



Appendix G

Addendum to the hazard, risk and public safety assessment



20 August 2021

Jonathon Thompson
Group Manager - Environment
Peak Gold Mines

Re: New Cobar Complex Project - Response to submissions - hazard and risk

Dear Jonathon,

1 Background

EMM Consulting Pty Limited (EMM) was engaged by Peak Gold Mines Pty Ltd (PGM) to undertake a hazard, risk and public safety assessment (HRPSA) (EMM 2020a) to support the Environmental Impact Statement (EIS) (EMM 2021b) for the New Cobar Complex Project (the Project).

The Project EIS was publicly exhibited from 25 February to 24 March 2021, and the NSW Department of Planning, Industry and Environment (DPIE) wrote to PGM on 31 March 2021 requesting responses to the matters raised by NSW Government agencies, local government authorities and the community that were received during the public exhibition of the EIS.

NSW regulators, Cobar Shire Council (CSC) and members of the community made submissions on the project, including a request from DPIE Hazards (DPIE-H) requesting further clarification on elements of the HRPSA.

2 DPIE Hazards submission

2.1 DPIE Hazards submission request 1

2.1.1 Comment

As for Class 5.1, it is unclear that whether the quantities described under section 3.2.5 are the existing storage quantities or proposed increased quantities. Please provide a breakdown of class 5.1 storage quantities from the existing operation and the proposed class 5.1 storage quantities as part of the project.

2.1.2 Response

Since exhibition of the EIS in March 2021, PGM has updated the types and materials stored at the New Cobar Complex, therefore this response provides an update to the quantities of materials described in Section 3.2.5 of the original HRPSA,

PGM is authorised to manufacture, supply, transport, possess and store Class 1.1B, 1.1D and 5.1 explosives at the New Cobar Complex in accordance with Licence Number XMNF200002. It is a condition of the licence that PGM must comply with the requirements of the *NSW Explosives Act 2003* and *NSW Explosives Regulation 2005*, as well as the SafeWork NSW (2013) *General Explosives Licence and Security Clearance Conditions*. No changes to this licence are proposed as part of the project.

Explosives are stored at the New Cobar Complex in an above ground magazine (storage ID DG-D1N) and an underground magazine (storage IDs DG-D2N DG-D3N, DG-D4N and DG-D5N), located approximately 360m below ground level. The details of quantities and types of material stored in each facility are presented in Table 2.1. The quantity of explosives stored on-site is not expected to increase as a result of the project, therefore the quantities in Table 2.1 will be those used for the project.

Table 2.1 Dangerous goods stored at the New Cobar Complex

Storage facility ID	Class/Division	Name	Typical quantity	Maximum capacity
DG-D1N	1.1D	Boosters without detonators	500 kg	47,000 kg
	1.1D	Explosive, type B	12,000 kg	47,000 kg
	1.1D	Explosive, type E	4,500 kg	47,000 kg
	5.1	Ammonium nitrate emulsion	30,000 kg	47,000 kg
DG-D2N	1.1B	Electric detonators	500	50,000
	1.1B	Detonator assemblies – non electric	49,500	50,000
DG-D3N	1.1B	Electric detonators	500	50,000
	1.1B	Detonator assemblies – non electric	49,500	50,000
DG-D4N	1.1D	Explosive, type B	8,000 kg	8,000 kg
DG-D5N	1.1D	Explosive, type E	5,100 kg	21,000 kg
	1.1D	Explosive, type B	10,000 kg	21,000 kg
	1.1D	Boosters without detonators	500 kg	21,000 kg
	5.1	Ammonium nitrate emulsion	5,400 kg	21,000 kg

2.2 DPIE Hazards submission request 2

2.2.1 Comment

It is stated that the nearest residence is outside of the threshold distance for all the AN [ammonium nitrate] emulsion quantity onsite as if they were classed as Class 1.1. Please provide further details on how the threshold distance is established and what is the calculated distance?

2.2.2 Response

In the HRPSA undertaken for the EIS, the threshold distance for considering AN emulsion as if it were a Class 1.1 explosive was determined using Figure 5 on Page 38 of the NSW Department of Planning document - *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (DoP 2011).

A threshold distance of 440 m was calculated for the 40,000 kg of AN emulsion described in the HRPSA. With the updated quantities described in Table 2.1 above, the threshold distance for the above ground magazine with the maximum capacity of 47,000 kg would be approximately 490 m. The threshold distance for the underground magazine with the maximum capacity of 21,000 kg would be approximately 200m. Both threshold distances are well below the distance to the nearest residence (R31, located 1.4 km to the west).

There are a number of approved plans and procedures already in place at the New Cobar Complex to reduce the potential hazards and risks associated with the manufacture, supply, transport and storage of explosives on-site (Section 6 of the HRPSA). On-site explosives storage has been designed and constructed in accordance with *Australian Standard 2187.1:1998 Explosives – Storage, Transport and Use: Storage* (AS2187.1:1998).

As described in the HRPSA and the EIS as a whole, the New Cobar Complex is an existing mining precinct and as such, the quantities of explosives described in the EIS and Table 2.1 above are already transported, stored and used on-site.

3 References

DoP 2011, *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33*, NSW Department of Planning.

EMM 2020a, *New Cobar Complex Project, State Significant Development (SSD10419) – Hazard, risk and public safety assessment*. Prepared by EMM on behalf of PGM.

EMM 2021b, *New Cobar Complex Project, State Significant Development (SSD10419) – Environmental Impact Assessment*. Prepared by EMM on behalf of PGM.

Yours sincerely



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