

Summary of Magellan's Response to Condition 6

Condition 6 of Magellan Metals' approval to transport lead carbonate concentrate from its mine site at Wiluna through the Port of Fremantle requires the company to develop and implement a Health, Hygiene and Environmental Management Program (HHE Management Program). The specific conditions related to the HHE Management Program are outlined below, while the remainder of this document summarises Magellan's plans for meeting the conditions. The full plan is available on www.magellanmetals.com.au.

SUMMARY OF CONDITIONS

The list below sets out the range of areas in which conditions have been applied to the sealed shipment process by the Minister for Environment.

CONDITION 1

Implementation

CONDITION 2

Proponent Commitments

CONDITION 3

Proponent

CONDITION 4

Commencement

CONDITION 5

Compliance Reporting

CONDITION 6

Dust control - Health, Hygiene and Environmental Management Program

CONDITION 7

Decommissioning and Rehabilitation Plan

CONDITION 8

Subterranean Fauna (Stygofauna) Sampling Plan

CONDITION 9

Health, Hygiene and Environmental Monitoring Program

CONDITION 10

Accredited Auditor

CONDITION 11

Public reporting of outcomes of auditing and monitoring

CONDITION 12

Emergency Response Plan

CONDITION 13

Performance review

CONDITION 14

Performance Bond

CONDITION 15

Definitions

6 Dust control - Health, Hygiene and Environmental Management Program

6-1 *The proponent shall ensure that lead carbonate concentrate (other than minor quantities removed for product testing purposes) which is to be removed from the mine-site is dealt with only in accordance with the following procedures;*

1. *Prior to being removed from the mine-site, lead carbonate concentrate shall be:*
 - a. *placed into double laminated water-proof and sieve proof bags which are sealed so as to prevent the release of lead carbonate concentrate from the bag;*
 - b. *all visible dust shall be removed from the exterior of the bags before they are placed in a clean shipping container which when loaded is locked, so that the only material containing lead carbonate is in sealed bags within the container when the container leaves the mine-site.*
2. *The locked shipping containers shall be transported by road to a designated secured storage area in Leonora, and then by rail from Leonora to Fremantle Port where they will be stored prior to being loaded onto vessels for export.*
3. *Unless required by a public official or public authority acting with lawful authority or an auditor engaged under Condition 10-1(3), the shipping containers shall be kept locked and the seals on the bags shall not be broken between the time when the shipping container leaves the mine-site and the time it is removed from the State.*
4. *The moisture content of the lead carbonate concentrate in the sealed bags shall be at least 7.5% at all times between the time when the shipping container leaves the mine-site and time it is removed from the State.*
5. *At all times after they are loaded with sealed bags of lead carbonate concentrate, the shipping containers shall only be lifted by top-lifting machines.*
6. *All bags shall be inspected by an auditor engaged under condition 10 after they are sealed and before they are loaded into a shipping container, and all shipping containers shall be inspected by an auditor engaged under Condition 10 before being removed from the mine-site.*

6-2 *Prior to removing shipping containers of lead carbonate concentrate from the mine-site at any time after 1 January 2009, the proponent shall prepare a Health, Hygiene and Environmental Management Program to the requirements of the Minister for Environment on advice of the CEO, the Department of Health, the Department of Mines and Petroleum.*

Continued over page...

6 Dust control - Health, Hygiene and Environmental Management Program

6-2 continued...

This Health, Hygiene and Environmental Management Program shall make provision for the following matters in a manner which is consistent with the requirements of condition 6-1:

1. *document standards, guidelines and codes of practice relating*
 2. *to the management of lead carbonate concentrate;*
 3. *detail the education and training of the workforce so as to minimise exposure of personnel and to identify areas of risk for lead carbonate exposure;*
 4. *detail rules and procedures to be applied in mining, processing and storage areas at the Wiluna mine-site to minimise disturbance of lead carbonate concentrate and to ensure that release to the environment is minimised;*
 5. *detail the process which will be applied to ensure ongoing assessment of the risk of lead carbonate contamination, including environmental biological monitoring to evaluate the environmental and health risks and determine appropriate control measures;*
 6. *review the existing storage and ship loading facilities at the Port which is to be conducted by the proponent prior to the existing facilities being used for lead carbonate concentrate, including*
 - i. *equipment to be used;*
 - ii. *procedures and monitoring programs to identify potential pathways for lead carbonate concentrate to enter the environment, and*
 - iii. *where equipment, management or revised procedures are found to pose a risk to the safe storage and ship loading of the lead carbonate, additional equipment, management or revised procedures are to be identified and acquired or implemented.*
 7. *detail rules and procedures to be applied for the packaging and transport of the lead carbonate from the mine-site through to export from the Port, including the use of top-loading machines for the transport of the shipping containers.*
- 6-3 *The proponent shall implement the Health, Hygiene and Environmental Management Program required by condition 6-2*
- 6-4 *Revisions to the Health, Hygiene and Environmental Management Program may be approved by the Minister for Environment on advice of the CEO, the Department of Health, the Department of Mines and Petroleum.*
- 6-5 *The proponent shall implement revisions of the Health, Hygiene and Environmental Management Program required by condition 6-4".*

HHE Management Program objectives

1. Meet the requirements of Condition 6 (outlined above).
2. Meet the Environmental Protection Authority (EPA) objectives ensuring that:
 - i. the health of the public is protected from lead contaminants
 - ii. the mine site is managed in the long-term and rehabilitated to protect the public and the environment from the adverse impacts of lead.

Operations covered by the HHE Management Program

The HHE Management Program covers activities associated with the mining, processing and packaging of lead carbonate concentrate at Magellan's mine site at Wiluna and its transportation to, and export from, the Port of Fremantle.

A description of Magellan's mining, concentrating, storage, bagging, containerisation and transportation activities can be found at www.magellanmetals.com.au.

The HHE Management Program sets out a range of specific management actions relating to each stage of Magellan's operations to minimise the disturbance and potential for release to the environment of lead carbonate. These actions are also detailed in the full plan for compliance with Condition 6 as follows:

- mining and processing.
- bagging.
- storage at the Magellan mine.
- loading at the Magellan mine site.
- transport of lead carbonate concentrate to the Port of Fremantle.
- storage and loading of containers at the Port of Fremantle.

Risk management

Magellan and its contractors implement a range of rules and procedures to minimise the disturbance and potential for release of lead carbonate into the environment. The detailed rules and procedures can be viewed in the full plan.

Training

Magellan's training program ensures all personnel (management, employees and contractors) are:

- clear about their roles and responsibilities
- able to be effective, safe and healthy in their position
- assessed to verify they can perform to the standard required in their position.

Magellan also has a detailed training program that specifically addresses lead carbonate exposure risks for employees and the environment. This program helps personnel assess the significance of activities that may result in lead carbonate exposure to themselves, other people, and the environment. Contractors are provided with a 'lead awareness' training package to be incorporated into their training regimes.

Fremantle Port

Port Facilities Review

Prior to lead carbonate exports commencing through the Port of Fremantle, a review of the existing storage and ship loading facilities is being conducted, including the equipment to be used, procedures and monitoring programs to identify potential pathways for lead to enter the environment. This review commenced in April 2008 and will be ongoing.

Identifying potential pathways for lead to enter environment

Magellan will undertake regular risk assessments of the potential pathways for lead carbonate concentrate contamination, including from the Port operation. The risk assessments will be reviewed every 12 months for the life of the project.

Handling procedures for dangerous goods

The Port of Fremantle handles a wide range of dangerous goods. Those in the same packing group* as lead carbonate (Packing Group III, 'low danger') are removed from the Port within five to ten days. Dangerous goods of the same packing group are handled in accordance with the general principle of prudence by all Port operators with the aim of minimising risks. All the Port operators contracted by Magellan have systems and procedures in place to ensure that all machinery used to handle containers is correctly maintained and operated and that individual operators are trained for each task. Magellan has provided lead awareness training material for incorporation into the Port operators training regimes.

Health, Hygiene and Environmental Monitoring Program

Environmental monitoring is undertaken within the Port and is outlined in the Condition 9 summary document and full plan (Health, Hygiene and Environmental Monitoring Program) available on www.magellanmetals.com.au.

Port Operators

All Port operators have the equipment, training, maintenance, management and safety procedures in place to safely handle containers containing lead carbonate. The key factor in the safe handling of containers at the port is the use of top-frame spreader lifting devices, which all operators use at all times when moving and loading containers, and training and management procedures, which are well documented and enforced.

Contingencies

The key contingencies in relation to the management of lead carbonate have been developed to address the unlikely event of spillage of concentrate. These actions are described in the Condition 12 summary document and the full Emergency Response Plan available on www.magellanmetals.com.au.

Reporting

Incident reporting

Any environmental incidents will be reported in accordance with Magellan's Incident Reporting Management System, including the completion of an Incident Management Process Form. Any spills of lead carbonate will be reported to the Department of Environment and Conservation's (DEC) Perth, Goldfields, Wheatbelt and Swan offices within 24 hours of Magellan becoming aware of the spill.

Complaints register

Magellan will record all complaints made to the company (or its contractors) in relation to its activities. A summary of the complaints and the responses will be reported in the Magellan Annual Environmental Review (AER) which will be published on the company's website.

Compliance reporting

Magellan will prepare and maintain a compliance assessment plan and submit a compliance assessment report annually in accordance with Condition 5 of its approval.

Public reporting

Magellan will report:

- all monitoring results, inspection reports and other relevant information on Magellan's website as soon as they become available
- monitoring results, including baseline sampling (airborne particulates, dust deposition, soil and marine sediments) in the Magellan Annual Environmental Report submitted to Government agencies in accordance with the site licence conditions. The Report will be publicly available upon request from either Magellan or the aforementioned government agencies.

Community reference group

Magellan will report the findings of all inspections, auditing and monitoring to an appropriate reference group with relevant community representation, as determined by the Minister for Environment. Until otherwise determined, the reference group will be the Fremantle Ports Inner Harbour Community Liaison Group.

** A packing group is one of the three groups (Packing Group 1 – high danger, Packing Group 2 – medium danger, Packing Group 3 – low danger) into which dangerous goods are divided for packaging purposes according to their degree of danger.*