



APPENDIX

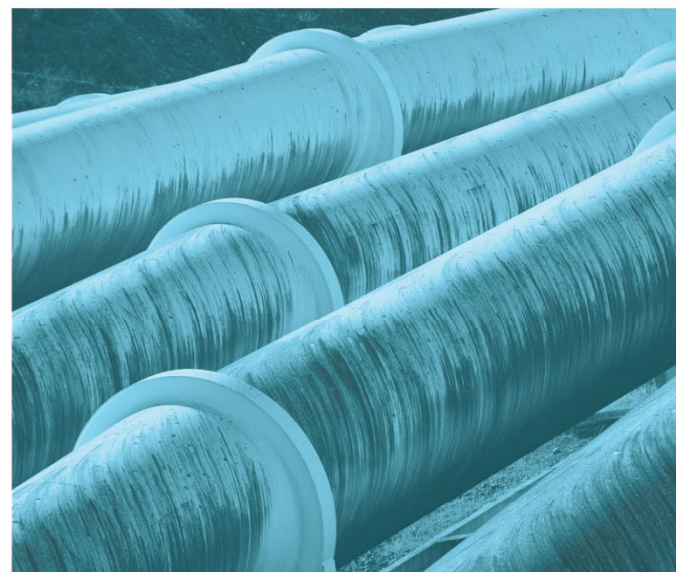
RISK SCREENING



Risk Screening

Proposed Segment Factory

Prepared for Snowy Hydro Limited
September 2019



Risk Screening

Proposed Segment Factory

Report Number

J17188 RP#102

Client

Snowy Hydro Limited

Date

17 September 2019

Version

v1 Final

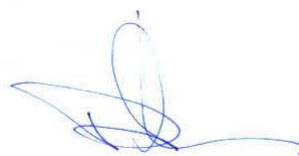
Prepared by**Approved by**



Brett McLennan

Director

26 August 2019



Duncan Peake

Director

26 August 2019

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at the time and under the conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.

Table of Contents

1	Introduction	1
1.1	Snowy 2.0	1
1.2	The proposed segment factory	2
1.3	Location of the site	2
1.4	Proponent	5
1.5	Purpose of this report	5
1.1	Assessment guidelines and requirements	5
1.6	Scope	5
2	Project description	6
2.1	Introduction	6
2.2	Construction	6
2.2.1	Main activities	6
2.2.2	Earthworks	6
2.2.3	Traffic movements	6
2.2.4	Construction timeframe and hours	7
2.2.5	Workforce	7
2.3	Operations	7
2.3.1	General	7
2.3.2	Site layout	7
2.3.3	Utility connections	9
2.3.4	Segment inputs	9
2.3.5	Segment transport	9
2.3.6	Traffic movements	9
2.3.7	Staff and manpower	9
2.3.8	Hours of operation	9
2.4	Decommissioning	10
3	Risk screening	11
3.1	Introduction	11
3.2	Potentially hazardous development	12
3.3	Transportation screening	14

3.4	Potentially offensive development	15
4	Conclusion	16
	Abbreviations	17
	References	18

Tables

Table 3.1	SEPP 33 hazardous material storage screening summary	13
Table 3.2	SEPP 33 hazardous material storage screening summary	14

Figures

Figure 1.1	Site location in regional context	3
Figure 1.2	Site location in local context	4
Figure 2.1	Proposed site layout	8

1 Introduction

1.1 Snowy 2.0

Snowy Hydro Limited (Snowy Hydro) proposes to develop Snowy 2.0, a large-scale pumped hydro-electric storage and generation project which would increase hydro-electric capacity within the existing Snowy Mountains Hydro-electric Scheme (Snowy Scheme). This would be achieved by establishing a new underground hydro-electric power station that would increase the generation capacity of the Snowy Scheme by almost 50%, providing an additional 2,000 megawatts (MW) generating capacity, and providing approximately 350,000 megawatt hours (MWh) of storage available to the National Electricity Market (NEM) at any one time, which is critical to ensuring system security as Australia transitions to a decarbonised NEM. Snowy 2.0 will link the existing Tantangara and Talbingo reservoirs within the Snowy Scheme through a series of underground tunnels and hydro-electric power station.

Snowy 2.0 has been declared to be State significant infrastructure (SSI) and critical State significant infrastructure (CSSI) by the NSW Minister for Planning under Part 5 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). CSSI is infrastructure that is deemed by the NSW Minister for Planning and Public Spaces to be essential for the State for economic, environmental or social reasons. An application for CSSI must be accompanied by an environmental impact statement (EIS).

Separate applications are being submitted by Snowy Hydro for different phases of Snowy 2.0, including Exploratory Works for Snowy 2.0 (the Exploratory Works) and Snowy 2.0 Main Works (the Main Works).

The first phase of Snowy 2.0, the Exploratory Works (Application Number SSI 9208), includes an exploratory tunnel and portal and other exploratory and construction activities primarily in the Lobs Hole area of the Kosciuszko National Park (KNP). Exploratory Works has been assessed in a separate EIS and is subject to an approval issued by the former NSW Minister for Planning on 7 February 2019. Construction for Exploratory Works has already commenced.

The second phase of Snowy 2.0, the Snowy 2.0 Main Works (Application Number SSI 9687), covers the major construction elements of Snowy 2.0, including permanent infrastructure (such as the underground power station, power waterways, access tunnels, chambers and shafts), temporary construction infrastructure (such as construction adits, construction compounds and accommodation), management and storage of extracted rock material and establishing supporting infrastructure (such as road upgrades and extensions, water and sewage treatment infrastructure, and the provision of construction power). Snowy 2.0 Main Works also includes the operation of Snowy 2.0. The EIS for Snowy 2.0 Main Works was submitted to the NSW Department of Planning, Industry and Environment (DPIE) in September 2019.

A separate application has also been submitted for a proposed factory that would manufacture precast concrete segments that would line the tunnels being excavated for Snowy 2.0 (Application Number SSI 10034). This risk screening supports the EIS for the proposed segment factory.

On 26 June 2019, Snowy Hydro referred the proposed segment factory (Reference Number 2019/8481) to the Commonwealth Minister for the Environment under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). On 13 August 2019, the proposed segment factory was determined by the Acting Assistant Secretary Assessments and Waste Branch of the Commonwealth Department of the Environment and Energy (DEE), as delegate to the Minister, to be 'not a controlled action' and therefore does not require further assessment or approval under the EPBC Act.

1.2 The proposed segment factory

The tunnels for Snowy 2.0, including the exploratory tunnel for Exploratory Works and underground tunnels linking Tantangara and Talbingo reservoirs for the Main Works, would be excavated, for the most part, using tunnel boring machines (TBMs) and would be lined using precast concrete segments. These segments are proposed to be manufactured at the proposed segment factory to be located on the south-eastern side of Polo Flat (the site), which is an industrial area located to the east of Cooma.

The proposed segment factory would contain a building for the casting and curing of the segments, uncovered storage areas for raw materials and segments, vehicle parking areas and associated offices and workshops.

Main inputs for the segments include aggregate, sand, cement and rebar steel. Primary outputs include the segments which would be transported to the TBM launch sites for Exploratory Works and Main Works within KNP.

The construction phase of the proposed segment factory would last about five months utilising a workforce of about 30 people. Construction would take place six days a week (from Monday to Saturday) and for 10 hours per day.

The factory would operate over a period of about 3.5 years utilising a workforce of about 125 people. It would be operational 24 hours a day, seven days a week.

The proposed segment factory would be constructed and operated by Future Generation Joint Venture (FGJV) which has been contracted by Snowy Hydro to construct Snowy 2.0.

At the completion of the construction of Snowy 2.0, the proposed segment factory would be decommissioned.

Further details of the proposed segment factory are provided in Chapter 2 of this report.

1.3 Location of the site

The site of the proposed segment factory is located on the south-eastern side of Polo Flat, predominantly on the southern part of the land owned by Snowy Hydro. The site is located to the east of Polo Flat Road and to the north of Carlaminda Road.

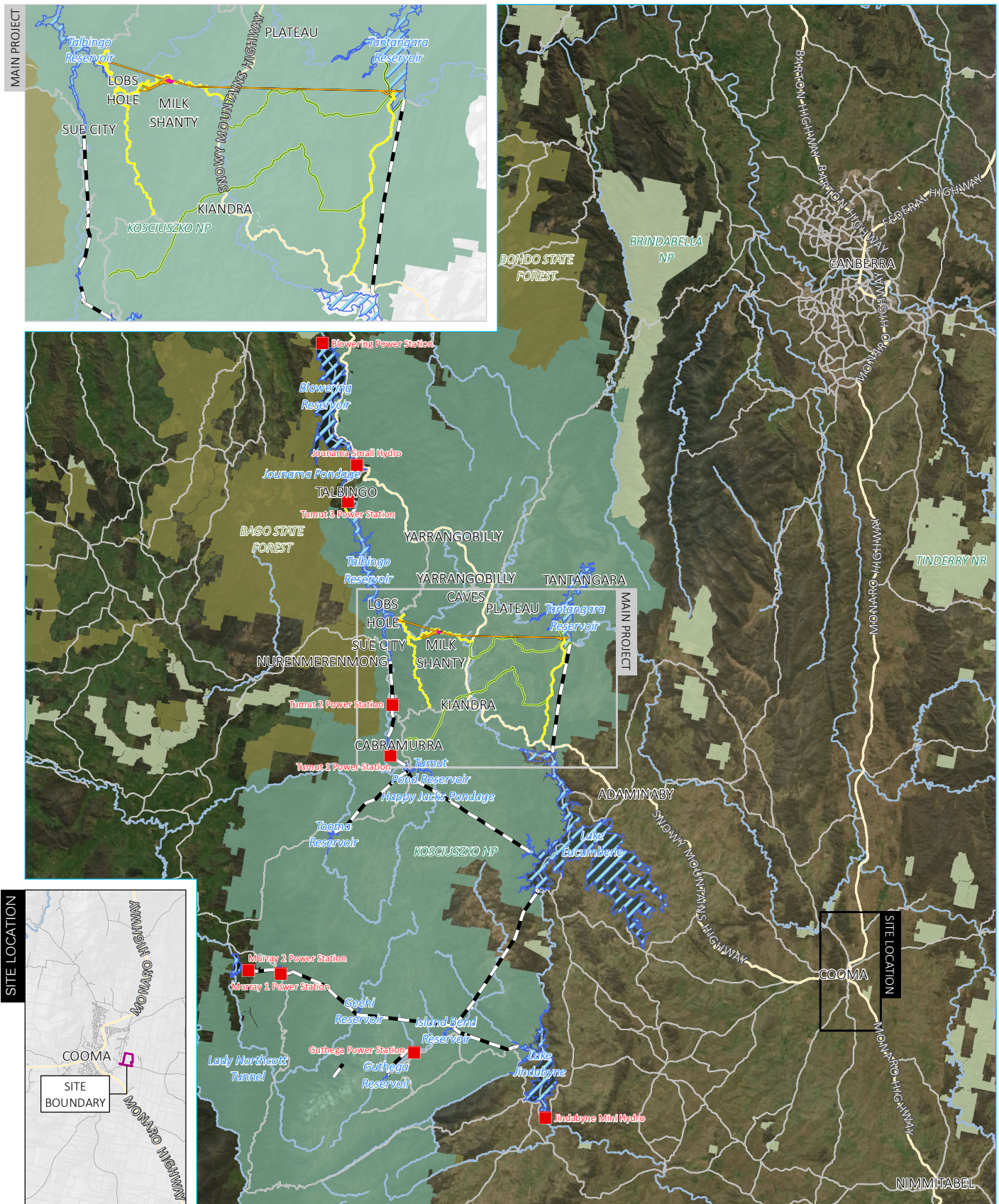
Figure 1.1 shows the location of the site in a regional context and Figure 1.2 shows the site in its local context.

The site contains the following land parcels:

- southern part of Lot 14 in Deposited Plan (DP) 250029 – also known as 9 Polo Flat Road, Polo Flat;
- Lot 3 in DP 238762 – also known as 33 Carlaminda Road, Polo Flat; and
- an unmade road corridor, directly south of the aforementioned lots.

Except for a few buildings located on the southern part of Lot 3 in DP 238762, the site is vacant and dominated by grassland. A third order watercourse flows in a north-westerly direction through the middle of the site.

Lot 14 in DP 250029 is a large parcel of land which contains a private airfield predominantly located in the middle and northern part of the land. This airfield was originally established in 1921 and further developed in the late 1950s and 1960s to service the Snowy Scheme. It became the base for the Snowy Mountains Hydro-electric Authority's (the predecessor to Snowy Hydro) flying unit and aircraft. The land was sold by Snowy Hydro in 1998 where it continued use as a private airfield. Snowy Hydro purchased the land again in early 2019.



Source: EMM (2019); FGJV (2019); Snowy Hydro (2019); DFSI (2017); GA (2011); LPMA (2011)

KEY

- | | | |
|---|--|--------------------------|
| SITE BOUNDARY | Existing Snowy Scheme | Main road |
| Snowy 2.0 project elements | ■ Existing power station | Local road or track |
| Utilities | Existing pipeline tunnel | Watercourse |
| Tunnels, portals, intakes | Scheme storage | Kosciuszko National Park |
| Power station | | NPWS reserve |
| Permanent roads and surface infrastructure | | State forest |

Location of the project area



Snowy 2.0
Risk Screening
Proposed Segment Factory
Figure 1.1



KEY

- Site boundary
- Rail line
- Main road
- Local road or track
- Watercourse
- Cadastral boundary
- NPWS reserve

Location of site in local context

The site is surrounded by industrial development to the west and predominantly rural land to the south and east. To the north of the site is the remainder of Lot 14 in DP 250029 which contains the private airfield, and other industrial development. Snowy Hydro's private airfield contains a main north-south aligned runway, hangars and offices. It also contains an above ground fuel tank for the refuelling of planes and helicopters.

Lot 3 in DP 238762 contains a communications tower which ceased use (ie transmission) in August 2019.

There is an isolated industrial operation containing a residence located about 150 metres (m) to the south-east of the site, and an abattoir located about 350 m to the east.

The nearest residence is a rural residence located about 450 m to the south-south-east of the site. The nearest residences within Cooma are located about 1 km to the west of the site.

1.4 Proponent

Snowy Hydro is the proponent for the proposed segment factory. Snowy Hydro is an integrated energy business – generating energy, providing price risk management products for wholesale customers and delivering energy to homes and businesses. Snowy Hydro is the fourth largest energy retailer in the NEM and is Australia's leading provider of peak, renewable energy.

As previously stated, the proposed segment factory would be constructed and operated by FGJV which has been contracted by Snowy Hydro to construct Snowy 2.0.

1.5 Purpose of this report

This risk screening supports the EIS for the proposed segment factory. It documents the risk screening undertaken of the project to determine if the proposal is potentially hazardous or offensive and hence if a preliminary hazard assessment (PHA) is required under the provisions of *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* (SEPP 33).

The risk screening demonstrates that there are no potentially hazardous materials transported, stored or handled at the proposed segment factory, and as such, the factory is not defined as a potentially hazardous industry.

1.1 Assessment guidelines and requirements

This risk screening has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs), issued by the DPIE on 31 July 2019. In relation to hazards, the SEARs state that the EIS is to contain:

... an assessment of any potential hazardous impacts or public safety risks of the project;

1.6 Scope

This risk screening considers the transport, storage and handling of potentially hazardous materials, including dangerous goods, at the proposed segment factory, which, with the exception of diesel and acetylene, are used in the batching and curing of the concrete. It relies on information provided by FGJV about potentially hazardous materials stored and handled at the site.

This risk screening does not assess onsite risk and work, health and safety issues.

2 Project description

2.1 Introduction

It is proposed to construct and operate a factory on the site to supply precast concrete segments that would line the tunnels for Snowy 2.0.

The construction phase of the proposed segment factory would last about five months utilising a workforce of about 30 people. The operational phase would last about 3.5 years utilising a workforce of about 125 people.

The proposed segment factory would be decommissioned at the completion of operations.

2.2 Construction

2.2.1 Main activities

The following main activities would be undertaken for the construction of the proposed segment factory:

- demolition and removal of buildings and decommissioned telecommunications tower on the southern part of site;
- clearing, removal of topsoil and vegetation (topsoil excavated would be stockpiled on site for later use if deemed suitable);
- undertaking earthworks to establish level surfaces;
- establishment of primary access road;
- installation of site services (power, water and communications);
- establishment of site surfaces (ie concrete, asphalt and cement soil); and
- construction of site facilities and buildings, including precast building, concrete batching plant (CBP), workshops, offices, parking areas, storage areas and associated facilities.

2.2.2 Earthworks

Excavation will be carried out at the site to provide level surfaces, establish the access road and create the required trenches for drainage.

Where possible excavated material would be reused on site for filling and compaction (including benching areas of the site where required). Where there is a deficit of excavated material, additional material would be sourced from local quarries.

2.2.3 Traffic movements

Construction vehicle movements will comprise construction worker's light vehicles and heavy vehicles transporting equipment, building and construction materials, waste, and fill material if required.

2.2.4 Construction timeframe and hours

The construction phase of the proposed segment factory would last about five months (estimated to commence in March 2020 subject to obtaining the required approvals). Construction would be undertaken from Monday to Saturday for 10 hours per day. Access to the site would generally start at 6 am for pre-starts and toolbox talks, and construction would commence at 7 am.

2.2.5 Workforce

A workforce of about 30 people would be required to construct the proposed segment factory.

2.3 Operations

2.3.1 General

The segments would be produced by casting concrete (made in the CBP) in reusable steel moulds which would then be cured in a chamber. Following curing, the segments would be temporarily stored onsite before being transported to the TBM launch sites within KNP.

The casting and curing would be undertaken in the precast building. Storage of the segments would predominantly be undertaken in uncovered storage areas.

Main inputs for the segments include aggregate, sand, cement, water and steel rebar.

Approximately 130,500 segments would be manufactured over the operational period.

2.3.2 Site layout

The layout of the proposed segment factory is shown in Figure 2.1. Details of the site layout are provided below.

i General layout

The CBP and precast building (which contains a casting room and curing chamber) would be located at the southern end of the site. Open storage areas would be located predominantly to the north of the building on the northern part of the site.

Site offices and workshops would be located in the south-western corner of the site.

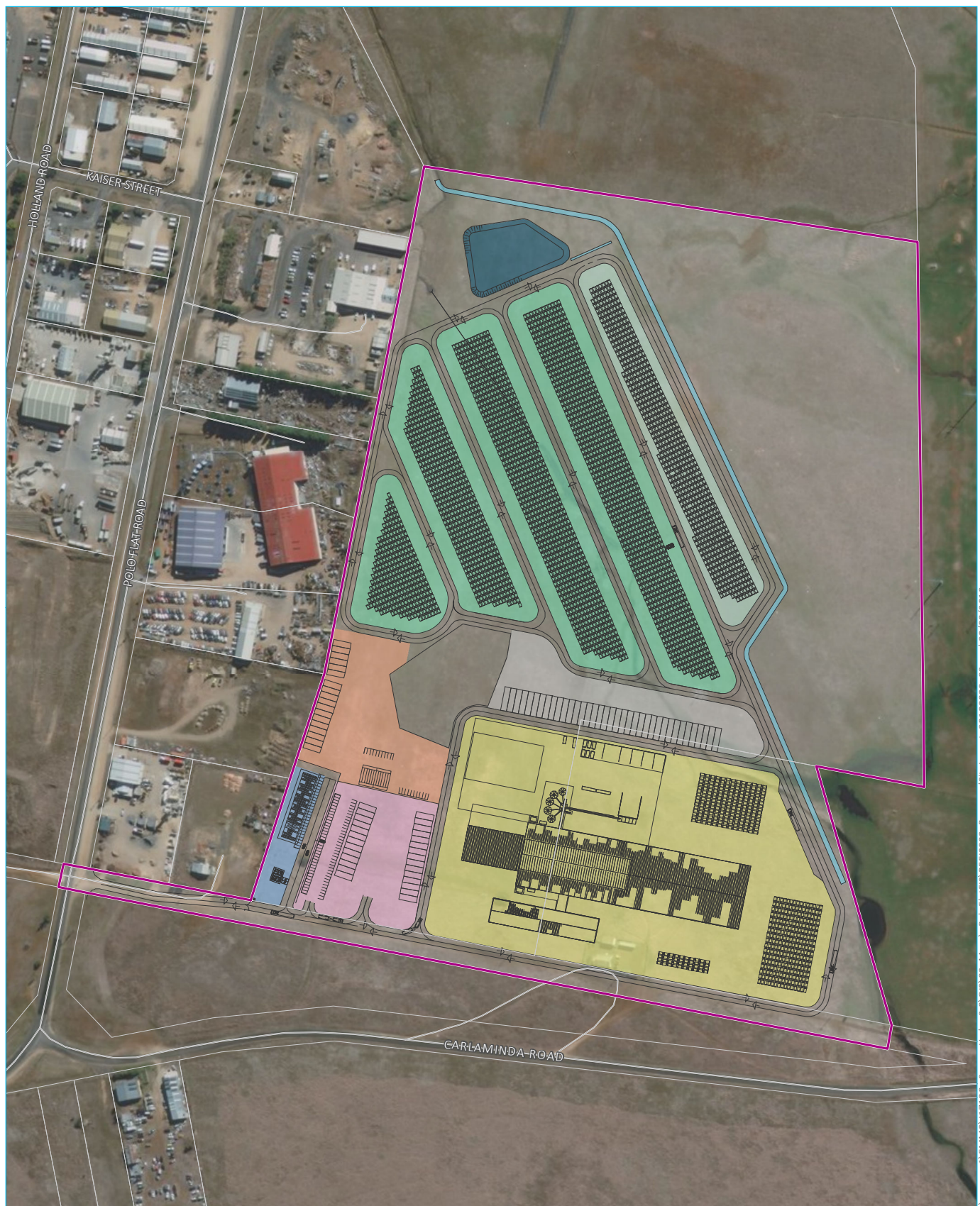
ii Ingress and egress

Vehicle ingress and egress to the site would be provided on a new access road which would connect to Polo Flat Road. The access road would be constructed on an existing informal service road located in the unmade road corridor immediately north of Carlaminda Road.

iii Raw materials storage

Cement silos, and aggregate and sand storage areas for the CBP would be located adjacent to the CBP. Storage would be sized to hold approximately three days production.

Other raw materials include steel rebar and concrete admixtures which would be stored in, or adjacent to, the precast building.



Source: EMM (2019); FGJV (2019); Snowy Hydro (2019); DFSI (2017); ESRI (2019); GA (2011); LPMA (2011)

0 100 200
m
GDA 1994 MGA Zone 55

KEY

- | | | |
|--|--|---|
| Site boundary | Precast yard, concrete plant, aggregates area, precast warehouse, segment storage | Trailer parking |
| Indicative site layout | Bus stop and parking | Storage area |
| Local road or track | Offices, guard house and first aid | Emergency storage area |
| Cadastral boundary | Mechanical and plant workshop with parking | Detention basin |
| | | Drainage |

Proposed layout

Snowy 2.0
Risk Screening
Proposed Segment Factory
Figure 2.1



iv Parking

Two large parking areas are proposed in the south-western corner of the site, and to the north of the precast building. Parking in the south western area would be used for light vehicles, trucks and buses. Parking to the north of the precast building would be used for trucks.

v Drainage

A diversion drain would be constructed around the eastern perimeter of the site to divert water from the third order watercourse. The drain diversion would be constructed to match the general width and depth of the existing watercourse.

A detention basin would be provided to the north of the site to collect surface flows. Overflows from the detention basin would be directed into the diversion drain.

2.3.3 Utility connections

The proposed segment factory would be connected to utility mains, including communications, electricity, water, wastewater and gas.

2.3.4 Segment inputs

As previously stated, main inputs for the precast concrete segments include aggregate, sand, cement and steel rebar. These main inputs would likely be sourced from locations in proximity to site and/or from quarries near Canberra.

In addition to these main inputs, several accessories are also required to produce the segments, such as reinforcement cages, steel fibres, gaskets and inserts. These inputs would likely be sourced from Canberra.

2.3.5 Segment transport

Following casting, curing and storage, the segments would be transported to the TBM launch sites within KNP.

2.3.6 Traffic movements

Operational vehicle movements will comprise light vehicles (worker's vehicles and service vehicles) and heavy vehicles required for the transportation of the main inputs for the segments and for the transportation of the segments from the site to the TBM launch sites within KNP.

2.3.7 Staff and manpower

A workforce of about 125 people would be required to operate the proposed precast segment factory. Most of this workforce would be sourced locally from the Snowy Monaro Regional LGA and surrounding localities.

2.3.8 Hours of operation

It is proposed to operate the proposed segment factory 24 hours a day, seven days a week. It is estimated that the factory would operate for a period of about 3.5 years.

2.4 Decommissioning

As previously stated, the proposed segment factory would be decommissioned at the completion of construction of Snowy 2.0 which would include removal of all plant and equipment. Snowy Hydro would retain the main structures such as the precast building, workshops and offices and seek to use these for an alternative industrial use.

It is envisaged that Snowy Hydro would submit a separate application for approval for an alternative use of the site prior to the decommissioning phase of the project.

3 Risk screening

3.1 Introduction

Environmental planning instruments, including SEPPs, do not apply to SSI and CSSI by virtue of section 5.22(2) of the EP&A Act. Notwithstanding this, SEPP 33 presents a systematic approach to planning and assessing proposals for potentially hazardous and offensive development for the purpose of industry or storage. While SEPP 33 is an enabling instrument (that is, it allows for the development of industry) it also aims to ensure that the merits of proposals are properly assessed (in relation to off-site risk and offence) before being determined. The merit-based approach ensures that locational and design considerations are an integral part of the assessment process.

SEPP 33 ensures that only those proposals which are suitably located, and able to demonstrate that they can be built and operated with an adequate level of safety and pollution control, can proceed. As such, SEPP 33 has been used as a basis for considering whether the proposed segment factory is potentially hazardous.

The aims of SEPP 33 are, in part:

...

- (d) to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and
- (e) ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and

While SEPP 33 is an enabling instrument (that is, it allows for the development of industry) it also aims to ensure that the merits of proposals are properly assessed (in relation to off-site risk and offence) before an application for the development is determined.

Whilst not required for the proposed segment factory, the screening process in SEPP 33 was used to provide a framework to determine the 'potentially hazardous' nature of the proposed development.

SEPP 33 ensures that only those developments which are suitably located, and able to demonstrate that they can be built and operated with an adequate level of safety and pollution control, can proceed.

Certain developments or activities may involve handling, storing or processing a range of materials which in the absence of locational, technical or operational controls may create an off-site risk or offence to people, property or the environment. Such activities would be defined as potentially hazardous or potentially offensive.

For developments classified as 'potentially hazardous industry', SEPP 33 establishes a comprehensive test by way of a PHA to determine the risk to people, property and the environment at the proposed location and in the presence of controls. Should such risk exceed the criteria of acceptability, the development is classified as 'hazardous industry' and may not be permissible within most industrial zonings in NSW.

For developments identified as 'potentially offensive industry', the minimum test for such developments is meeting the requirements for licensing by the NSW Environment Protection Authority (EPA) or other relevant authority. If a development cannot obtain the necessary environment protection licence (EPL), then it may be classified as 'offensive industry' and may not be permissible in most zonings.

The risk screening, which is explained in detail below, demonstrates that there are no potentially hazardous materials transported, stored or handled at the proposed segment factory, and as such, the factory is not defined as a potentially hazardous industry.

3.2 Potentially hazardous development

SEPP 33 defines potentially hazardous industry as:

... a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

- (a) to human health, life or property; or
- (b) to the biophysical environment, and:

includes a hazardous industry and a hazardous storage establishment.

To determine whether a proposed development is potentially hazardous, the risk screening process in the *Hazardous and Offensive Development Application Guidelines Applying SEPP 33* (NSW Department of Planning (DoP) 2011) (Applying SEPP 33) considers the type and quantity of hazardous chemicals to be stored on the site and the distance of the storage area to the nearest site boundary, as well as the expected number of transport movements.

Applying SEPP 33 is based on the *Australian Code for the Transport of Dangerous Goods Code by Road and Rail* (National Transport Commission (NTC), Edition 7.6, 2018) (ADGC) and therefore refers to hazardous materials by their dangerous goods classification. In this risk screening, materials will be referred to by their dangerous goods classification rather than their classification under the Globally Harmonized System (GHS), which is used in the ADGC.

The ADGC lists the following classes of dangerous goods:

- Class 1 - explosives;
- Class 2 – gases;
- Class 3 – flammable liquids;
- Class 4 – flammable solids;
- Class 5 – oxidising substances and organic peroxides;
- Class 6 – toxic and infectious substances;
- Class 7 – radioactive material;
- Class 8 – corrosive substances; and
- Class 9 – miscellaneous dangerous substances and articles, including environmentally hazardous substances.

A summary of the likely types and quantities of potentially dangerous goods to be transported, stored and handled at the proposed segment factory, together with a determination as to whether the goods are potentially hazardous under SEPP 33, is presented in Table 3.1. Product names provided in the table are examples of the products that

could be used at the proposed segment factory. The actual products to be used would be determined during the detailed design of the factory. Table 3.1 demonstrates that there are no potentially hazardous materials, stored or handled at the proposed segment factory and therefore the factory is not defined as a SEPP 33 potentially hazardous industry. Accordingly, a PHA for the storage and handling of these materials is not necessary for proposed segment factory.

Table 3.1 SEPP 33 potentially hazardous material storage screening summary

Material	DG Class	Packing group	Quantity	Potentially hazardous?	Notes
Diesel (eg automotive diesel fuel)	9	III	2 x 20,000 litre (L) tanks Total – 40,000 L	No	Stored outside of precast building. While diesel is classified as a Class 9 dangerous good under the ADGC, they are excluded from risk screening under SEPP 33. As such, there is no thresholds in Applying SEPP 33. Note the diesel will not be stored with other flammable materials.
Cement (eg general purpose cement)	N/A	-	-	No	Stored in silos at CBP. Cement is not classified as dangerous good under the ADGC.
Ground granulated blast furnace slag (GBFS)	N/A	-	-	No	Stored in silos at CBP. GBFS is not classified as dangerous good under the ADGC.
Silica fume (eg SikaFume)	N/A	-	-	No	Stored in the warehouse attached to the precast building. Silica fume is not classified as dangerous good under the ADGC.
Curing compound (eg Masterkure 250)	N/A	-	-	No	Stored in the warehouse attached to the precast building. While the curing compound is classified as a C1 combustible liquid, it is not classified as a dangerous good under the ADGC. As such, there is no threshold identified in Applying SEPP 33. The curing compound will not be stored with other flammable materials such as diesel.
Epoxy coating (eg Mapecoat W SP)	9	III	-	No	Stored in the warehouse attached to the precast building. While epoxy coating is classified as a Class 9 dangerous good under the ADGC, they are excluded from risk screening under SEPP 33. As such, there is no thresholds in Applying SEPP 33.
Concrete admixtures (eg Sikament® Eco 200, Sika Plastiment 20 and Viscocrete®-20 HE)	N/A	-	-	No	Stored in precast building or in covered and bunded area near CBP. Concrete admixtures are generally not classified as dangerous goods under the ADGC.
Evaporation retardant (eg A-Film)	N/A	-	-	No	Stored in the warehouse attached to the precast building. Evaporation retardant is not classified as dangerous good under the ADGC.

Table 3.1 SEPP 33 potentially hazardous material storage screening summary

Material	DG Class	Packing group	Quantity	Potentially hazardous?	Notes
Mould release agent (eg Crete-Lease 20-VOC)	N/A	-	-	No	Stored in the warehouse attached to the precast building. Mould release agent is not classified as dangerous good under the ADGC.
Acetylene (eg BOC industrial grade, dissolved)	2.1	-	2 x 1 cubic metre (m ³) tanks. Total – 2 m ³	No	Stored in the workshop. Volume and storage locations does not exceed the screening threshold for acetylene in Applying SEPP 33.

3.3 Transportation screening

The proposed segment factory may be potentially hazardous if the number of generated traffic movement (for significant quantities of potentially hazardous materials entering or leaving the site) is above the annual or weekly cumulative vehicle movements specified in SEPP 33. The list of substances that may be transported to the site during operational phase along with their screening threshold is summarised in Table 3.2.

Table 3.2 demonstrates that the deliveries of potentially hazardous materials do not exceed the screening threshold in Applying SEPP 33. Accordingly, a PHA for the transport of these materials is not necessary for proposed segment factory.

Table 3.2 SEPP 33 hazardous material storage screening summary

DG Class	Vehicle movements		Minimum quantity per load (tonne)		Potentially hazardous?	Notes
	Cumulative annual	Peak weekly	Bulk	Packages		
9	>1,000	>60	No limit	No limit	No	Diesel deliveries would likely be fortnightly, and deliveries of epoxy coating would likely be monthly. Diesel and epoxy coating deliveries would not exceed the screen thresholds.
2.1	>500	>30	2	5	No	Deliveries of acetylene would be based on demand but would likely be monthly at most. Deliveries of acetylene would not exceed the screening threshold.

3.4 Potentially offensive development

SEPP 33 defines potentially offensive industry as:

... a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.

Noise, air quality and water assessments have been undertaken of the proposed segment factory. These assessments conclude that the proposed segment factory can be operated in a manner that would not have a significant adverse impact on the locality, and therefore, is not an offensive industry.

Notwithstanding the above, an EPL will be required for the proposed segment factory as it is defined as a scheduled premise under clause 13 of Schedule 1 of the NSW *Protection of the Environment Operations Act 1997* (POEO Act). Under section 28 of the POEO Act, an EPL is required for scheduled activities where Schedule 1 of the POEO Act indicates that a licence is required for premises at which the activity is carried on.

Clause 13 of Schedule 1 of the POEO Act states:

- (1) This clause applies to **concrete works**, meaning the production of concrete products, but does not include the production of pre-mixed concrete (concrete batching).
- (2) The activity to which this clause applies is declared to be a scheduled activity if it has a capacity to produce more than 30,000 tonnes per year of concrete products.

Under section 5.24 of the EP&A Act, an EPL cannot be refused if it is necessary for carrying out approved SSI (and CSSI) and is to be substantially consistent with the EP&A Act approval.

The proposed precast yard would produce concrete products (ie tunnel segments) and would produce more than 30,000 tonnes per year of concrete products.

4 Conclusion

The risk screening demonstrates that there are no potentially hazardous materials transported, stored or handled at the proposed segment factory, and as such, the factory is not defined as a potentially hazardous industry. Accordingly, a PHA of the proposed segment factory is not required.

The noise, air quality and water assessments undertaken of the proposed segment factory conclude that the proposed segment factory can be operated in a manner that would not have a significant adverse impact on the locality and therefore, is not an offensive industry. Notwithstanding this, an EPL will be required for the proposed segment factory under the provisions of the POEO Act.

Abbreviations

ADGC	<i>Australian Dangerous Goods Code</i>
CBP	Concrete batching plant
CSSI	Critical State significant infrastructure
DA	Development application
DEE	Commonwealth Department of the Environment and Energy
DP	Deposited Plan
DPIE	NSW Department of Planning, Industry and Environment
EP&A Act	<i>NSW Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPBC Act	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
FGJV	Future Generation Joint Venture
GHS	Globally harmonized system
GGBFS	Ground granulated blast furnace slag
KNP	Kosciuszko National Park
L	Litre
m	Metres
m ³	Cubic metres
PHA	Preliminary hazard assessment
POEO Act	<i>NSW Protection of the Environment Operations Act 1997</i>
SEARs	Secretary's environmental assessment requirements
SEPP 33	<i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i>
SMRC	Snowy Monaro Regional Council
SSI	State significant infrastructure
TBMs	Tunnel boring machines

References

DoP 2011, *Hazardous and Offensive Development Application Guidelines Applying SEPP 33*, State of NSW

NTC 2018, *Australian Code for the Transport of Dangerous Goods Code by Road and Rail*, Edition 7.6, National Transport Commission



Servicing projects throughout Australia and internationally

SYDNEY

Ground floor, 20 Chandos Street
St Leonards NSW 2065
T 02 9493 9500

NEWCASTLE

Level 3, 175 Scott Street
Newcastle NSW 2300
T 02 4907 4800

BRISBANE

Level 10, 87 Wickham Terrace
Spring Hill QLD 4000
T 07 3648 1200

ADELAIDE

Level 1, 70 Pirie Street
Adelaide SA 5000
T 08 8232 2253

MELBOURNE

Ground floor, 188 Normanby Road
Southbank VIC 3006
T 03 9993 1900

PERTH

Level 6, 191 St Georges Terrace
Perth WA 6000

CANBERRA

PO Box 9148
Deakin ACT 2600