F.9 SEPP 33 risk screening

i Potentially hazardous development

Potentially hazardous or offensive development is defined by SEPP 33 as development which poses a significant risk to, or which would have a significant adverse impact on, human health, life, property or the biophysical environment, if it were to operate without employing any control measures. This includes developments for the handling, storing or processing of hazardous materials. A development is classified as a hazardous or offensive development if the thresholds in Applying SEPP 33 (DP&I 2011) — which compare the quantities of stored or used hazardous materials to the distance from publicly accessible areas — are exceeded.

An assessment of the Continuation Project against SEPP 33 potentially hazardous development criteria is provided in the following sub-sections.

a Hazardous materials stored, processed or handled

The storage conditions, quantities and hazardous properties of the materials that will be stored and used onsite are provided in Table F.1. Explosives are transported to the Quarry as needed for blasting, but are not stored onsite.

Table F.1 Dangerous goods and other potentially hazardous materials to be stored onsite

Classification	Name	Storage conditions	Approximate quantity
Dangerous goods			
Class 2.1 Flammable Gas	Acetylene	Stored in cages to Australian Standards	Up to 9 bottles
Class 2.2 Non-flammable, non toxic gas*	Oxygen	Stored in cages to Australian Standards	Up to 12 bottles
	Carbon Dioxide (CO_2)	Fire extinguishers, stored at various locations and all machines	Approximately 30 on site
	Argo Shield Universal	Stored in cages to Australian Standards	Up to 6 bottles
Class 3 Flammable Liquid PG II	Unleaded Petrol	Stored in Gerry cans as required	120 L
	All purpose thinner	Purpose built container, in enclosed storage room in main compound	20 L
Class 9 Miscellaneous dangerous substances PG III*	Diesel fuel**	Stored in self bunded diesel tank.	64,600 L
Other hazardous materials			
N/A	Oils (engine, hydraulic, and diesel)	Purpose built containers, in enclosed storage room in main compound	4,460 L
N/A	Window cleaner	Purpose built container, in enclosed storage room in main compound	40 L
N/A	Polo Citrus (Dust suppressant)	Purpose built container, in enclosed storage room in main compound	20 L
N/A	Dry Chemical ABE powder	Fire extinguishers, stored at various locations	33
N/A	Dishwashing liquid	Purpose built container, in enclosed storage room in main compound	2 L
N/A	Antibacterial hand cleaner	Purpose built container, in enclosed storage room in main compound	20 L

Table F.1 Dangerous goods and other potentially hazardous materials to be stored onsite

Classification	Name	Storage conditions	Approximate quantity
N/A	Grease	Two purpose-built containers, in enclosed storage room in main compound	500 kg
N/A	Coolant	Purpose built container, in enclosed storage room in main compound	200 L

Notes: *Exempt from "Applying SEPP" risk screening test.
**The Dangerous Goods Code states that diesel is not subject to the code as it is has a flash point of more than 60°C. The Work Practice Data Sheet provided by Chemwatch identifies Diesel as a Dangerous Good Glass 9.

A screening test for dangerous goods against the thresholds in SEPP 33 is provided in Table F.2.

Table F.2 *Applying SEPP 33* screening test

Dangerous goods classification	Total quantities	SEPP 33 screening threshold	Potentially hazardous?
Class 2.1 (liquefied excluding liquefied petroleum gas)	Up to 495 kg	Greater than 500 kg at specified distance	No
Class 3 PG II	140 kg	Greater than 5 tonnes at specified distance	No

Based on the dangerous goods screening test, the development is not classified as potentially hazardous.

b Transport of hazardous materials

Applying SEPP 33 also sets threshold limits for the transportation of hazardous materials to and from a site. The approximate quantities per load, and the number of weekly and annual deliveries are below the SEPP 33 transport screening thresholds (Table F.3).

Table F.3 Applying SEPP 33 transportation screening test

Hazardous materials	Deliveries		Quantities per load (average)	Potentially hazardous?
	Weekly (peak)	Annual		
Class 1.1 Explosives	2	104	9,000 kg	No
Class 2.1 Flammable Gas	1	30	16 m^3	No
Class 3 PG II	1	36	20 L	No
Class 9	1	24	45,000 L	No

Based on the dangerous goods screening test, the development is not classified as potentially hazardous.

c Other risk factors

Applying SEPP 33 requires an assessment of other hazards/risk factors outside the scope of the risk screening method. An assessment of other types of hazards associated with the Quarry is provided in Table F.4.

Table F.4 Other types of hazards

Type of hazard	Comments
Any incompatible materials (hazardous and non-hazardous materials).	No
Any wastes that could be hazardous.	No
The possible existence of dusts within confined areas.	No
Types of activities the dangerous goods and otherwise hazardous materials are associated with (storage, processing, reaction, etc.).	Use of explosives in blasting which is undertaken by licensed contractors, who hold a blasting explosives user licence with WorkCover NSW. No explosives will be stored onsite between blasts.
Incompatible, reactive or unstable materials and process conditions that could lead to uncontrolled reaction or decomposition.	No
Storage or processing operations involving high (or extremely low) temperatures and/or pressure.	No
Details of known past incidents (and near misses) involving hazardous materials and processes in similar industries.	No known incidents involving hazardous materials/processed at extractive industries.

d Hazard management

A range of hazard control measures will be implemented during the Continuation Project. Each of these will be appropriate for the hazard they are designed to control and will generally follow the Hierarchy of Hazard Controls (WorkCover NSW not dated). The storage and use of hazardous materials will be in accordance with the Australian Standard 1940:2004 The Storage and Handling of Flammable and Combustible Liquids.

ii Potentially offensive industry

The air, noise, and water emissions from the Continuation Project have been assessed to determine if the project is classified as a potentially offensive industry under SEPP 33 (Table F.5).

Table F.5 Potentially offensive industry assessment

Type of emission	Comments
Air	Dispersion modelling for the Continuation Project predicted that the Continuation Project will not result in any exceedances of the impact assessment criteria for key pollutants, including PM_{10}, $PM_{2.5}$, TSP and dust deposition (see Section 6.3). Current and proposed mitigation measures were incorporated into the modelling and no additional measures are required to manage air quality impacts.
Noise	Noise modelling for the Continuation Project predicted significant impacts at one private residence, which is currently exposed to Quarry noise and qualifies for voluntary acquisition in accordance with the Conditions of Consent of the Extension Project Approval. These voluntary acquisition rights will continue to apply at this residence. Cumulative noise, road traffic noise, blast overpressure and ground vibration levels are all predicted to satisfy the relevant criteria.

Table F.5 Potentially offensive industry assessment

Type of emission	Comments
Water	The existing surface water management strategy will continue to be implemented to mitigate potential water quality and quantity impacts. Water balance model results indicate that the Quarry's process water requirements will be met under most climatic conditions and there are available contingencies if there are water shortfalls. The Continuation Project will reduce the likelihood and magnitude of overflows occurring from the water management system. This is because the process water use associated with higher production will more than offset the increase in predicted groundwater inflows. As overflows will be reduced, the Continuation Project is not predicted to result in a negative impact to water quality in the downstream catchments relative to the approved Quarry.

Based on the findings of this EIS (as summarised above), the Continuation Project will not result in unacceptable levels of pollution. Significant and moderate noise emissions are predicted at one residence which will be offered mitigation and/or acquisition rights in accordance with the VLAMP. Therefore, the Quarry is not a potentially offensive industry.

iii Summary

An assessment of the Continuation Project against SEPP 33 determined that the Quarry is not a potentially hazardous development or a potentially offensive industry.