

Appendix 3

SEPP 33 Risk Screening

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A3.1 Introduction

It has been identified that consideration should be made as to whether the LOM Project is considered a hazardous or potentially hazardous industry under State Environmental Planning Policy (SEPP) 33. In accordance with the risk screening method provided by the Department of Planning (DoP) document “Applying SEPP 33 Hazardous and Offensive Development Application Guidelines” (Consultation Draft 2008), this appendix presents the details of the determination as to the classification of the LOM Project under SEPP 33.

Industries or projects determined to be hazardous or potentially hazardous would require the preparation of a Preliminary Hazard Analysis (PHA) in accordance with Clause 12 of SEPP 33. No further assessment under SEPP 33 is required for projects not considered potentially hazardous following a SEPP 33 Risk Assessment.

A3.2 Hazardous Materials on the Project Site

Hazardous materials are defined within DoP (2008) as substances falling within the classification of the Australian Code for Transportation of Dangerous Goods by Road and Rail (Dangerous Goods Code). Based on this definition, the hazardous materials to be stored on the LOM Project Site, quantities and storage location are summarised in Table A3.1.

**Table A3.1
Hazardous Materials Storage on the Project Site**

| Hazardous Material | Classification | Description | Storage Quantity | Storage Location |
|--|----------------|--|----------------------------------|----------------------------|
| Diesel Fuel | Class 3 C1 | Combustible liquids: flashpoint above 61°C but not exceeding 150°C | 120 000L (30m ³) | Workshop Area |
| Lubricating oils and greases | Class 3 C2 | Combustible liquids flashpoint above 150°C | 20 000kg (~15m ³) | Workshop Area |
| Ammonium Nitrate | Class 5.1 | Oxidizing substances and organic peroxides | 105 tonnes ¹ | Precursor Storage Facility |
| Note 1: Ammonium nitrate storage made up of 35t AN storage and 80t relocatable ANE storage. Source: WCC and Advitech (2008) | | | | |

Transport information for the hazardous materials of the Project Site is as follows.

**Table A3.2
Hazardous Materials Transport to the Project Site**

| | Average No. of Loads per Annum | Load Size |
|---------------------------------|--------------------------------|----------------|
| Diesel Fuel | 360 | 50kL |
| Ammonium Nitrate | 1825 | 12 - 35 tonnes |
| Source: WCC and Advitech (2008) | | |



A3.3 SEPP 33 Determination

As the diesel fuel (Class C1) and lubricating oils and greases (Class C2) are not stored adjacent to any other hazardous materials, DoP (2008) does not require these to be considered further.

The volumes of ammonium nitrate to be stored on the Project Site trigger SEPP 33 and therefore the LOM Project would be classified as potentially hazardous. A subsequent Preliminary Hazard Analysis (PHA) was undertaken by Orica and Advitech (Advitech, 2008) to accompany a Statement of Environmental Effects prepared for Modification 4 of DA-172-7-2004. This PHA identified several high risk scenarios with possible environmental impact resulting from fire and explosion. The risk of these scenarios to off-site receptors were assessed in accordance with AS 2187.1 – 1998, and found to be negligible. The safeguards proposed by Orica were deemed to be adequate to ensure that the storage of ammonium nitrate would pose a minimal risk and therefore could be classified as not hazardous. The full PHA is enclosed in **Appendix 4**. In summary, the safeguards to be undertaken include the following.

- Prior to the commissioning of the Precursor Storage Facility, a security plan would be updated and submitted to WorkCover. The security plan would include procedures and systems to manage security risks including:
 - theft, possible sabotage, or unexplained loss of explosives or precursors;
 - unauthorised access to explosives or precursors; and
 - establishment and maintenance of security perimeter fencing and lighting.
- The security plan would demonstrate that explosives are stored in a supervised area, such as a secure store or site.
- The Precursor Storage Facility would be located approximately 1 600m from the nearest public road and would be accessed via the Rail Load-out Road. Access would also be created for the MMU's direct to the mining areas (blast location).

The quantity of diesel fuel to be transported to the Project Site does not trigger the threshold and therefore is not required to be considered further.

The quantity per delivery of ammonium nitrate exceeds the quantity thresholds in SEPP 33. The total annual movements also exceed the vehicle movement threshold and therefore the LOM Project is considered potentially hazardous with respect to transport. A route evaluation was conducted as part of the PHA (Advitech, 2008). The route evaluation determined that the haul route was adequate and further evaluation of the route was therefore not required based on the following.

- Both the Rail Load-out Road and MMU access route(s) would be maintained as private access points and there would be no engagement with other traffic apart from mine site vehicles.
- AN and ANE would continue to be transported to the precursor storage facility in bulk via the current route from the Orica manufacturing facility at Liddell, via the New England Highway.



A3.4 Conclusion

Based on the risk screening method of DoP (2008), the storage of the hazardous material ammonium nitrate of up to 105t would result in the LOM Project being considered potentially hazardous under SEPP 33. As such, it is determined that the LOM Project is a potentially hazardous industry and there is a requirement to undertake a PHA which has been completed and is attached as Appendix 4 of this Environmental Assessment.

A3.5 References

DoP, 2008. *Applying SEPP 33 Consultation Draft.*

Advitech, 2008. *Preliminary Hazard Analysis – Werris Creek Precursor Facility.*



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