.</p> <p>Do not use of water on land (unless supplied by a water utility, irrigation corporation etc. or in accordance with basic landholder rights) without a water use approval.</p> <p>With the exception of controlled activity approvals, the <i>Water Management Act 2000</i> (WM Act) only applies in relation to those water sources covered by operational water sharing plans – these areas cover most of the State's major regulated river systems.</p>	<p>S56 S60A S60C</p> <p>S89</p> <p>S 89 S91A</p>	Yes
<i>Protection of the Environment Operations Act 1997</i>	Water pollution	Do not cause water pollution.	S120 S122	Yes
Noise				

Snowy 2.0 TCP
Construction Environmental Management Plan

Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Protection of the Environment Operations Act 1997</i>	Plant maintenance and operation	Do not operate plant if it emits noise caused by poor maintenance or operation.	S139	Yes
<i>Protection of the Environment Operations Act 1997</i>	Materials management	Do not cause noise by failing to properly and efficiently deal with materials.	S140	Yes
Contaminated soil				
<i>Protection of the Environment Operations Act 1997</i>	Land pollution	Do not cause or permit land pollution other than under authority of a licence or regulation (However it is not a land pollution offence to place virgin excavated natural material or lawful pesticides and fertilisers on land, or by placing matter on land that has been notified to the EPA as an unlicensed landfill and which is operated in accordance with the regulations.)	S142A – S142E	Yes
<i>Contaminated Land Management Act 1997</i>	Reporting contamination	Notify the EPA if contaminants exceed thresholds contained in guidelines or the regulations where contamination has entered or will foreseeably enter neighbouring land, the atmosphere, groundwater or surface water. Contaminants in soil are equal to or exceed guideline levels with respect to the current or approved use of the land. Contamination meets other criteria that may be prescribed by the regulations.	S60	Yes
Biodiversity				
<i>Biosecurity Act 2015</i>	Weed, pest and disease control.	The duty to prevent, eliminate and minimise biosecurity risks posed by biosecurity matters as defined by the Act.	s22 Schedule 1	Yes

Snowy 2.0 TCP
Construction Environmental Management Plan

Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Biosecurity Regulation 2017</i>	Pests and diseases.	Notify the presence any pest or disease listed in Schedule 1 of the Biosecurity Regulation 2014, within 1 working day after suspecting or becoming aware of the pest or disease.	cl. 7, Schedule 1	Yes
<i>Biodiversity Conservation Act 2016</i>	Threatened flora and fauna.	<p>Do not harm any animal that is; of a threatened species, that is part of a threatened ecological community or is a protected animal, unless authorised under other legislation (e.g. planning approval).</p> <p>Do not damage habitat of a threatened species or ecological community unless authorised under other legislation (e.g. planning approval).</p> <p>Do not damage declared areas of outstanding biodiversity value unless authorised under other legislation (e.g. planning approval).</p> <p>Do not pick a plant that is; of a threatened species, that is part of a threatened ecological community or is a protected plant, unless authorised under other legislation (e.g. planning approval).</p>	S2.1-2.4 S2.8	Yes
<i>Fisheries Management Act 1994</i>	Mangroves, seagrasses and marine vegetation	Do not harm any mangroves, seagrasses or other marine vegetation on public water land protected by the regulations without a permit.	S205	Yes
<i>Fisheries Management Act 1994</i>	Fish passage	Do not block fish passage without a permit.	S219	No

Snowy 2.0 TCP
Construction Environmental Management Plan

Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Environment Protection Biodiversity Conservation Act 1999 (Commonwealth)</i>	Flora and fauna conservation	Comply with the terms of any EPBC Act approval for the Project.	N/A	Yes
Waste				
<i>Protection of the Environment Operations Act 1997</i>	Littering	Do not litter in a public place or an open private place. Do not litter from a vehicle. Only deposit advertising material in receptacles provided for mail or newspapers or under the door of the premises. Do not deposit advertising material on or in vehicles.	Part 5.6A	Yes
<i>Protection of the Environment Operations Act 1997</i>	Waste and transportation	Do not undertake a scheduled waste activity unless in accordance with an environment protection licence. Refer also to the Resource Recovery Exemptions. Only transport waste to a facility that can lawfully accept the waste within 150 km from Project. Do not dispose of waste in a manner that harms or is likely to harm the environment.	Part 3.2 Schedule 1 S143 S115	Yes
<i>Protection of the Environment Operations (Waste) Regulation 2014</i>	Waste and transportation	Comply with general requirements for the transport of waste. For example, any vehicle used by the person to transport waste must be kept in a clean condition and be maintained so as to prevent spillage of waste. For some wastes only licensed transporters can be used.	Regulation cl.49	Yes

Snowy 2.0 TCP
Construction Environmental Management Plan

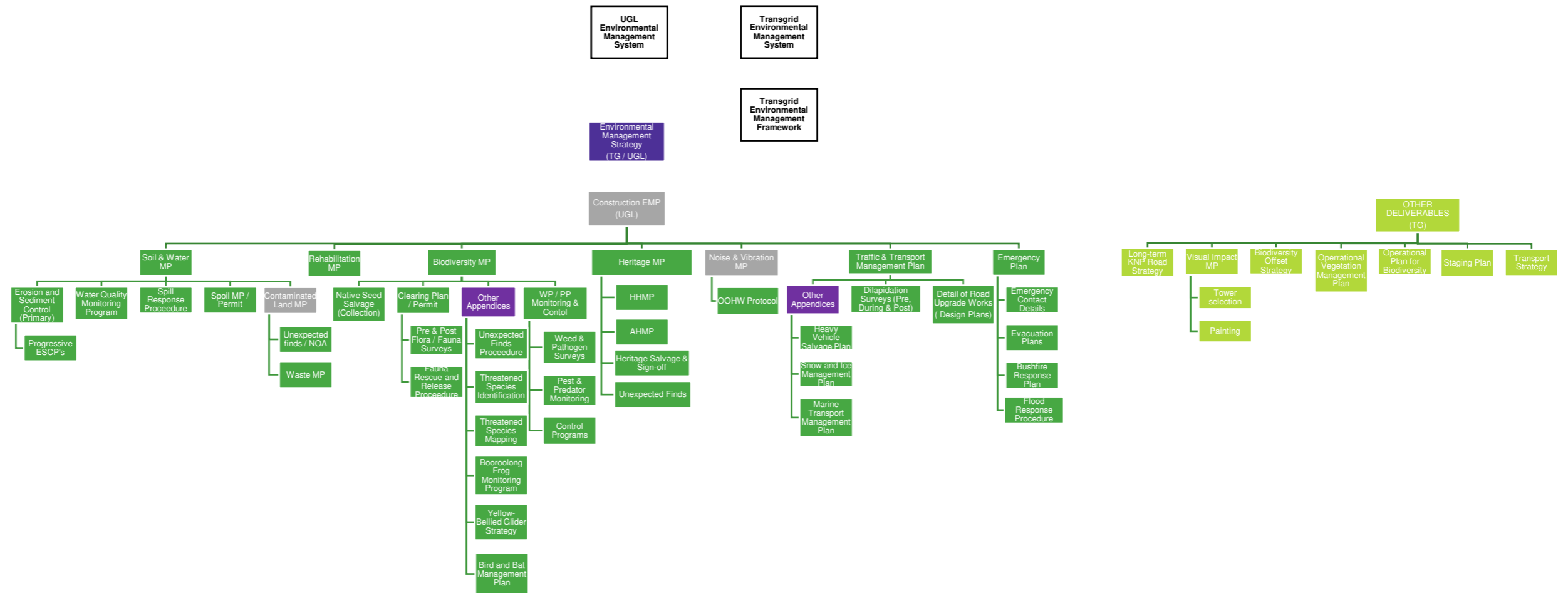
Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Protection of the Environment Operations (Waste) Regulation 2014</i>	Waste and transportation	Comply with record keeping requirements in relation to the transport of certain types of waste.	Regulation Part 3	Yes
Heritage				
<i>Heritage Act 1977</i>	Heritage	Do not undertake an activity that will affect a place, building, work, relic, moveable object or precinct which is subject to an Interim Heritage Order or is listed on the State Heritage Register without approval from the Heritage Council.	S56-57	Yes
		Do not disturb or excavate land with knowledge or reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed; or Do not disturb or excavate land on where a relic has been discovered or exposed unless an excavation permit in place.	S139	No
		Notify the Heritage Council on discovery of a relic.	S146	Yes
		Give the Heritage Council at least 14 days' notice before removing or demolishing any item listed in a section 170 register.	S170A	Yes
<i>National Parks and Wildlife Act 1974</i>	Aboriginal places and objects.	Do not harm or desecrate an Aboriginal object or Aboriginal place without consent.	S86 S90	Yes
		Notify the NPWS within reasonable time of becoming aware of the location or discovery of certain Aboriginal objects.	S89A	Yes

Snowy 2.0 TCP
Construction Environmental Management Plan

Act	Activity / aspect	Requirement	Reference	Applicable ?
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth).</i>	Protection of areas and objects.	Report any discovery of Aboriginal remains to the Federal Minister for the Environment and Heritage.	S20	Yes
		Comply with the provisions of any declaration in relation to a significant Aboriginal area or object.	S22	Yes

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX D Document Map



LEGEND:

	CoA deliverable by PC		Document – not deliverable		CoA deliverable by Transgrid		CoA deliverable co-written PC-TG		Placeholder only		System Documents
--	-----------------------	--	----------------------------	--	------------------------------	--	----------------------------------	--	------------------	--	------------------

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX E Check-It Planner & planning schedule templates

WHS CHECK-IT PLANNER														
Contract:	TransGrid Maragle Project: Project: 3200-0645												Etc...	
Location: Elliott Way, Lobs Hole Ravine Rd NSW	Project Supervisor: Darrell van Bruchem												Etc...	
Activity Type	Responsibility (potential to change based on consultation with Project Team)	Frequency S = Scheduled A = Asst	Dec	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Meetings			S	A	S	A	S	A	S	A	S	A	S	A
Daily Pre-Start	Supervisor	Daily												
Work Planning Meeting	Project Manager / Construction Manager / Supervisor / WHS Advisor/ Subcontractor	Weekly												
Toolbox Talks	Supervisor	Fortnightly												
Safety Inspections														
Crane Inspections	Supervisor / Crane Operator	As required by program												
Weekly HSE Workplace Inspection	Supervisor / Construction Manager	Weekly												
Scaffolding Inspection	Construction Manager/supervisor	As required by program												
Detailed HSE Workplace Inspection	WHS Advisor	Monthly												
Fire Extinguishers	External verification of Fire extinguisher tag	6 monthly												
Safety Equipment (Eye Wash Stations)	Supervisor / WHS Advisor	Monthly Eyewash bottles												
Site plant pre start inspections	Operator	As required per Plant item												
Spill Kit Inspection	Environmental Advisor	Quarterly												
SWMS Infield audit of current works	Supervisor (WHS Advisor Support)	Monthly												
Building & Amenities	Supervisor	Quarterly												
Electrical Equipment	Supervisor	Quarterly												
Fall Prevention Equipment	Supervisor / Dogger / Rigger	Quarterly												
Lifting Gear Inspection	Supervisor / Dogger / Rigger	Quarterly												
Portable Ladder Inspection	Supervisor	Quarterly												
Rigging Equipment Check	Supervisor / Rigger	Quarterly												
First Aid Kit	WHS Advisor	Site Mobilisation and then Quarterly												
Management Obligations & U-Safe Initiatives														
Safety Management Plan Review	Management Team	6 monthly												
Environmental Management Plan Review	Management Team	6 monthly (3 monthly review after approval/POS to ensure effectiveness. Fall: 22)												
Emergency Management Plan review	Management Team	6 monthly or at change of scope												
Drug and Alcohol Testing	WHS Advisor	Daily BAC testing												
HazObs	Construction Manager	1 per week												
ETC...	Supervisor x 1	1 per week												
	Project Grad Engineer	1 per week												
	Environmental Advisor	1 per week												
	WHS Advisor	1 per week												
U Take 5's	Work crew	Daily & per task												
Safety Conversations	Project Manager	1 per month												
	Construction Manager	1 per week												
	Civil Supervisor	1 per week												
	Project Grad Engineer	1 per week												
	Environmental Advisor	1 per week												
	WHS Advisor	1 per week												
Reward and Recognition	Management Team	As nominated												
Registers														
Mobile Plant and Vehicle Register	WHS Advisor (Supervisor Support)	Monthly												
Project Induction Register	WHS Advisor	Monthly												
Project Risk Register	Project Manager, Site Manager, WHS Advisor	Monthly												
SDS Register	Supervisor (WHS Advisor Support)	Monthly												
SWMS Register	WHS Advisor (Supervisor Support)	Monthly												
Emergency Preparedness														
Conduct Emergency Scenario Drill	Project Manager / HSE Advisor to nominate - Site supervisor to run	6 Monthly, plus desktop monthly												
Critical Risk Audits scheduled in line with risk profile of project														
Working at Height	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Operation of Mobile Plant	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Working in Confined Spaces	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Excavation and Trenching	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Cranes and Lifting Operations	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Energy Isolation	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Working with Electricity	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Managing Traffic	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Handling and Storage of Hazardous Chemicals	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Working with Asbestos (ACM)	WHS Advisor (Supervisor Support)	Quarterly (in line with construction schedule)												
Audits - Corporate														
Mobilisation HSE	Utilities WHS Team	Within 3 months of mobilisation to site												
HSE Compliance Audit	Utilities WHS Team	6 monthly												
Environmental Legal Compliance Audit	Environmental Manager	6 monthly												
Reporting														
Safety Performance (Statistical) Report	Supervisor (WHS Advisor Support)	Monthly												
Induction for the month	Supervisor (WHS Advisor Support)	Monthly												
Training hours for the month	Supervisor (WHS Advisor Support)	Monthly												
Activity Plan Compliance			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Snowy 2.0 TCP
Construction Environmental Management Plan



HS&E PLANNING SCHEDULE																													
Contract: Maragle 3200-0645		Document Revision Date		FIRST YEAR												SECOND YEAR													
Location: Elliott Way, Maragle, Ravine Rd, Lobs Hole NSW		Project Approval Date		QTR 1 2024			QTR 2 2024			QTR 3 2024			QTR 4 2024			QTR 1 2025			QTR 2 2025			QTR 3 2025			QTR 4 2025				
Note: Timetable Only. To be completed prior to POS. Timetabled documents should be considered as 'not' and subject to change. Timetabled items will include items that are considered 'Timetabled'.		POS Date		Prior to POS		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Condition / Requirement	Activity / Control	Responsibility	Frequency	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	
CONSTRUCTION SCHEDULE - 330kV Line Works																													
Contract	Site Mobilisation	TBA	TBA																										
Contract	Geotech	TBA	TBA																										
Contract	Site Establishment	TBA	TBA																										
Contract	Survey	TBA	TBA																										
Contract	Ecology preworks	TBA	TBA																										
Contract	ESC	TBA	TBA																										
Contract	Clearing (East & West)	TBA	TBA																										
Contract	Site Access Development (EAW)	TBA	TBA																										
Contract	Bulk Earthworks / Spoil Movement	TBA	TBA																										
Contract	Site Rehabilitation	TBA	TBA																										
Contract	Tower Foundations & Concreting	TBA	TBA																										
Contract	Tower Assembly	TBA	TBA																										
Contract	Tower Erection	TBA	TBA																										
Contract	Earthing	TBA	TBA																										
Contract	Stringing	TBA	TBA																										
Contract	Climbing elements	TBA	TBA																										
Contract	Commissioning	TBA	TBA																										
Contract	DC Demobilisation	TBA	TBA																										
CONSTRUCTION SCHEDULE - 330kV Switching Station Works																													
Contract	Ecology preworks	TBA	TBA																										
Contract	Site Access Upgrades	TBA	TBA																										
Contract	ESC	TBA	TBA																										
Contract	Clearing	TBA	TBA																										
Contract	Bulk Earthworks	TBA	TBA																										
Contract	Fencing	TBA	TBA																										
Contract	Drainage	TBA	TBA																										
Contract	Site Rehabilitation	TBA	TBA																										
Contract	Foundations	TBA	TBA																										
Contract	Civil & Earthgrid	TBA	TBA																										
Contract	Buildings	TBA	TBA																										
Contract	Electrical	TBA	TBA																										
Contract	Testing & Commissioning	TBA	TBA																										
Contract	DC Demobilisation	TBA	TBA																										
FEDERAL APPROVAL CONDITIONS																													
EPBC 1a - Minimise impact on protected matters. Not clear more than 4.0ha of Booroolong Frog habitat & TBA area of Spotted Quail habitat.	UGL to regulate clearing via a 'clearing permit', and provide Transgrid with 'as constructed' clearing limit packages, during clearing. TG to fully habitat.	UGL	TG																										
EPBC 1b - Minimise impact on hollow bearing trees	UGL to implement 'staged' clearing and relocate salvaged hollows to edge of easement.	UGL	TG																										
EPBC 2 - Not clear outside the project area	UGL to survey and clearly mark edge of easement, communicate & subscribe.	UGL	TG																										
STATE APPROVAL CONDITIONS (incl. BODR)																													
CIA A1 - Must require performance measures and do all reasonable & practicable to prevent environmental harm during the project.	UGL to prepare and implement Environmental Management Plans for the works.	UGL	TG																										
CIA A2 - Development to be carried out in compliance with the conditions of approval, the FIS, the development layout and any Secretariat Direction.	Propose to meet compliance to each condition. UGL to determine required compliance to each condition and implement as required (i.e. this schedule).	TG (BKL)	TG																										
CIA A3 - Propose to comply with requirements from the Planning Secretary relating to the assessment of the EMPs, audits, reports & the annual and triennial monitoring.	Propose to advise UGL of any such requirements, and UGL to implement	TG (BKL)	TG																										
LICENCE CONDITIONS																													
EPL - Variation of Licence No. 21753 - Condition A1.2 - TG to comply with annual extractive spoil limit 'maximum allowed'.	UGL to regulate spoil extraction with Spoil Movement & Placement Permits, ensuring tails to be used.	TG (BKL)	TG																										
EPL - Condition P1.1 - Allocation of surface water monitoring locations for monitoring of water constituents during construction.	UGL to utilise specified locations for construction water quality monitoring identified.	TG (BKL)	TG																										
PERMIT CONDITIONS																													
UGLMS-4-1324 - Dewatering approval to discharge Dewater (include license report).	UGL to regulate dewatering via UGLMS-4-1324 (Dewatering Permit).	UGL	TG																										
HS&E MANAGEMENT PLANS - EMS / CEMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - BMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - SWMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - HMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - NVMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - RMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - TTMP																													
TBA	TBA	TBA	TBA																										
HS&E MANAGEMENT PLANS - ERP																													
TBA	TBA	TBA	TBA																										
OTHER MANAGEMENT PLANS																													
TBA	TBA	TBA	TBA																										
MEETINGS																													
TBA	TBA	TBA	TBA																										
INSPECTIONS / CHECKLISTS																													
TBA	TBA	TBA	TBA																										
REGISTERS / PERMITS / LOGS																													
TBA	TBA	TBA	TBA																										
SURVEYS																													
TBA	TBA	TBA	TBA																										
TRAINING																													
TBA	TBA	TBA	TBA																										
AUDITS																													
TBA	TBA	TBA	TBA																										
NOTIFICATIONS / REPORTING																													
TBA	TBA	TBA	TBA																										

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX F Site Environmental Plan template

Snowy 2.0 TCP
Construction Environmental Management Plan

Site Environmental Plan
Template

PROJECT CONTACTS			APPLICABLE PERMITS	ENVIRONMENTAL	RESPONSIBILITY	PROJECT NAME AND TIMEFRAME	KEY IMPACTS AND RELEVANT CEMP SUB-PLANS	POTENTIAL
Position	Name	Contact	Permit to Disturb Land or Vegetation		PC Supervisor/EA	PROJECT SCOPE OF WORKS	<input type="checkbox"/> Soil Management <input type="checkbox"/> Surface Water <input type="checkbox"/> Flora & Vegetation <input type="checkbox"/> Fauna <input type="checkbox"/> Noise & Vibration <input type="checkbox"/> Air Quality (Dust) <input type="checkbox"/> Cultural Heritage <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Waste Management <input type="checkbox"/> Contaminated Land <input type="checkbox"/> Biosecurity <input type="checkbox"/> Acid Sulphate Soils <input type="checkbox"/> Other (specify):	
Environmental Advisor			Permit to Enter No Go Zone		PC Supervisor/EA			
PC Supervisor			Permit to Dewater		PC Supervisor/EA			
Project Engineer			Out of Standard Hours Work Permit		Project Manager			
Project Manager								
Safety Advisor / HSE Rep								
Community Engagement								
PROJECT SITE HOURS OF WORK		EVALUATING PERFORMANCE			RESPONSIBILITY	AT ALL TIMES FOR THE PROJECT	REPORT TO THE PC SUPERVISOR IMMEDIATELY <ul style="list-style-type: none"> • Environmental incidents, Spills and hazards • Unexpected finds of ASS/PASS, heritage or contaminated soils • Encroachment into No Go Zones • Risk or damage to native flora/fauna • Dust/air/water pollution 	
Monday – Friday: <<Insert time here>>		Daily: After a rain event. Inspect erosion & sediment controls			PC Supervisor			
Saturday: <<Insert time here>>		Weekly:			PC Supervisor			
Sunday and Pub Holidays: <<Insert time here>>		<ol style="list-style-type: none"> 1. Inspect erosion & sediment controls 2. Inspect dust emissions & controls 3. Inspect waste management practices 4. Inspect No Go Zones & associated protection flagging/fencing 5. Complete weekly checklist 						
For any works outside of standard hours seek approval from the Project Manager & Environmental Advisor in accordance with an Out of Standard Hours Work Permit.		Refer to PC Checklist Planner for other programmed environmental requirements.						
SOIL		SURFACE WATER			FLORA & VEGETATION			
Management Measures	Responsibility	Management Measures	Responsibility	Management Measures	Responsibility			
<ul style="list-style-type: none"> • Erosion & sediment controls are to be installed prior to or immediately upon any disturbance to vegetation or soil. • Minimise ground disturbance & progressively rehabilitate. • Stockpile materials away from water flow paths • Stockpile locations for cleared vegetation, topsoil and subsoil are defined on maps. • Rehabilitated areas shall be sign posted until rehabilitation is considered complete. • 	PC Supervisor	<ul style="list-style-type: none"> • Install erosion and sediment controls, • Clean water diversions must be installed prior to the commencement of work. • Sediment laden water (dirty water) captured onsite must be preferentially reused e.g. dust control. • Water discharged from site is in strict accordance with the site's dewatering procedure, • No discharge to receiving waterways or drainage infrastructure will be made without a 'Permit to Dewater'. 	PC Supervisor	<ul style="list-style-type: none"> • Prior to any disturbance, clearing or grubbing activities in any locations the following must be in place: • A PC Permit to Clear Land or Vegetation must be prepared by the EA/HSE Rep • No-Go Zones for significant flora habitat must be established, fenced/ flagged and sign posted prior to any commencement of clearing; and • All required statutory pre-clearance surveys must be completed by a qualified and suitably experienced ecologist 	PC Supervisor/PM/EA			
<ul style="list-style-type: none"> • All machinery and vehicles will be maintained in good condition to minimise the chance of leaks or drips of lubricants, fuels or other fluids. 	PC Supervisor	<ul style="list-style-type: none"> • The concrete washout to be conducted in designated areas. 	PC Supervisor	<ul style="list-style-type: none"> • Use only approved access tracks/roads as per the approved Traffic Management Plan for the Project. 	PC Supervisor/PM/HSE			

**Snowy 2.0 TCP
Construction Environmental Management Plan**

<ul style="list-style-type: none"> All infrastructure, disturbed areas, site compounds, stockpiles, paving and hard stands areas are to be progressively rehabilitated throughout the Project lifecycle. 	PC Supervisor
<ul style="list-style-type: none"> The area of disturbed land must be kept to a minimum. 	PC Supervisor
FAUNA	
Management Measures	Responsibility
<ul style="list-style-type: none"> Once approved any dead or injured fauna will be removed immediately from trenches/excavations or access tracks and roadways. 	PC Supervisor/EA
<ul style="list-style-type: none"> All significant fauna habitats shall be avoided where practicable. If a threat to an animal is evident onsite, the Supervisor and/or EA must be contacted immediately. No domestic pets are allowed on site. 	PC Supervisor/EA/PM
<ul style="list-style-type: none"> Any damage to livestock must be reported immediately to PC Supervisor or EA who will report to the PM. 	PC Supervisor

<ul style="list-style-type: none"> Water shall only be taken from points authorised by client in accordance with licences (as per state jurisdiction). 	PC Supervisor/PM/EA
<ul style="list-style-type: none"> Silt curtains must be used in waterways around activities that present a risk of sediment disturbance or sedimentation. 	PC Supervisor
NOISE & VIBRATION	
Management Measures	Responsibility
<ul style="list-style-type: none"> Undertake construction activities within nominated hours of work. A PC Out of Standard Hours Works Permit must be obtained prior to commencing work outside of allowable hours for the site. 	PC Supervisor/PM
<ul style="list-style-type: none"> All equipment must be serviced and maintained according to the manufacturer's recommendations, Consider neighbours and minimise noise when packing up plant and equipment and/or departing from site. Construction machinery, plant and equipment shall be switched off or throttled down to a minimum when not in use. 	PC Supervisor
<ul style="list-style-type: none"> Undertake high noise generating works in accordance with Project specific approvals. 	PC Supervisor/PM

<ul style="list-style-type: none"> Ancillary works, such as lay down areas and office facilities not vital for construction will be located to minimise impact. 	PC Supervisor/PM/HSE
<ul style="list-style-type: none"> Cleared/ removed vegetation shall be beneficially reused where practicable (e.g. habitat) 	PC Supervisor
AIR QUALITY (DUST)	
Management Measures	Responsibility
<ul style="list-style-type: none"> The area of disturbed land will be kept to a minimum and existing vegetated area will be kept intact for as long as possible prior to clearing. 	PC Supervisor/PM
<ul style="list-style-type: none"> Active exposed areas, materials and stockpile areas will be watered, treated or rehabilitated to minimise dust creation; All access track and roadway speed limits must be followed. Vehicles transporting material to and from the site will be covered. 	PC Supervisor
<ul style="list-style-type: none"> Construction activities will be reprogrammed or relocated, if necessary, during periods of strong winds. 	PC Supervisor

CULTURAL HERITAGE	
Management Measures	Responsibility
<ul style="list-style-type: none"> Known Cultural Heritage sites (including indigenous or non-indigenous) will be demarcated with signage, flagging and fencing as appropriate. 	PC Supervisor/EA
<ul style="list-style-type: none"> If any Cultural Heritage artefacts or materials are found, work will cease immediately in the affected areas and the area protected from further disturbance. PC will immediately notify Transgrid if such an event occurs. 	PC Supervisor/PM/EA
<ul style="list-style-type: none"> If human remains are uncovered; all work in the immediate area of the remains will stop immediately. The incident will be immediately reported to Transgrid 	PC Supervisor/PM/EA

HAZARDOUS MATERIALS	
Management Measures	Responsibility
<ul style="list-style-type: none"> All dangerous goods shall be stored strictly in accordance with all relevant Australian Standards and for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund. All chemicals MUST have current SDS, current risk assessment and recorded in the SDS register. All flammable materials will be kept in a segregated area 	PC Supervisor/PM/HSE/EA
<ul style="list-style-type: none"> Designated refuelling area must be marked on a site map and displayed in prominent areas of the site. 	PC Supervisor
<ul style="list-style-type: none"> All spills >XXL will be reported to Transgrid as per contract. Hazardous material shall not be stored or drained onto the ground, into watercourses or floodplains. 	PC Supervisor/PM
<ul style="list-style-type: none"> Manage fuel and chemical quantities so that only the required amounts are stored onsite. 	PC Supervisor/HSE/EA

WASTE	
Management Measures	Responsibility
<ul style="list-style-type: none"> Identify all waste streams Provide adequate waste separation facilities including waste disposal containers at appropriate locations. Engage licensed contractor(s) for collection and recycling/disposal of all materials. 	PM/EA
<ul style="list-style-type: none"> Controlled wastes will be managed in accordance with the requirements of the state. This includes obtaining tracking receipts (with tracking numbers): 	PC Supervisor/PM/EA
<ul style="list-style-type: none"> Maintain a tidy site and ensure bins are accessible for collection. No overfilling of bins onsite. Rubbish burning is not permitted. There are to be no fires All cigarette butts will be placed in bins provided. Smoking is allowed on site only in designated areas 	PC Supervisor
<ul style="list-style-type: none"> Maintain records of waste recycling and disposal including mass/volumes of material, transport and location receipts. 	EA/HSE

Snowy 2.0 TCP
Construction Environmental Management Plan

CONTAMINATED LAND		BIOSECURITY		ACID SULFATE SOILS	
Management Measures	Responsibility	Management Measures	Responsibility	Management Measures	Responsibility
<ul style="list-style-type: none"> In the event unanticipated contaminated materials are discovered or suspected, work must cease, and the EA notified immediately. Testing by a trained & competent person shall be conducted & a management strategy developed. No offsite disposal of any contaminated materials without a Waste Disposal Certificate (or equivalent). 	PC Supervisor	<ul style="list-style-type: none"> All machinery and vehicles shall be cleaned down of all soil and vegetation material. Prior to arrival on site. A weed declaration form will be completed as part of the vehicle pre-inspection. Washdown VEPM prior to movement within the Project site from infested/ infected areas to non-infested/infected areas. Prior to demobilisation from the Project site. 	PC Supervisor	<ul style="list-style-type: none"> An Acid Sulfate Soils Management Plan must be developed for sites with known ASS/PASS soils. In the event unanticipated PASS materials are discovered or suspected, Works must cease, and the EA/PM notified immediately, The movement of ASS/PASS materials must be tracked via the Waste Tracking Certificates. 	PC Supervisor
<ul style="list-style-type: none"> All vehicles, plant and other machinery operating in contact with contaminated soil must be decontaminated prior to leaving site. 	PC Supervisor	<ul style="list-style-type: none"> When accessing construction sites, PC and subcontractors will use only approved access tracks/roads. 	PC Supervisor	OTHER	
<ul style="list-style-type: none"> Temporary water management works will be put in place to capture contaminated runoff from stockpiles and contaminated areas. Water and sediment will be monitored for quality and managed in accordance with regulatory requirements. 	PC Supervisor	<ul style="list-style-type: none"> All associated chemicals (e.g. Round up) required for the treatment of invasive species will be managed appropriately, by individual who are sufficiently trained in the use of such chemicals (I.e. ACDC Licence) as identified by the EA. 	PC Supervisor	Add as required	

PROJECT/SITE SPECIFIC MONITORING REQUIREMENTS						
Location	Parameter	Acceptance Criteria	Frequency	Equipment/ Methodology	Record	Responsibility

PROJECT/SITE ENVIRONMENTAL INCIDENTS AND EMERGENCY RESPONSE	
Management Measures	Responsibility
In the event an environmental incident occurs in relation to the Project Works:	

<<Insert photo of Site layout/ESCP>>

INSERT SITE PLAN(S) SHOWING DETAILS OF ENVIRONMENTAL MANAGEMENT AND MITIGATION FEATURES

WHERE PROJECT SPECIFIC MONITORING IS REQUIRED INSERT SITE PLAN(S) SHOWING DETAILS OF ENVIRONMENTAL MONITORING LOCATION

Snowy 2.0 TCP Construction Environmental Management Plan

APPENDIX G Aspects and Impacts Register



Location Work Area:	Maragle	ENVIRONMENTAL ASPECTS AND IMPACTS REGISTER	Company:	UGL	
Date of this Revision:	2/9/2023		Environmental Risk Assessment for Maragle Transmission Line & Switching Station (Main Works)	Contract No.:	1163
Date of last Revision:	18/2/2023		Document No: 3200-0645	Revision No.:	D

No	ACTIVITY	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	RISK RATING			LEGAL REQUIREMENT Is this aspect or potential impact enforceable by law? (Yes or No)	CONTROLS Refer to section 16 of CEMP for full list of mitigation measures	ASSESSMENT OF CONTROLS		
				RISK Assessment (Current)					RESIDUAL RISK		
				Consequence	Likelihood	Risk Score			Consequence	Likelihood	Risk Rank
1	Procurement	Waste generation	Excessive waste generation Carbon footprint	C1-Minor	L2-Unlikely	E	No	<ul style="list-style-type: none"> Product legacy / bio-degradability consideration Vehicle maintenance & waste consideration NGERS tracking and reporting 	C1-Minor	L3-Rare	E
2	Project Enabling Works (Preliminary Activities)	Several	Impact heritage site Impact Flora / Fauna Spill impact Non conformance to Conditions of Approval	C4-Major	L4-Likely	B	Yes	<ul style="list-style-type: none"> Provision of EMPs, Site Environmental Plans & Work Packs Kick-off Meeting Direct supervision at all times 	C4-Major	L3-Rare	D
3	Site Establishment (Possession of Site)	Flora / Fauna	Laydowns or site facilities impacting adjoining or environmentally sensitive areas	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Planned, mitigated and communicated site establishment Designated parking & laydown areas Provision of Site Environmental Plans Supervision Demarcate flora / fauna protected areas (markers / signage) 	C3-Moderate	L2-Unlikely	D
		Traffic	Traffic related impacts from construction vehicles	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Adherence to project Traffic & Transport Management Plan (TTMP) Application of traffic control (where required) Applied construction signage Application of RWMS Speed Limitations Tools to be kept to designated areas (as required) 	C3-Moderate	L2-Unlikely	D
		Air Quality	Excessive dust, emissions or mud affecting residents or workers	C1-Minor	L3-Possible	E	Yes	<ul style="list-style-type: none"> Water carting for dust suppression Stabilised entry / exits Vehicle maintenance & load checking Upgraded intersections / turnouts (where permitted) Limit activities on windy days 	C1-Minor	L3-Unlikely	E
		Erosion & Sediment Control	Off site sediment loss / impact	C4-Major	L3-Possible	C	Yes	<ul style="list-style-type: none"> Application of required ESC measures (as per ESC Plans) Upgrade and/or maintain ESC measures applied 	C4-Major	L3-Rare	D
4	Clearing	Heritage	Impact heritage site	C4-Major	L3-Possible	C	Yes	<ul style="list-style-type: none"> Prior salvage and/or mark-up of heritage sites Provision of EMPs, Site Environmental Plans & Work Packs Kick-off Meeting Follow heritage management plans Heritage training & communication Transit notification for Cultural Heritage monitor attendance Heritage unexpected finds procedure 	C4-Major	L3-Rare	D
		Weeds (on-site)	Weed proliferation / biodiversity impact	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Preliminary weed mapping, surveys & monitoring Intentional removals or treatment prior to clearing Apply weed hygiene restrictions Washdowns and vehicle checks Weed hygiene declarations 	C3-Moderate	L2-Unlikely	D
		Pathogens (on site)	Pathogen proliferation / biodiversity impact	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Preliminary pathogen testing Apply biosecurity restrictions to affected areas Disinfections Disinfection records 	C3-Moderate	L2-Unlikely	D
		Predators & Pests	Habitat modification & waste generation that may increase pest / predator numbers	C2-Low	L2-Unlikely	E	No	<ul style="list-style-type: none"> Regular monitoring for pests & predators Limiting access to food wastes Post monitoring program if increased numbers observed Apply baiting program if increase is verified (with stakeholder approval) 	C2-Low	L3-Rare	E
		Flora / Fauna	Impact / injury / death to protected flora / fauna	C3-Moderate	L4-Likely	C	Yes	<ul style="list-style-type: none"> Clearing Permits Clearing TRS Workpacks Spotter catcher / ecologist attendance Protected species checks & monitoring Flora / fauna pre-checks & surveys Habitat hollow salvage and relocation Intentional removals & translocations Application of glider pole arrays Mitigations for works next to sensitive areas Adaptive change management (ITAMP) Frog & glider monitoring Partial & hard closure in selected areas Reversal method GPS tracking on clearing equipment Supervision Kick-off meeting Work Packs (Clearing plans & SOPs) Drone surveys to clear clearing 	C3-Moderate	L2-Unlikely	D
		Over clearing or wrong type of clearing		C4-Major	L3-Possible	C	Yes	<ul style="list-style-type: none"> Supervision Kick-off meeting Work Packs (Clearing plans & SOPs) Drone surveys to clear clearing 	C4-Major	L3-Rare	D
		Erosion & Sediment control	Off site sediment loss / impact	C4-Major	L4-Likely	B	Yes	<ul style="list-style-type: none"> Application of required ESC measures to 'better than bluebook' Upgrade and/or maintain ESC measures applied Soil disturbance method of forecast weather conditions 	C4-Major	L3-Rare	D
5	Soil Cartworks & Access Development	Weeds (on site)	Transfer / proliferation of weed species	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Weed surveys Topsoil segregation and movement limitation Weed hygiene restrictions Washdowns Pre-clearing weed removal (where relevant) Weed hygiene declarations 	C3-Moderate	L2-Unlikely	D
		Pathogens (on site)	Transfer / proliferation of a pathogen	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Topsoil segregation and movement limitation Check for previous known pathogens with SHL Testing if pathogen is suspected Implement hygiene protocols if pathogen is confirmed 	C3-Moderate	L3-Rare	E
		Heritage	Impact heritage site	C4-Major	L3-Possible	C	Yes	<ul style="list-style-type: none"> Prior salvage and/or mark-up of heritage sites Provision of EMPs, Site Environmental Plans & Work Packs Kick-off Meeting Follow heritage management plans Heritage training & communication Heritage unexpected finds procedure Apply upslope clearwater diversion Follow dewatering procedure Cover or barricade excavations Perform geotech investigations 	C4-Major	L3-Rare	D
		Excavation / trenching / drilling	Surface water ingress / failures Groundwater infiltration Dewatering Fauna impact	C3-Moderate	L3-Possible	C	Yes	<ul style="list-style-type: none"> Apply upslope clearwater diversion Follow dewatering procedure Cover or barricade excavations Perform geotech investigations 	C3-Moderate	L3-Rare	E
		Spill generation (sustainable / waste)	Generation of excess spoil & emissions	C1-Minor	L2-Unlikely	E	No	<ul style="list-style-type: none"> Spill minimisation / reuse in design Topsoil salvage and reuse Geotech preliminary testing Apply spill management & tracking permits Communication & training Kick off meetings / supervision Review design plans for implementation Apply topsoil segregation Apply spill testing (where required - XRF & Lab) Load remove rocky outcrops Notify Client of all contaminated soil / spoil finds Follow contaminated soil procedures & Client Directions Compliance checklist / inspections Develop site specific ESC Plans (EPSC approved) Communicate ESC Plans to earthworks contractor Apply ESC TRS Apply erosion & sediment control measures as detailed Design and apply sediment basins where triggered Apply progressive site rehabilitation Strategic placement of stockpiles outside of drainage lines Sediment control on stockpiles (where required) Check and maintain ESC measures applied News ESC Plans current, use EWMS & supervision for activities in a watercourse 	C1-Minor	L3-Rare	E
		Spill movement and placement	Leachate formation Structural failures (intentional slips, dislodged rocks) Topsoil mixing (loss) Possible contaminant release or transfer (e.g. NDA) Non conforming soil movement Fauna impact	C4-Major	L3-Possible	C	Yes	<ul style="list-style-type: none"> Apply spill management & tracking permits Communication & training Kick off meetings / supervision Review design plans for implementation Apply topsoil segregation Apply spill testing (where required - XRF & Lab) Load remove rocky outcrops Notify Client of all contaminated soil / spoil finds Follow contaminated soil procedures & Client Directions Compliance checklist / inspections Develop site specific ESC Plans (EPSC approved) Communicate ESC Plans to earthworks contractor Apply ESC TRS Apply erosion & sediment control measures as detailed Design and apply sediment basins where triggered Apply progressive site rehabilitation Strategic placement of stockpiles outside of drainage lines Sediment control on stockpiles (where required) Check and maintain ESC measures applied News ESC Plans current, use EWMS & supervision for activities in a watercourse 	C4-Major	L3-Rare	D
		Erosion and sediment control	Turbid runoff / offsite sedimentation Excessive erosion Impact to sensitive receiving environments Sediment tracking onto roads Unmitigated activities in a watercourse	C4-Major	L4-Likely	B	Yes	<ul style="list-style-type: none"> Apply erosion & sediment control measures as detailed Apply ESC TRS Design and apply sediment basins where triggered Apply progressive site rehabilitation Strategic placement of stockpiles outside of drainage lines Sediment control on stockpiles (where required) Check and maintain ESC measures applied News ESC Plans current, use EWMS & supervision for activities in a watercourse 	C4-Major	L3-Rare	D
		Air Quality - Dust	Dust inhalation / visual limitation for workers Impact to sensitive receiving environments Nuisance to traffic	C1-Minor	L4-Likely	E	Yes	<ul style="list-style-type: none"> Water carting activities during works Limiting traffic movements and speeds Covering all loads Access track construction with correct materials Use of dust suppressant (if required and here approved) 	C1-Minor	L2-Unlikely	E
		Air Quality - Fugitive emissions (fumes)	Greenhouse gas emissions Nuisance smoke or fumes Depletion of fuel resource	C1-Minor	L5-Almost Certain	D	Yes	<ul style="list-style-type: none"> Ensure scheduled servicing & repairs Plant & equipment verification and daily pre-checks Visual checking for sustained fugitive emissions Abide with AS & compliance codes for plant design and fuel use NGERS reporting Reduce idling times (where practicable) Routing to designated on-site spill routes Prior notifications for excessive noise and vibration generating activities, and O&M Checking and preventing excessive noise and vibration impacts to sensitive receivers and heritage sites 	C1-Minor	L4-Likely	E
		Noise & Vibration	On-site impacts from noise & vibration	C1-Minor	L2-Unlikely	E	No	<ul style="list-style-type: none"> Ensure scheduled servicing & repairs Plant & equipment verification and daily pre-checks Visual checking for sustained fugitive emissions Abide with AS & compliance codes for plant design and fuel use NGERS reporting Reduce idling times (where practicable) Routing to designated on-site spill routes Prior notifications for excessive noise and vibration generating activities, and O&M Checking and preventing excessive noise and vibration impacts to sensitive receivers and heritage sites 	C1-Minor	L3-Rare	E
Spills & Leaks	On-site pollution to ground or water from load loss, chemical or fuel release	C4-Major	L3-Possible	C	Yes	<ul style="list-style-type: none"> Spill kits readily available Plant & equipment well maintained Personnel trained in spill response & notification Supervised spill clean-up and waste removal Fuel volume limitation Checking tagline latches Keeping to tracks and clear of ground debris Refuelling in designated areas, well removed from watercourses Chemical and fuel storage to AS 1940 	C4-Major	L3-Rare	D		

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX I Emergency Contacts

Project Contacts - HLWJV
General Manager (Utilities) – John Greaves
General Manager (People & Culture) – Jessica Fitzgerald
General Manager (Engineering) – Cameron Matthews
National Power Operations – Andrew Vaughan
Project Director – Tim Burns (<i>tim.burns@hljv.com.au</i>)
Construction Director – Alan Foote (<i>alan.foote@hljv.com.au</i>)
Senior Design Manager – Tim Sleep (<i>tim.sleep@ugllimited.com</i>)
Substation Construction Manager – Sherif Mansour (<i>sherif.mansour@hljv.com.au</i>)
Commercial Manager – David Ridgeway (<i>david.ridgeway@hljv.com.au</i>)
WHS Manager – Andrew Bruce (<i>andrew.bruce@ugllimited.com</i>)
WHS Advisor – Francis Williams (<i>francis.williams@hljv.com.au</i>)
Environmental Approvals Manager – Ian Irwin (<i>ian.irwin@hljv.com.au</i>)
Construction Environmental Manager – Jeremy Slattery (<i>jeremy.slattery@hljv.com.au</i>)
Senior Environmental Advisor – Stephen Barnes (<i>stephen.barnes@cpbcon.com</i>)

Snowy 2.0 TCP
Construction Environmental Management Plan

Project Contacts – Stage 1 – UGL

Role	Personnel	Contact Details
Operations Manager	Louis Linde	0493 818 783
Project Manager	Tim McCarthy	0455 087 248
HSE Manager	Andrew Bruce	0455 081 843
Construction Manager WEST	Darrell Van Bruchem	0447 307 244
Construction Manager EAST	Bert Brookman	0488 358 821
Environmental Manager	Brendan Toohey	0488 951 736
Senior Environmental Advisor	Alozie Agomoh	0475 558 532
Senior Environmental Advisor	Camille Palmer	0438 177 874
Site Environmental Advisor	Lauren Logue	0474 055 199
Site Environmental Advisor	Vivian Lee Yu	0447 824 930
Site Environmental Graduate	Lachlan Whiteford	0427 772 512
HSE Advisor	Ian Rembridge	0466 517 794
HSE Advisor	Geoff Fletcher	0499 459 077
Civil Engineer	Raj Kumar	0428 490 687
Civil Engineer	Tyger Yeo	0423 305 068
Civil Supervisor	Matthew Barnes	0438 808 913
Project Administrator	Arahi McIntosh	0411 732 773
Health and Safety Administrator	Lee Jobson	0400 514 742

Project Contacts – Stage 2 – HLWJV

Role	Personnel	Contact Details
Project Director	Tim Burns	0493 818 783
Construction Director	Vince Newton	TBD
HS Manager	Andrew Bruce	0455 081 843
Construction Manager	Sherif Mansour	0459 936 310
Environmental Manager	Jeremy Slattery	0421 827 231
Senior Environmental Advisor	Ron Billyard	TBD
Site Environmental Advisor	TBC	
Site Environmental Graduate	Nicholas Mok	0456 477 192
HS Senior Advisor	Nathan Blair	TBD

Snowy 2.0 TCP
Construction Environmental Management Plan

Role	Personnel	Contact Details
HS Advisor	Francis Williams	0456 651 421
Senior Project Engineer	Sajith Sivarajan	0492 462 802

Project Contacts - Transgrid

Role	Personnel	Contact Details
Senior Project Manager (Delivery)	Andrew Buttigieg	0436 166 667
Senior Environmental Advisor (Delivery)	Jason Snape	0472 756 143
Environmental Business Partner (Delivery)	Chris Wooll	0475 149 689
Environmental Business Partner (Delivery)	Chris Johnston	0427 407 828

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX J Environmental Inspection Weekly Checklist

Snowy 2.0 TCP
Construction Environmental Management Plan

ENVIRONMENTAL INSPECTION WEEKLY CHECKLIST

FORM

Site/Location or Area: <<add>>

Form Instructions *please delete before use*

- Site user must update inspection question set with relevant controls to check from site EMP (or equivalent)
- Existing form questions in BLACK text are stand/mandatory questions – these must remain
- Existing form questions in RED text are option questions for inclusion if relevant to project risks

Date							
Day:	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
Weather:							
Rainfall past 24 hours:							
Inspection performed by:							
Compliance Measure:	Compliance		Comments				CAR
Section 0 – Within the Last 7 Days:		If No, take action	(provide evidence)				X - Required
0.1	Have environmental incidents/non-compliances/report only events been entered into Synergy and managed in accordance with management plan/Client/regulatory requirements?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA					
0.2	Has a weekly environmental toolbox been delivered at site?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA					
0.3	Have all new staff completed the required project environmental onboarding (inductions, internal training, competencies)?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA					
Section 1 – Soil and Water Management		If No, take action	(provide evidence)				X - Required
1.1	Has all land disturbance occurred under an UGL Permit to Disturb / Clear Vegetation?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA					
1.2	Are erosion and sediment controls installed and functioning correctly and controls in place as per ESCP prepared in accordance with relevant guidelines?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA	<i>(Refer to approved ESCP)</i>				
1.3	In the event of significant rain forecast, has earthworks been rescheduled and temporary reinstatement undertaken to stabilise the ground where practicable?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA					
1.4	Is there any visual evidence of erosion or washout following recent rainfall or evidence of offsite unauthorised discharge of sediment?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA	<i>(Refer to post rainfall inspection checklists)</i>				

Snowy 2.0 TCP Construction Environmental Management Plan

1.5	Have any unexpected contaminated materials/acid sulfate soils been identified? If yes, have these been managed in accordance with the unexpected finds procedure?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
1.6	Are sources with potential contaminants of concern (e.g. parked plant and equipment, soils, wastes, hazardous substances) located outside of drainage lines (with an adequate buffer in place)?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
1.7	Are areas of rehabilitation signed and exclusion fencing in place?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
1.8	Works within/adjacent to waters have been scheduled to avoid times of flow, where practicable?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
1.9	Has routine and event water quality monitoring been undertaken at nominated locations?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
1.10	Has any overland water been captured / groundwater intercepted on site been dewatered in accordance with a UGL Dewatering Permit?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
1.11	Add site specific requirements	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
Section 2 – Biodiversity		If No, take action	(provide evidence)	X - Required
2.1	Has vegetation clearing been undertaken in accordance with: <ul style="list-style-type: none"> Agreed clearing scope (method, season and duration); and Pre-clearance survey requirements. 	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA	<i>(Refer to Permit to Disturb/Clear Vegetation conditions)</i>	
2.1	All vegetation/protected area exclusion barricading (flagging and signage) is in good order?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
2.2	Is there any evidence of unauthorised clearing of vegetation, clearing outside of designated boundaries/approved areas or access to excluded areas?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
2.3	Is there any evidence of retained vegetation dieback within/adjacent to works?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
2.4	Is there any evidence of sick/injured/dead fauna? If so, has injured fauna been handled, transported and treated in accordance with wildlife welfare codes?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
2.5	Are injured wildlife contacts displayed on site?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
2.6	Have trenches/open pits/other excavations been inspected for fauna entrapped at beginning and end of shift, and prior to installation/backfilling?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
2.7	Add site specific requirements	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		

Snowy 2.0 TCP Construction Environmental Management Plan

Section 3 – Air Quality & Amenity		If No, take action	(provide evidence)	X - Required
3.1	Have all works been undertaken within standard hours? If not, were works undertaken in accordance with an UGL Out of Hours Work Permit?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.2	Has all plant and equipment been maintained in good condition? For any defects, has use of plant and equipment ceased and the defect rectified before a restart?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.3	Have noise/vibration/dust/visual amenity/other environmental related complaints been recorded?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.4	Are site work activities, stockpiles, disturbed areas haul roads or adjacent streets free of visible dust/particulate matter that may cause an environmental nuisance/sedimentation risk?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.5	Are all loads leaving the site either covered or sprayed with a dust suppressant/retardant?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.6	Is there any evidence of fire or fire risks?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.7	Is there any visible/smokey emissions from operation of plant and equipment emissions?			
3.8	Have pre-start conversations been completed in relation to: <ul style="list-style-type: none"> - Driver behaviour - Equipment maintenance - Light spill (for out of hours works) - Emissions management - Litter, and - Windy conditions and dust? 	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.9	The fuel burn rate for all plant and equipment on site is within safety margin of manufacturer emission standards? If not, has the cause of the excessive emissions been investigated?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA	<i>(Refer to fuel records and manufacturer air emission standards)</i>	
3.10	Has air quality monitoring near sensitive receptors been undertaken?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
3.11	Add site specific requirements	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
Section 4 – Indigenous & Non-Indigenous Heritage Management		If No, take action	(provide evidence)	X - Required
4.1	Is there any evidence of unauthorised access to protected heritage areas? If so, was access authorised under a UGL Permit to Enter a Protected or No Go Zone?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
4.2	Is appropriate fencing and signage for heritage sites and exclusion zones in place and functional?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		

Snowy 2.0 TCP
Construction Environmental Management Plan

7.1	Is all machinery and vehicles cleaned down of all soil and vegetation material prior to entering the project area/site?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
7.2	Do all plant and equipment have a valid hygiene checklist completed and a copy kept in the vehicle and on the P&E Register?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
7.3	For any fill material imported to site, have soil (weed/pest carrying) products been declared weed/pest free from the Supplier and records maintained?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
7.4	Has any new weed presence, weed spread or increased weed density occurred?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
7.5	All packaged materials are clean with no evidence of mould, animal droppings or plant matter? If not, the pest or disease concern has been reported?	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
7.6	<i>Add site specific requirements</i>	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		
Section XX – XXXX Management		If No, take action	(provide evidence)	X - Required
	<i>Add site specific requirements</i>	<input type="checkbox"/> Y / <input type="checkbox"/> N / <input type="checkbox"/> NA		

Snowy 2.0 TCP
Construction Environmental Management Plan

LIST OF CORRECTIVE ACTION REQUESTS (CARs) DETERMINED FROM INSPECTION DENOTED WITH 'X'. (All actions must be entered into Synergy)

Section No.	Action	Action By	Synergy No/Due Date
	<< Please add as necessary >>		

SIGN _____ **Print Name** _____ **Date** / /



Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX K Pre and Post Rainfall Inspection Checklists

Snowy 2.0 TCP
Construction Environmental Management Plan

PRE-RAINFALL INSPECTION CHECKLIST

INFORMATION	
Date and Time	
Weather Forecast	
Attendees	
Supervisor or delegate involved in inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No

Urgency:

IMD – Immediate, on day of inspection
day of inspection

H – High, within 24 hrs from the

M – moderate, within 3 days from the day of inspection

L – Low, within 5 days from the

SITE LOCATION INSPECTED						
Item	YES	NO	N/A	Proposed Comment	Action/	Timeline
1.1						
1.2						
1.3						
1.4						
1.5						
1.6						
1.7						
1.8						

SITE LOCATION INSPECTED						
Item	YES	NO	N/A	Proposed Comment	Action/	Timeline
2.1						
2.2						

Snowy 2.0 TCP
Construction Environmental Management Plan

SITE LOCATION INSPECTED					
2.3	Site drainage installed as per ESCP?				
2.4	Clean water diversions installed as per ESCP?				
2.5	Disturbed/exposed areas stabilised as per ESCP?				
2.6	Topsoil/subsoil stockpiles stabilised?				
2.7	Temporary waterway crossings maintained and free of sediment build-up?				
2.8	Site entry/exit points stabilised?				

SITE LOCATION INSPECTED						
Item		YES	NO	N/A	Proposed Comment	Action/ Timeline
3.1	Sediment controls installed as per ESCP and functional?					
3.2	Adequate capacity within sediment basins and sumps?					
3.3	Site drainage installed as per ESCP?					
3.4	Clean water diversions installed as per ESCP?					
3.5	Disturbed/exposed areas stabilised as per ESCP?					
3.6	Topsoil/subsoil stockpiles stabilised?					
3.7	Temporary waterway crossings maintained and free of sediment build-up?					
3.8	Site entry/exit points stabilised?					

SITE LOCATION INSPECTED						
Item		YES	NO	N/A	Proposed Comment	Action/ Timeline
4.1	Sediment controls installed as per ESCP and functional?					
4.2	Adequate capacity within sediment basins and sumps?					
4.3	Site drainage installed as per ESCP?					
4.4	Clean water diversions installed as per ESCP?					

Snowy 2.0 TCP
Construction Environmental Management Plan

SITE LOCATION INSPECTED					
4.5	Disturbed/exposed areas stabilised as per ESCP?				
4.6	Topsoil/subsoil stockpiles stabilised?				
4.7	Temporary waterway crossings maintained and free of sediment build-up?				
4.8	Site entry/exit points stabilised?				



Completed by:

Signed:

Date:



Supervisor Signoff

Actions required prior to rainfall have been discussed with and understood by Supervisor (or delegate)

Name	Signed	Date

Additional comments:

Snowy 2.0 TCP
Construction Environmental Management Plan

DURING / POST RAINFALL INSPECTION CHECKLIST

INFORMATION	
Date and Time	
Rain Received	
Has 'design' rainfall been reached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Attendees	
Supervisor or delegate involved in inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No

Urgency:

IMD – Immediate, on day of inspection
day of inspection

H – High, within 24 hrs from the

M – moderate, within 3 days from the day of inspection
day of inspection

L – Low, within 5 days from the

SITE LOCATION INSPECTED						
Item		YES	NO	N/A	Proposed Comment	Action/ Timeline
1.1	Are sediment controls working effectively?					
1.2	Have sediment basins and sumps overtopped?					
1.3	Site drainage working effectively?					
1.4	Any clean water observed coming into site?					
1.5	Are disturbed areas stable? Is scouring visible?					
1.6	Are stockpiles intact?					
1.7	Any muddy water observed leaving the site?					
1.8	Any mud tracking visible at site entry/exit points?					

SITE LOCATION INSPECTED						
Item		YES	NO	N/A	Proposed Comment	Action/ Timeline
2.1	Are sediment controls working effectively?					
2.2	Have sediment basins and sumps					

Snowy 2.0 TCP
Construction Environmental Management Plan

SITE LOCATION INSPECTED						
	overtopped?					
2.3	Site drainage working effectively?					
2.4	Any clean water observed coming into site?					
2.5	Are disturbed areas stable? Is scouring visible?					
2.6	Are stockpiles intact?					
2.7	Any muddy water observed leaving the site?					
2.8	Any mud tracking visible at site entry/exit points?					

SITE LOCATION INSPECTED						
Item		YES	NO	N/A	Proposed Comment	Action/ Timeline
3.1	Are sediment controls working effectively?					
3.2	Have sediment basins and sumps overtopped?					
3.3	Site drainage working effectively?					
3.4	Any clean water observed coming into site?					
3.5	Are disturbed areas stable? Is scouring visible?					
3.6	Are stockpiles intact?					
3.7	Any muddy water observed leaving the site?					
3.8	Any mud tracking visible at site entry/exit points?					

SITE LOCATION INSPECTED						
Item		YES	NO	N/A	Proposed Comment	Action/ Timeline
4.1	Are sediment controls working effectively?					
4.2	Have sediment basins and sumps overtopped?					
4.3	Site drainage working effectively?					
4.4	Any clean water observed coming into					

Snowy 2.0 TCP
Construction Environmental Management Plan

SITE LOCATION INSPECTED						
	site?					
4.5	Are disturbed areas stable? Is scouring visible?					
4.6	Are stockpiles intact?					
4.7	Any muddy water observed leaving the site?					
4.8	Any mud tracking visible at site entry/exit points?					



Completed by:

Signed:

Date:



Supervisor Signoff

Actions required prior to rainfall have been discussed with and understood by Supervisor (or delegate)

Name	Signed	Date

Additional comments:

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX L Environmental Monitoring Program

Snowy 2.0 TCP
Construction Environmental Management Plan

Conducting the Projects Division Environmental Weekly Inspection Checklist and Projects Division Environmental Monthly Report will be basis of achieving the table below.

Aspect	Monitoring Parameter	Frequency	Reporting
Training	Number of personnel trained, inducted, and demonstrated understanding of environmental requirements and incident reports.	Monthly	Project Monthly Report
General Site Environment	Environmental site inspection	Weekly	Site inspection checklist
	Pre-rainfall inspection	Within 24 hours of the start of a forecasted rainfall event (or on the following working day) Rainfall event being greater than 50% potential for 10mm or more with 24 hours	Pre-rainfall inspection checklist
	Post-rainfall inspection	Within 24 hours of rainfall event occurring	Post-rainfall inspection checklist
	Transgrid Environmental site inspections	Fortnightly	Site inspection checklist
Environmental Audits	Environmental internal audits as required under the auditing procedure to ensure compliance with the environmental management system, the CEMP and Legal and other requirements	Within the first 3 months and then at least every 6 months	Audit report
	Independent external audits	Within 3 months of commencing construction and then at least every 6 months	Audit report
EPL	Water quality	Monthly	6 monthly monitoring report Annual report

Snowy 2.0 TCP
Construction Environmental Management Plan

Aspect	Monitoring Parameter	Frequency	Reporting
Soil and water (incl. ESC)	Any visible signs of erosion	Weekly	Site inspection checklist
	Drainage and erosion & sediment controls are in place and in good working order	Weekly	Site inspection checklist
	Soil stockpiles and excavations are being protected	Weekly	Site inspection checklist
	Sediment has been removed following large storm events and controls maintained	Weekly and after storm events	Post-rainfall inspection checklist
	Effectiveness of landscaping and rehabilitation	Weekly	Site inspection checklist Pre-rainfall inspection checklist Post-rainfall inspection checklist
	Visual inspection for indications of sediment-laden waters, waste waters or pollution (e.g., grease/oil, effluent) because of construction.	Weekly and after each rainfall event	Site inspection checklist Pre-rainfall inspection checklist Post-rainfall inspection checklist
	Visual inspection of settled water for contaminants or sedimentation will be made before water is discharged to drains.	Weekly and after each rainfall event	Site inspection checklist
	Visual inspection of waterway crossings and access tracks	Weekly and after each rainfall event	Site inspection checklist
	Visible erosion on spoil stockpiles	Weekly	
	Spoil and topsoil are being appropriately segregated during excavation and storage activities	Weekly	
Spoil stockpiles and excavations are being protected	Weekly		

Snowy 2.0 TCP
Construction Environmental Management Plan

Aspect	Monitoring Parameter	Frequency	Reporting
	No spoil is being transported between the east and west sections of the Project	Weekly	
	Inspection of VENM / ENM transportation documentation	Weekly	Refer to SMP
	Inspection of Plant and equipment being used during spoil management	Weekly	
	Site Rehabilitation	Refer to RMP	Refer to RMP
Biodiversity	<p>Monitoring the performance of mitigation measures in the BMP and strategies Including for;</p> <ul style="list-style-type: none"> • Protected Species – BF, YBG, Masked Owls, GG Cockatoos • Breeding Places • Bird / Bat collision or electrocution • Pest / Predator • Weeds / Pathogens • Staged Clearing / BOS 	Refer to the BMP	Refer to the BMP
Noise & Vibration	Monitoring the performance of mitigation measures in the NVMP	Weekly	Site inspection checklist
	Noise or vibration being generated by the works	In response to a compliant or an identified concern of potential exceedance. During approved out of hours work	Noise or vibration report/recording forms
	Out Of Hours Works	At request	Refer to OOHW Protocol in NVMP
Air Quality	<p>Visible dust in air</p> <p>Visual exhaust from machinery, Observation of odours</p>	Weekly	Site inspection checklist

Snowy 2.0 TCP
Construction Environmental Management Plan

Aspect	Monitoring Parameter	Frequency	Reporting
Heritage	Monitoring the performance of mitigation measures in the HMP No work to continue if heritage is found Heritage management measures fully implemented and no heritage incidents.	Weekly At completion of works	Site inspection checklist Post works report
Aboriginal heritage salvaged items	Monitoring of salvaged items	Post salvage to outline the effectiveness of the program, Fortnightly to inspect items are still protected	Salvage report Site inspection checklist
Hazardous Materials/ Risk	Appropriate storage and use of hazardous materials (appropriate housekeeping)	Weekly	Site inspection checklist
	Hazards identified during inspections by the Client to be communicated to PC immediately.	As needs basis	Monthly report
Waste	Effectiveness and appropriateness of waste management and disposal. Effectiveness of chemical bunds. Waste amount, type and proposed disposal locations	Weekly	Site inspection checklist
Spoil Management / Contaminated Land	Testing and managing spoil for leachate, to not impact receiving environments Testing and managing spoil for NOA Monitoring the performance of mitigation measures in the CLMP	As required. Refer to Contaminated Land Management Plan & Spoil Management Plan (in SWMP)	Refer to CLMP & SMP in SWMP

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX M Environmental Monthly Report Template

PROJECTS DIVISION ENVIRONMENTAL MONTHLY REPORT FORM

Project Name: <<Insert here>>

Date: <<Insert here>>

Prepared By: <<Insert here>>

1 SUMMARY

Summary of Monthly Activities including:

- KPIs
- Works Completed
- Milestones
- Upcoming works

<<Insert here>>

1.1 INSPECTIONS AND OUTSTANDING ISSUES/ACTIONS DURING MONTH:

1.1.1 MONTHLY INSPECTION CONDUCTED BY THE ENVIRONMENTAL REPRESENTATIVE

Complete the Projects Division Environmental Inspection Weekly Checklist as evidence and attach below as Appendix 1.

Synergy No.	Action	Action By	Due Date
	<<Please add as necessary>>		

1.1.2 OVERVIEW OF WEEKLY INSPECTIONS

Please find <<Insert number of inspections here>> weekly environmental inspection checklists attached as evidence in Appendix 2. See breakdown below.

WEEK 1: Site

<<Insert here>>>

Snowy 2.0 TCP
Construction Environmental Management Plan

WEEK 2: Site

<<Insert here>>

WEEK 3: Site

<<Insert here>>

WEEK 4: Site

<<Insert here>>

1.2 RAINFALL DURING MONTH:

Week	Total Rainfall per Week	Week	Total Rainfall per Week
1		3	
2		4	
Total Rainfall for the month: <<Insert here>>			

1.3 INCIDENTS DURING MONTH:

INCIDENTS:

Total Incidents for the month: <<Insert here>>.

NON – CONFORMANCES:

Total Non – Conformances for the month: <<Insert here>>.

HAZARDS:

Total Hazards for the month: <<Insert here>>.

ACTIONS (OTHER THAN INSPECTION ACTIONS)

<<Insert here>>

1.4 CEMP UPDATE

The current version of the CEMP is Revision <<Insert here>>.

Next review of the CEMP is <<Insert date here>>.

1.5 ESCP UPDATE

The current version of the ESCP is Revision <<Insert here>>.

The ESCP must be reviewed monthly and signed off.

Snowy 2.0 TCP
Construction Environmental Management Plan

1.6 MONITORING ACTIVITIES RESULTS:

<<Insert here>>. This should include any fauna/fauna spotting, dewatering activities, noise monitoring, air monitoring etc.

1.7 REGULATORY INSPECTIONS/VISITS/NOTICES:

<<Insert here>>

1.8 APPROVALS COMPLIANCE SUMMARY/REGISTER:

Instrument	Title	Obligation	Environmental Aspect/ Activity

1.9 STAKEHOLDER COMPLAINTS:

Total Complaints for the month: <<Insert here>>

<<Insert here>>

1.10 STAFFING AND RESOURCES

<<Insert here>>

1.11 ENVIRONMENTAL TRAINING

What was completed during the month?

<<Insert here>>

1.12 WASTE TRACKING

Is the monthly waste sheet completed?

Waste Register is attached as evidence. See Appendix 3.

2 POSITIVE NEWS AND PHOTOS:

<<Insert brief summary here>>

PHOTO	DESCRIPTION
<<Insert photo>>	<< Insert brief description & reference section no. >>
<<Insert photo>>	<< Insert brief description & reference section no. >>

Snowy 2.0 TCP
Construction Environmental Management Plan

3 APPENDICES

3.1 *APPENDIX 1 - PROJECTS DIVISION ENVIRONMENTAL INSPECTION WEEKLY CHECKLIST*

<<Insert here>>

3.2 *APPENDIX 2 - COPY OF WEEKLY ENVIRONMENTAL INSPECTION SHEETS*

<<Insert here>>

3.3 *APPENDIX 3 - WASTE REGISTER*

<<Insert here>>

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX N Project Environment Filing Structure (1102: Folder)

Folder
E00 Client Documents & Reports
0.1 Approval Documents
0.1.01 EIS, BDAR, Amendment Report
0.1.02 Federal Condition
0.1.03 State CoAs
0.02 Contract Specification
0.2.01 Contract Env Communications
0.3 Regulatory & Compliance
0.3.01 Directions & Instructions
0.3.02 Environmental Representative
0.3.03 Dept & Stakeholder Correspondance
0.3.3.01 Incoming
0.3.3.02 Outgoing
0.3.04 External -Compliance Reporting
0.3.4.01 Annual Reports
0.3.05 Other Correspondence
0.3.5.01 Meeting Minutes (external)
0.4 Licenses & Permits
0.4.01 EPL
0.4.02 Others
0.5 Internal Compliance Reporting
0.5.01 UGL Monthly Report
0.6 ER Report
E01 Polices and Proedures Documents
1.01 Procedures
1.1.01 Weed and Pathogen Procedures
1.1.02 Clearing Procedure
1.1.03 Booroolong Frog
1.1.04 Fauna Rescue and Release Procedure
1.1.05 Unexpected Finds Procedures
1.1.06 Pest and Predator
1.1.07 Water Quality Monitoring
1.1.08 Sediment Basin Operating Procedure
1.1.09 Approved Subcontractor Procedures
1.02 Forms & Checklists
1.2.01 Checklists
1.2.02 Forms
1.03 TARPs
1.04 Workpacks
1.4.01 East Workpacks
1.4.02 West Workpacks
1.4.03 Previous Workpack Information
1.05 EWMS
1.06 Subcontractor Permits
1.07 Secondary Approvals
1.08 Field Data Sheets
1.09 ITP's& ITC's
1.9.01 ITP

Snowy 2.0 TCP
Construction Environmental Management Plan

Folder
1.9.02 ITC
E02 Environmental Management Plans
2.01 CEMP
2.02 Biodiversity MP
2.03 Heritage MP
2.04 Soil & Water MP
2.05 Transport TMP
2.06 Emergency Plan
2.07 Noise & Vibration MP
2.08 Rehabilitation MP
2.09 Visual Impact MP
2.10 EMS
E03 Site Inspections, Checklists, Permits and Registers
3.01 Inspections and Checklists
3.1.01 Weekly Environmental Inspections
3.1.02 Pre and Post Clearing Inspections
3.1.03 Pre-Rainfall Inspections
3.1.04 During & Post Rainfall Inspections
3.1.05 ESC Inspections
3.1.06 Rainfall Readiness Review
3.1.07 Shutdown Inspections
3.1.08 Subcontractor Inspection
3.1.09 Client Inspection
3.1.10 ER Inspections
3.1.11 Joint Agency Inspections
3.1.12 Contract Signoff Inspection
3.02 Permits
3.2.01 Clearing Permits
3.2.02 No Go Access Permits
3.2.03 Spoil Movement and Placement Permits
3.2.04 Water Irrigation and Disposal Permit
3.2.05 Sediment Basin Treatment and Discharge Permit
3.03 Registers
3.3.01 Community & Stakeholder Complaints Register
3.3.02 Environmental Incidents Register
3.3.03 Permits Registers
3.3.04 Environmental Monitoring
3.3.05 Fauna Strike Register
3.3.06 Progressive ESCP Register
3.3.07 Sediment Basin Treatment Register
3.3.08 Unexpected Finds
3.3.09 Site Environmental Plan Register
3.3.10 Spill Kit Register
3.3.11 EWMS Register
3.3.12 Waste Registers
3.04 Forms
3.4.01 Topsoil Stripping and Stockpiling

Snowy 2.0 TCP
Construction Environmental Management Plan

Folder
E04 Aspects & Impacts
4.01 Air Quality
4.02 Noise & Vibration
4.03 Flora & Fauna
4.3.1 Fauna Handling
4.3.2 Pathogen Management
4.3.4 Pre-Clearing Survey
4.3.5 Weed Management
4.04 Heritage Management
4.4.01 ACH
4.4.02 HH
4.05 Surface Water
4.06 Groundwater
4.07 Waste and Contaminated Land
4.7.01 Licence Copies
4.08 Spoils & Excavated Materials
4.8.01 ENM Compliance Statement
4.8.02 Imported Fill
4.8.03 Section 143 Notice Template
4.8.04 Spoil Characterisation Sampling
4.8.05 VENM Certificate Template
4.09 Topsoil Management
4.10 Weather & Lighting
4.10.01 Weather
4.10.1.01 Daily Weather Notifications
4.10.02 Lighting
4.11 GIS and Plans
4.12 Complaints Management
4.13 Risk Register
E05 Communication and Reporting
5.01 Client Notifications
5.1.01 Teambinder Comms
5.02 Regulatory Notifications
5.2.01 EPBC
5.03 Environmental Reports
5.04 NGER Reporting
5.4.01 Energy and Fuel
5.4.02 Water
5.4.03 Waste
5.4.04 Records
5.05 Meeting Minutes
5.06 Monthly Reporting
5.6.01 FCNSW
5.6.02 NPWS
5.07 Incident & Event Reporting
5.08 Consultants Memo

Snowy 2.0 TCP
Construction Environmental Management Plan

Folder
E06 Monitoring and Measurement
6.01 Air Quality
6.02 Noise & Vibration
6.2.01 East Noise Assessments
6.2.02 West Noise Assessments
6.2.03 Noise Monitoring Data Sheets
6.03 Flora & Fauna
6.3.01 Bird & Bats
6.3.02 Booroolong Frog Monitoring
6.3.2.01 Baseline Drone Imagery
6.3.03 Hand Clearing
6.3.04 Pest and Predators
6.3.4.01 Camera Locations
6.3.4.02 Camera Traps Placement
6.3.05 Songmeter Data
6.3.06 Threatened Species
6.3.6.01 Unexpected Threatened Species Notifications
6.3.6.02 Koala Thermal Surveys
6.3.6.03 RFI's
6.3.07 Weed & Pathogen
6.3.7.01 Baseline Pathogen Sampling
6.3.7.02 Weed Cover Monitoring
6.3.7.03 Weed Presence and Absence
6.3.7.04 Pathogen DNA Results
6.3.08 Yellow-bellied Glider
6.04 Heritage Management
6.05 Surface Water
6.5.01 Pre-Construction Sampling
6.5.02 Construction Sampling
6.06 Groundwater
6.07 Waste and Contaminated Land
6.08 Spoils & Excavated Materials
6.09 Topsoil Management
6.10 Weather & Lighting
6.10.01 Weather
6.10.1.01 Monthly Rain Stats Tumbarumba
6.10.1.02 Lobs Weather Station
6.10.02 Lighting
6.11 Water Tracking
6.11.01 Water Take Records
6.12 Complaints Management
6.13 GS
6.14 NGER
6.14.01 Energy & Fuels
6.14.1.01 Fuel
6.14.1.02 Generators
6.14.1.03 Subcontractors

Snowy 2.0 TCP
Construction Environmental Management Plan

Folder
6.14.02 Water
6.14.2.01 Smallmon 2023
6.14.2.02 Smallmon 2024
6.14.2.03 March 2024
6.14.2.04 Water Extraction
6.14.03 Waste
6.14.3.01 Records
6.14.3.02 Bellettes - Waste Removal
6.14.3.03 Bellettes - Waste Water Removal
6.14.3.04 Smallmons - Potable Water
6.14.3.05 Divalls Day Sheets
6.14.3.06 Christies Waste
6.14.04 East Lobs Hole Waste Records
6.14.05 Subcontractor NGER Forms
6.15 Monitoring Equipment
E07 Audits
7.01 Internal Audits
7.1.01 BV Audit
7.1.02 Internal Environmental Audit
7.02 External Audits
7.2.01 EIA EPBC Approval
7.2.02 EIA - Infrastructure Approval
7.2.03 Evidence
7.03 Compliance Tracking
7.3.01 Compliance Tracker
7.3.02 Compliance Tracking Report
7.04 Management Committee
E08 Incident Investigation
8.01 Environmental Incidents
8.02 Unexpected Finds
E09 Inductions and Training
9.01 Inductions
9.1.01 Cultural
9.1.02 Induction Register
9.1.03 Induction Materials
9.02 Toolbox & Awareness
9.2.01 Toolboxes
9.2.02 Prestart
9.2.03 Awareness
9.03 Task Specific
9.3.01 Trainings
9.3.02 Attendance Register
E10 Subcontractors
10.01 Subcontractor Quotes
10.02 Subcontractor Invoices
10.03 Rosters
10.04 Procurement and Onboarding

Snowy 2.0 TCP
Construction Environmental Management Plan

Folder
10.05 Contractor Hours
10.06 Subcontractor Checklist
10.07 Handbook
10.08 Subcontractor Qualifications, CV's
10.09 Ecologist Resources
10.10 Subcontractors Licences and Permits
E11 Environmental Schedule
11.01 Clearing Program
11.02 Eastern Alignment Ecologist Schedule
11.03 Western Alignment Ecology Schedule
11.04 Three Week Look Ahead
11.05 30_60_90 Day Plan
11.06 Checklist Planner
11.07 Subcontractor Schedules
E12 Environmental Team Handover Notes
E13 Environmental Photos
E14 Environmental Drawings
14.01 Site Environmental Plans
14.02 Environmental Design Plans
14.03 Erosion and Sediment Control
14.3.01 Primary ESCPs
14.3.02 PESCP
14.3.03 TL64 ESCPs
14.04 Site Survey Points
E15 Signs and Poster
15.01 Site Posters
15.02 Site Signage
15.03 Emails and Comms
15.04 Templates
E16 GIS
E17 Management
E18 Miscellaneous
18.01 Environmental Resources & Procurement
18.02 Reference Materials
18.03 Handover Documents

Snowy 2.0 TCP
Construction Environmental Management Plan

APPENDIX O CEMP Sign Off

<i>We, the undersigned, confirm that the responsibilities nominated below have been explained and its contents are clearly understood.</i>						
<i>Position</i>	<i>Name</i>	<i>Signature</i>	<i>Date</i>	<i>Name</i>	<i>Signature</i>	<i>Date</i>
<i>Project Manager</i>						
<i>Construction Manager</i>						
<i>Supervisor 1</i>						
<i>Supervisor 2</i>						
<i>Engineer</i>						
<i>WHS Advisor / HSE Advisor</i>						
<i>Environmental Manager</i>						
<i>Environmental Advisor</i>						
<i><<Add as necessary>></i>						

APPENDIX P Transgrid Environmental Policy

Environment Policy



The Transgrid Group is committed to conducting its activities and services in a manner that protects the environment, prevents pollution, meets our compliance obligations, and supports the development of a green energy future. Transgrid actively supports and encourages employees and contractors to consider the environmental impact of their daily activities, aligning with our commitment to sustainability.

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

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

In meeting these commitments, Transgrid:

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

Approved by: Brett Redman, CEO, February 2024

Official

