

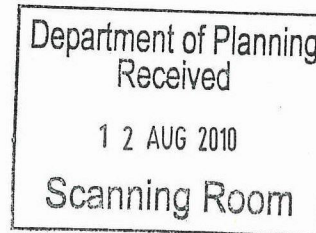
Our reference: LIC07/2213-03: DOC10/29921
Contact: Denis Harvey 03 5021 8919



PCU013452

The Manager, Mining
NSW Department of Planning
GPO Box 39
SYDNEY NSW 2001

Attention: Kane Winwood



Dear Mr Reed

Re RASP Mine Project– Major Project Application 07_0018

I refer to your letter dated 29 June 2010 to the Department of Environment, Climate Change and Water (DECCW) seeking written submissions on the Environmental Assessment (EA) for the proposed RASP Mine Project at Broken Hill.

We have reviewed the information provided and determined that we are able to support the proposal subject to the Department of Planning seeking the amendments to the draft Statement of Commitments (SOC) identified in Attachment 'A', and the inclusion of the recommended conditions of consent in Attachment 'C'. If the Minister for Planning grants development consent for this proposal these conditions should be incorporated into the consent.

Attachment 'B' contains our assessment of the proposal, including justification for the amendments to the SOC's in Attachment 'A' and recommended conditions of consent in Attachment 'C'. This information should be taken into consideration by the Department of Planning in its overall assessment of the application.

As requested by the Department of Planning we have provided comments on the human health risk assessment.

We request an opportunity to review the draft Director-General's Environmental Assessment Report for this proposal. If the amendments to the draft Statements of Commitments are not included to our satisfaction, we will be recommending that they are included as conditions of consent, if approval is recommended by the Department of Planning. It should be noted that these amendments are important for our ongoing support of the proposal.

The Department of Environment and Climate Change NSW is now known as the Department of Environment, Climate Change and Water

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Department of **Environment and Climate Change** NSW



We advise that the Applicant currently holds environment protection licence no 12559 with us under the *Protection of the Environment Operations Act 1997* to mine for minerals. Our licence will need to be varied consistent with the Statement of Commitments and conditions of consent if development consent is granted.

If you have any further enquiries about the matter please contact Denis Harvey by telephoning 03 5021 8919.

Yours sincerely

A handwritten signature in blue ink, which appears to read 'Darren Wallett', followed by the date '6/8/10' also in blue ink.

DARREN WALLETT
Head, Griffith Unit
Environment Protection and Regulation

Attachment 'A'

The following amendments to the draft Statement of Commitments (SOC) are sought:

Air Quality

- New SOC-Enclosure of all above ground conveyors and transfer points prior to the grinding circuit (ball mills).
- New SOC-Conduct additional air modelling which must include inputs of higher particulate emissions from the active component of the tailings dam.
- New SOC-The completion and implementation of the Tailing Construction and Operation Manual prior to the commencement of any construction activities at the site.
- New SOC-Installation of video recording equipment to assist in the active management of emissions from the tailings dam.
- New SOC-Conduct a six monthly assessment of soil contamination on vacant land in Eyre Street and designated residences adjacent to the tailings dam (identified as the initial tailings disposal area) until the dam is decommissioned and rehabilitated.
- New SOC-Undertake sampling to quantify road surface silt loadings on an ongoing basis.
- Amendment to SOC-The commitment for the *"continuation and expansion of the existing air quality management programme to include, in addition to two high volume samplers and five dust deposition jars, a real time monitor to identify real time impacts and delineate short term concentrations"* should be amended to read; *"continuation and expansion of the existing air quality management programme to include high volume samplers, dust deposition jars and real time monitors"*.
- Amendment to SOC-The commitment to *"maintaining a surface crust to minimise potential wind erosion"*. This should be revised to *"chemical dust suppressants as per the manufacturer's specifications, or more often as required, are to be used on all areas of the site potentially impacted by wind erosion"*.
- Amendment to SOC-The commitment to *"extensive sealing of haul roads and other primary roadways"*. This should be revised to specify all roadways that will be sealed, e.g. the 1.25 km section of the haul road from the Kintore pit to ROM (Run of Mine) pad as detailed in section 3.1.1 of the Air Quality Impact Assessment.

Community Health

- New SOC-Revise the health risk assessment for the dust suppressant chemicals once the choice of chemicals has been finalised.
- New SOC-Development of a Community Health Assessment Plan acceptable to the Department of Planning, Department of Health and DECCW. The plan will detail the proposed health assessment of residents adjacent to the mine likely to be at risk as a result of background lead levels and possible lead emissions from the mine. The plan must include monitoring of blood lead level of resident children and where necessary an assessment of the cause and recommended remedial action where these levels are above acceptable levels.

- New SOC-Provide a detailed map of mine 'free areas'.
- New SOC-Specify proposed dust control measures for mine 'free areas'.

Aboriginal Cultural Heritage

- New SOC-A procedure will be prepared in relation to the identification of an Aboriginal object on the site. The procedure will include that upon discovery on the development area works will immediately cease and the Broken Hill Local Aboriginal Land Council and the DECCW will be contacted by telephoning 131 555 for advice.

Noise and Vibration

- New SOC-Submit a construction noise report that demonstrates and justifies the need to carryout construction activities outside the standard hours of the Interim Construction Noise Guideline.
- New SOC-Ensure operational noise is within limits of the NSW Industrial Noise Policy.
- New SOC-Ensure rock blast vibration levels are within guidelines issued by the Australian and New Zealand Environment and Conservation Council.
- New SOC-Ensure rock blast overpressure limits are within guidelines issued by the Australian and New Zealand Environment and Conservation Council.
- New SOC-Crushing and screening will only be carried out during dayshift (7:00am to 7:00pm) seven days a week.
- New SOC-Shunting of concentrate wagons will only occur between 7:00am and 6:00pm seven days a week.
- New SOC-Production rock blasting will not occur between 7:15pm and 6:45am seven days a week.

Attachment 'B'

Assessment of Air Quality

We consider the Air Quality Impact Assessment to be generally satisfactory and the methods used are in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (DEC 2005).

However, as the Air Quality Impact Assessment did not take into consideration air emissions from above ground conveyors and transfer points, we have recommended in the Statement of Commitments that these be enclosed to minimise air emissions.

Also, we are concerned about the proximity of the tailings dam to residential dwellings and the possible risk of wind blown contaminants impacting on surrounding land and residents. The following mitigation measures have been recommended to be included in the Statement of Commitments:

- (a) Additional air modelling must be undertaken to include higher particulate emissions from the active component of the tailings dam. DECCW believes there is potential for higher emissions from the active component of the tailings dam than have been modelled and considered in the EA.
- (b) The specifying of real time monitors.
- (c) Completion of the Tailings Construction and Operational Manual prior to construction.
- (d) Installation of video recording equipment to assist in the active management of emissions from the tailings dam. A video recording of the tailings dam during daylight hours will assist in confirming that tailings are being confined to the designated area and not being emitted from the site.
- (e) A six monthly assessment of land (land not on mining lease) adjacent to the initial tailings dam. The land adjacent to the tailings dam may become contaminated with larger tailing particles not normally collected by air monitoring equipment. On this basis DECCW recommends that contamination in the adjacent land should be assessed at six month intervals (until the dam is decommissioned and rehabilitated) to identify any contamination level changes in the soil.

Environmental Risk Assessment

The Environmental Risk Assessment summarised in Chapter 6 of Volume 1 of the EA does not provide a full list of environmental issues that were assessed. It only provides a list of those found to be key issues for management in the project. We request that this information is supplied specifically to allow identification of all the issues considered as possible risks and the likelihood and consequence estimates that were assigned to each risk. This would clarify how the issues listed as 'key issues' in table 6-5 of the EA were determined.

Assessment of Community Health

While the Community Health Risk Assessment has been undertaken using appropriate methods, there are still a number of areas where there is a high degree of uncertainty. Assessing the bioaccessibility of lead from dust and ore, for example, involves techniques that are still in their infancy, particularly in their use in Australia. Another uncertainty includes whether or not 80% dust control from 'free areas' will be achieved.

As a result of these uncertainties it is important that appropriate monitoring take place around the mine to confirm the results of the risk assessment during the life of the mine. Whilst dust monitoring is already part of the proposal, a Community Health Assessment Plan should be developed by the Applicant. This plan should include provision that blood lead levels of resident children are monitored and where necessary a remedial action plan be developed when it is likely mining activity is resulting in an increase of contamination levels that may result in health concerns.

Another option for ensuring the risk from lead from the proposal is appropriately controlled is to consider the remediation of backyards in risk zone 1. This would bring background exposures down in the people most likely to be affected by the mine. Such a process is being undertaken around the Pasminco smelter near Lake Macquarie – the Lead Abatement Strategy.

As is yet to be determined which chemicals are intended for use to control dust loss from the 'free areas' of the site, there is uncertainty about the conclusions from the risk assessment undertaken on one of the initially proposed chemicals. It is essential that this risk assessment be revised should the Applicant chose to use a different chemical dust suppressant than the proposed "*Gluon 500*" as this was the only chemical where sufficient information was available for inclusion in the risk assessment.

Assessment of Aboriginal Cultural Heritage

As the site is already highly disturbed from past mining activities, it is unlikely any objects of Aboriginal cultural heritage will be located on the site. However, we recommend that there be an acknowledgement by the Applicant that procedures should be developed in the event an object of Aboriginal significance is located on the development site.

Assessment of Construction Noise

The Applicant is seeking to carryout construction 7:00am – 7:00pm seven days a week. This is outside the standard hours of the Interim Construction Noise Guideline - Monday to Friday 7:00am to 6:00pm, Saturday 8:00am to 1:00pm and no work on Sundays or public holidays.

Under the Guideline work outside the standard hours must be justified. This justification has been requested through an amendment to the Statement of Commitments.

Assessment of Operational Noise

Noise has the potential to severely impact on residents amenity. The operational noise assessment was carried out as described in the NSW Industrial Noise Policy (INP) and is considered satisfactory. The assessment is based on:

- Crushing and screening only to be carried out during dayshift (7:00am to 7:00pm) seven days a week, and
- Shunting of concentrate wagons will only occur between 7:00am and 6:00pm seven days a week.

These restrictions will be placed on the environment protection licence.

It was noted in the assessment that at two residential locations INP limits were predicted to be exceeded by up to 2 dB (A). We can advise that we intend to issue the licence at the predicted noise limits based on the justification that any minor exceedance may occur while the best feasible and reasonable controls have been put in place.

Assessment of Blast Vibration

Blast vibration has the potential to impact on residents amenity and damage buildings. The EA does not specify the proposed times for production blasting which is critical to blast vibration limits placed on an operation. Advice from the Applicant is that production blasting will take place at the change of shift.

We can advise that the environment protection licence will prohibit production rock blasting between 7:15pm and 6:45am seven days a week.

Attachment 'C'

Recommended Conditions of Consent

The following are recommended conditions of consent that will also be included on the environment protection licence.

1. Dust

- The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- Visible dust emissions from any tailings storage facility are not permitted at any time.
- Crushing, grinding, screening and separating of extracted material must only occur inside the processing building.
- The processing building must be maintained under negative pressure at all times.
- The processing building and emission controls must be constructed and operated in such a manner, as to ensure there are no fugitive emissions from the processing building.

2. Maintenance of plant and equipment

- All plant and equipment installed at the premises or used in connection with the licensed activity:
 - (a) must be maintained in a proper and efficient condition; and
 - (b) must be operated in a proper and efficient manner.

3. Air Quality Management Plan

- The Air Quality Management Plan must include dust management practices that effectively minimise dust emissions at all times, including all mitigation measures discussed in the Environmental Assessment (*RASP Mine Zinc-Lead-Silver Project Environmental Assessment Report, July 2010*).

4. Concentration Limit(s)

Point 11 - Ventilation Shaft (Little Kintore Pit)

Pollutant(s)	Concentration Limit	Units of Measure
Oxides of nitrogen (as NO ₂)	350	Milligrams per cubic metre
Total solid particles	20	Milligrams per cubic metre
Type 1 and Type 2	1	Milligrams per cubic metre
Volatile organic compounds (as n-propane)	40	Milligrams per cubic metre

Point 12 - Process building / Baghouse stack

Pollutant(s)	Concentration Limit	Units of Measure
Total solid particles	13	Milligrams per cubic metre
Type 1 and Type 2	1	Milligrams per cubic metre

Concentration reference conditions are: dry, 273 K, 101.3 kPa.

5. Requirement to Monitor Pollutant Concentrations

Point 6 - Ambient Air Monitoring Station

Pollutant(s)	Units of Measure	Frequency	Sampling method	Location
Total suspended particulate	Micrograms per cubic metre	Continuous	AM-15	TBD
Lead	Micrograms per cubic metre	Continuous	AM-11	TBD

Points 7 and 8 - Ambient Air Monitoring Station

Pollutant(s)	Units of Measure	Frequency	Sampling method	Location
PM ₁₀	Micrograms per cubic metre	Continuous	AM-18	TBD
Lead	Micrograms per cubic metre	Continuous	AM-11	TBD

Points 9 and 10 - Ambient Air Monitoring Station

Pollutant(s)	Units of Measure	Frequency	Sampling method	Location
PM ₁₀	Micrograms per cubic metre	Continuous	AM-22	TBD

Points 1, 2, 3, 4, 5 - Dust Deposition Monitoring

Pollutant(s)	Units of Measure	Frequency	Sampling method	Location
Dust Deposition	Micrograms per cubic metre	Continuous	AM-19	TBD

Special frequency 1: means one (1) sample only, undertaken when underground blasting operations are occurring.

The location of the ambient air quality and meteorological monitoring stations must be informed by the modelling results from the EA and be to the satisfaction of DECCW.

All ambient air monitoring stations shall be installed and operating prior to construction works commencing at the project site.

Ambient monitoring shall be sited and conducted in accordance with the reference methods prescribed in the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

6. Requirement to Monitor Weather

The Applicant shall install and continuously operate a meteorological monitoring station on the project site. The meteorological monitoring station shall be installed and operating prior to construction works commencing at the project site.

Point W1 - Meteorological Monitoring Station

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4
Temperature @ 10 metres	°C	Continuous	15 minute	AM-4
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4
Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4
Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4
Solar radiation	W/m ²	Continuous	15 minute	AM-4
Additional requirements - Siting - Measurement	-	-	-	AM-1 & AM-4 AM-2 & AM-4