# **Keith Lindbeck and Associates Environmental Management Consultants**

ABN 36 150 274 469









7 August 2012

Mr K Taylor General Manager Office of the Environmental Protection Authority Locked Bag 33, Cloisters Square PERTH WA 6850

Dear Kim

INDEPENDENT ENVIRONMENTAL AUDITOR - FIMISTON GOLD MINE OPERATIONS EXTENSION (STAGE 3 - GOLDEN PIKE CUTBACK AND CLOSURE PLANNING), KALGOORLIE CONSOLIDATED GOLD MINES

#### **MINISTERIAL STATEMENT NO. 782**

The first independent auditor's report for the first audit period was presented to and considered by the Community Reference Group (CRG) on 11 February 2010. The second report was presented to the CRG on 13 May 2010 and the third report was presented to the CRG for consideration on 9 December 2010.

Condition 5-3 of Ministerial Statement 782 required the independent auditor to report to the Minister after the third audit period by undertaking a review and providing a recommendation to the Minister for continuation or cessation of the audit process. After the third audit period (18 months), the review was completed by the auditor and a summary report and recommendation from the auditor was forwarded to the Minister on 14<sup>th</sup> April 2011. The recommendation from the auditor was for the continuation of the audit for a further two audit periods.

On 3<sup>rd</sup> June 2011, the Minister advised the auditor that he had accepted the recommendation with the audit period to cease on 28<sup>th</sup> September 2011. He also requested a further review and recommendation from the auditor for continuation or cessation of the audit process on completion of the two additional audit periods (to 28<sup>th</sup> September 2011).

On 30<sup>th</sup> June 2011, KCGM requested the auditor to consider the two audit periods to encompass 29 July 2010 to 31 March 2011 and 1 April 2011 to 30 September 2011 as these dates correlate with KCGM's quarterly reporting periods. This request was agreed to by the auditor.

Subsequently, the fourth independent environmental audit for the period 29 July 2010 to 31 March 2011 was completed and presented to the CRG on 8 March 2012 and the fifth independent environmental audit for the period 1 April to 30 September 2011 was presented to the CRG on 17 May 2012.

As required by Item 6 of Condition 5-3 contained within Ministerial Statement No. 782, I attach my second summary report as the Independent Environmental Auditor for the period 29 July 2010 to 30 September 2011.

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There were no limits exceeded or non-compliances sighted or observed that could be attributed to the expansion of the Fimiston Operations as set down by the Ministerial Conditions (Statement No. 782) or by the DEC Operating Licence (L6420/1988/12).

#### Recommendation

The total audit period has covered a period of 32 months of which mining at Golden Pike has been undertaken for 18 months. The early commencement of the audit enabled background checks to be considered and observations of the monitoring and reporting systems to be undertaken by the auditor.

The third, with the additional fourth and fifth audits have encompassed three audit periods required in the Ministerial Condition (for the mining operations).

As no breaches of Conditions and no non-compliances have been identified over the audit period, I recommend that no further audit periods be required for the Golden Pike Cutback and Closure Plan at KCGM in Kalgoorlie.

I also recommend that Ministerial Conditions 782:M5.3 and 782:M5.4 be classified as "Completed" under the OEPA audit classification system.

I look forward to receiving your concurrence to my recommendation.

Yours sincerely

Keith Lindbeck Principal

#### Keith Lindbeck and Associates Environmental Management Consultants



# SECOND SUMMARY COMPLIANCE REPORT BY INDEPENDENT ENVIRONMENTAL AUDITOR

Audit Period – 29 July 2010 to 30 September 2011

# FIMISTON GOLD MINE OPERATIONS EXTENSION (STAGE 3 - GOLDEN PIKE CUTBACK) AND MINE CLOSURE PLANNING

#### KALGOORLIE CONSOLIDATED GOLD MINES PTY LTD

# As Required by Item 6 of Condition 5-3 Contained Within Ministerial Statement No. 782

Report Prepared for: Minister for the Environment

Report Prepared by Keith Lindbeck & Associates

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**July 2012** 

#### **EXECUTIVE SUMMARY**

Kalgoorlie Consolidated Gold Mines Pty Ltd ("KCGM") submitted a proposal to the Environmental Protection Authority (EPA) to undertake the Golden Pike Cutback of the "Superpit" immediately to the north of the City of Kalgoorlie-Boulder. This cutback has the potential to create adverse impacts of noise and dust generation on nearby city residents.

The EPA formally assessed the proposed project and on 29 January 2009, the Minister for the Environment issued a "Statement that a Revised Proposal may be Implemented (Pursuant to the Provisions of the *Environmental Protection Act 1986*)" – Statement No. 782.

Condition 5-3 imposed within Statement No. 782 required KCGM to appoint an independent environmental auditor to audit compliance with the conditions contained in the Statement and the site Department of Environment & Conservation (DEC) operating licence (L6420/1988/12) and for the auditor to report to the Community Reference Group (CRG). Item 6 of Condition 5-3 requires the auditor to:

- "carry out an overall review after eighteen months and advise the Minister for the Environment as to whether the independent auditing should continue".

This document includes the report on the overall review and the recommendation on the continuation of the auditing.

The independent auditor, Mr Keith Lindbeck of Keith Lindbeck and Associates was appointed on 17 June 2009.

Three independent environmental audits were undertaken for the periods 29 January 2009 to 28 July 2009, 29 July 2009 to 28 January 2010 and 29 January 2010 to 28 July 2010.

All relevant records and reports were sighted.

There were no limits exceeded or non-compliances sighted or observed that could be attributed to the expansion of the Fimiston Operations as set down by the Ministerial Conditions (Statement No. 782) or by the DEC operating licence (L6420/1988/12).

On advice from the Office of the Environmental Protection Authority (OEPA), the period of auditing commenced on the date of issue of the Minister's Statement (No 782 on 29 January 2009).

Mining of the Golden Pike Cutback by KCGM was not able to commence until an appeal against the Minister's decision to grant a Regulation 17 variation under the Environmental Protection (Noise) Regulations 2003 was determined. The appeal was determined by the Minister on 24 March 2010. It was from that date that KCGM could commence the mining operation. Mining of the Golden Pike Cutback commenced late in March 2010.

Consequently, the first two audit periods occurred before the commencement of mining.

Therefore, the independent auditor recommended to the Minister for the Environment (KLA 2011a) that two additional audit periods be undertaken (viz. 29 July 2010 to 28 January 2011 and 29 January to 28 July 2011). Subsequently it was agreed that the two additional audit periods would cease on 30 September 2011.

This resulted in a total of five audits, the latter three of which will be undertaken during the mining operation which was the original intent of Condition 5-3 imposed within Ministerial Statement 782.

The Minister requested that at the end of the two additional audit periods (30 September 2011), the independent auditor provide a recommendation to the Minister for the Environment on the continuation or cessation of the independent audit process.

During the two additional audits, there were no limits exceeded or non-compliances sighted that could be attributed to the expansion of the Fimiston Operations as set down by the Ministerial Conditions (Statement No. 782) or by the DEC operating licence (L6420/1988/12).

As the auditor has completed five audits and there were no exceedences or non-compliances identified during the audits, and as KCGM have effective management practices to immediately mitigate any exceedences, the Auditor recommends that no further audits be undertaken as set down in Ministerial Statement No. 782.

Therefore, Ministerial Conditions 782:M5.3 and 782:M5.4 are considered to be completed.

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#### **ATTACHMENT 1**

Audit Table for Compliance with Ministerial Statement No. 782

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#### 1.0 INTRODUCTION

#### 1.1 BACKGROUND

Kalgoorlie Consolidated Gold Mines Pty Ltd ("KCGM") submitted a proposal to the Environmental Protection Authority (EPA) to undertake the Golden Pike Cutback of the "Superpit" immediately to the north of the City of Kalgoorlie-Boulder. This cutback has the potential to create adverse impacts of noise and dust generation on nearby city residents.

The EPA formally assessed the proposed project and on 29 January 2009, the Minister for the Environment issued a "Statement that a Revised Proposal may be Implemented (Pursuant to the Provisions of the *Environmental Protection Act 1986*)" – Statement No. 782.

This Ministerial Statement No. 782 contains Conditions 5-3 and 5-4 which state:

- "5-3 The proponent shall appoint and fund an independent environmental auditor for an initial period of eighteen months to report to the community through the community reference group and to the Minister for the Environment on the environmental performance of the proponent. The auditor shall
  - 1. check on compliance with the Ministerial Conditions contained in this Statement:
  - report on the results of dust monitoring and actions taken where dust levels have exceeded set criteria and can be attributed to the proponent;
  - 3. report on the consistency with the noise criteria set through the Regulation 17 approval process;
  - 4. report on compliance with conditions set in the licence and performance against environmental criteria set by the licence;
  - report six monthly to the community reference group any noncompliance of conditions or inconsistency with environmental criteria as soon as practicable after identifying that non-compliance or inconsistency; and
  - 6. carry out an overall review after eighteen months and advise the Minister for the Environment as to whether the independent auditing should continue.
- 5-4 Subject to the outcomes of the eighteen month review described in item 6 of condition 5-3, the proponent will continue to fund the independent environmental auditor after the initial period of eighteen months for such time as determined by the Minister for the Environment."

These Conditions, therefore, are the terms of reference for the Independent Auditor.

#### 1.2 EXTENSION TO AUDIT PERIOD

The first three auditing dates for the three six-monthly periods were:

- 29 January to 28 July 2009
- 29 July 2009 to 28 January 2010

29 January 2010 to 28 July 2010.

Consequently, the first independent auditor's report for the first audit period was presented to and considered by the Community Reference Group (CRG) on 11 February 2010 (KLA 2010a).

The second report (KLA 2010b) was presented to the CRG on 13 May 2010 and the third report (KLA 2010c) was presented to the CRG for consideration on 9 December 2010.

Condition 5-3 of Ministerial Statement 782 requires the independent auditor to report to the Minister after the third audit period by undertaking a review and providing a recommendation to the Minister for continuation or cessation of the audit process. After the third audit period (18 months), the review was completed by the auditor and a summary report and recommendation from the auditor was forwarded to the Minister on 14<sup>th</sup> April 2011 (KLA 2011a). The recommendation from the auditor was for the continuation of the audit for a further two audit periods.

On 3<sup>rd</sup> June 2011, the Minister advised the auditor that he had accepted the recommendation with the audit period to cease on 28<sup>th</sup> September 2011. He also requested a further review and recommendation from the auditor for continuation or cessation of the audit process on completion of the two additional audit periods (to 28<sup>th</sup> September 2011).

On 30<sup>th</sup> June 2011, KCGM requested the auditor to consider the two audit periods to encompass 29 July 2010 to 31 March 2011 and 1 April 2011 to 30 September 2011 as these dates correlate with KCGM's quarterly reporting periods. This request was agreed to by the auditor.

Subsequently, the fourth independent environmental audit for the period 29 July 2010 to 31 March 2011 (KLA 2011b) was completed and presented to the CRG on 8 March 2012 and the fifth independent environmental audit for the period 1 April to 30 September 2011 (KLA 2012) was presented to the CRG on 17 May 2012.

This summary report and recommendation to the Minister for the Environment covers the period of the fourth and fifth audit periods, 29<sup>th</sup> July 2010 to 30 September 2011.

#### 1.3 APPOINTMENT OF AUDITOR

On 17 June 2009, KCGM advised the Minister for the Environment that Keith Lindbeck, Principal of Keith Lindbeck and Associates had been appointed under Condition 5-3 as the independent environmental auditor to report to the Community Reference Group (CRG) in Kalgoorlie.

#### 1.3 AUDIT REPORTING PERIODS

The auditing dates for the two additional audit periods were:

- 29 July 2010 to 31 March 2011
- 1 April to 30 September 2011.

The fourth independent auditor's report was presented to and considered by the CRG on 8 March 2012 (KLA 2011b) and the fifth report (KLA 2012) was presented to the CRG on 17 May 2012.

#### 2.0 LITERATURE REVIEWED

Prior to commencing the first audit and for the subsequent audits, the following documents provided background information for the auditor:

- Ministerial Statement No. 782 dated 29 January 2009
- Kalgoorlie Consolidated Gold Mines Pty Ltd Revised Noise and Vibration Monitoring and Management Programme June 2004
- Fimiston Operations Air Quality Management Plan 30 September 2009
- Department of Environment and Conservation Licence for Prescribed Premises L6240/1988/12 (commencing 1 October 2008 and expiring 30 September 2011)
- Minutes of CRG Meeting held 5 February 2009
- Minutes of CRG Meeting held 5 March 2009
- Minutes of CRG Meeting held 2 April 2009
- Minutes of CRG Meeting held 7 May 2009
- Fimiston Operations Seepage and Groundwater Management Plan dated 30 September 2009.

The following documents providing additional background information and data were reviewed by the auditor to enable the audit process to be completed:

- Acoustic Assessment, Golden Pike Development including Noise Bund Construction (Herring Storer Acoustics, June 2005)
- Northern Waste Rock Dumps Environmental Acoustic Assessment (Herring Storer Acoustics, July 2006)
- Supplementary Information for Golden Pike Development, Environmental Acoustic Assessment (Herring Storer Acoustics, July 2006)
- Kalgoorlie Consolidated Gold Mines Super Pit Effects of Blasting in the Golden Pike Cut-Back (Terrock Consulting Engineers, 27 February 2006)
- Air Dispersion Modelling of Mercury Emissions for KCGM (Environ, 5 July 2006)
- Letter report KCGM-Fimiston Open Pit Particulate Modelling Update (Environ, 20 September 2007)
- Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2009
   Approval by the Minister for the Environment under Regulation 17 (7) of the Environmental Protection Act 1986 published in Government Gazette, WA, No. 132, pp2795-2807, 14 July 2009
- Fimiston Operations Noise and Vibration Monitoring and Management Programme (August 2009 Revision) – 11 August 2009
- KCGM 2008 Annual Environmental Report.

# 3.0 INDEPENDENT ENVIRONMENTAL AUDITS FOR PERIOD 29 JULY 2010 TO 30 SEPTEMBER 2011

#### 3.1 SITE AUDITS

Site visits or audits were undertaken by the independent auditor on:

- 20 July 2011 (audit)
- 8 March 2012 (presentation to the CRG)
- 5 April 2012 (audit)
- 17 May 2012 (presentation to the CRG).

#### During the audits the auditor:

- Received and reviewed published reports and hard copies of data/certificates
- Reviewed real-time data available on KCGM's internal computer system
- Reviewed data displayed and available on the KCGM web-site
- · Held discussions with:
  - o Ms Graeme Smith
  - o Ms Michelle Berryman
  - Ms Catherine Wharton
  - o Ms Bronwen Smith.

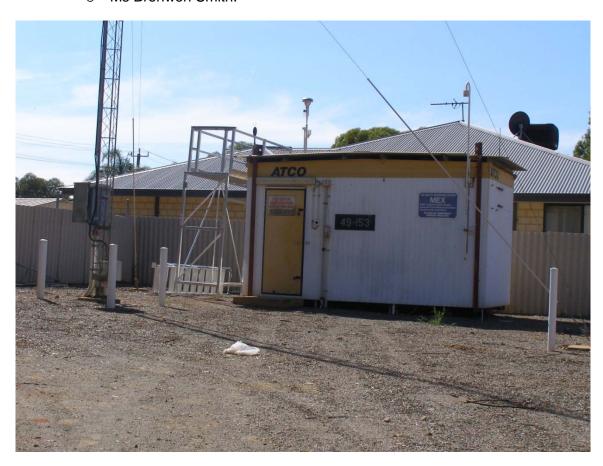


Plate 1 - MEX Monitoring Site

# 3.2 AUDIT OF CALIBRATION RECORDS OF RECORDING INSTRUMENTS

The accuracy of recording instruments can only be acceptable if the instruments are regularly calibrated. Calibration records were sighted for:

- The blast monitoring equipment (Alpha-Foxtrot)
- The dust monitoring equipment for this audit period (calibrated quarterly).

All recording equipment passed the calibration tests.

#### 3.3 RECORDS AND REPORTS REVIEWED

All relevant records and reports applicable to each of the audit periods were provided by KCGM and reviewed. Each of the audit reports contain a list of the reports that were received and reviewed.

# 3.4 COMPLIANCE WITH MINISTERIAL CONDITIONS (Ministerial Statement No. 782)

To record compliance (or otherwise) with the Ministerial Conditions imposed within Ministerial statement 782, an audit table has been developed in conjunction with officers from the Office of the Environmental Protection Authority (OEPA). This audit table has been completed to encompass the period of the two audit periods (29 July 2010 to 30 September 2011) and is included with this report as Attachment 1.

In the "Compliance Status" column of the Audit Table terms have been used as described in Department of Environment and Conservation (2007).

The auditor verifies that KCGM is in compliance with all relevant Ministerial Conditions during the audit period.

The following specific Ministerial Conditions were audited for the audit period.

#### 3.4.1 Dumping of Waste within 500 m of Residences (Condition 782:6.1)

This Condition requires KCGM to prepare a waste dumping management plan if waste rock dumping is to encroach within 500 m of residences. KCGM has produced a plan of the waste dump to be located to the north of the Golden Pike Cutback (Figure 1).

This plan indicates that the waste dump will not encroach within 500 m of any residence.

#### 3.4.2 Set-back for Mining Activities (Condition 782:M10.1)

This Ministerial Condition requires KCGM to obtain the written consent of all owners and occupiers of residential properties located within 400 m of the active mining operations. Figure 2 is a plan indicating the properties located within the 400 m mining zone.

The auditor sighted and reported on every written request to the owners/occupiers with the attached consent form forwarded by KCGM in January 2010 and also sighted each signed consent form returned by the owner or occupier (KLA 2011b, KLA 2012).

#### 3.5 COMPLIANCE WITH DUST MONITORING

Nine exceedences in dust levels were notified to the Department of Environment and Conservation (DEC) and Department of Health (DOH) for exceedences occurring on 19 August, 20 August, 19 October, 20 October, 27 October, 21 November, 13 December 2010, 11 January and 28 January 2011. This action was taken in compliance with the Ministerial condition.

Seven of the nine incidents were related to smoke from wood fires, dust or thunderstorms in the local area and could not be attributed to the KCGM mining operation.

The investigation of the incident occurring on 19 October 2010 was unable to confirm the location of the dust source. However, there appeared to be some indication that dust may have been sourced from the KCGM waste landforms.

The investigation of the incident of 13 December 2010 indicated that dust may have been sourced from the Golden Pike expansion area. To reduce the possible impact, KCGM reduced operations at Golden Pike and instigated dust suppression watering operations.

Five exceedences in dust levels were notified to the DEC and DOH for exceedences occurring on 6 April, 28 June, 30 June, 20 August and 18 September 2011.

The incident that occurred on 18<sup>th</sup> September 2011 was believed to be triggered by a regional dust storm that was a contributing factor to the elevated dust readings at all the sites.

The investigations into the remaining four incidents indicated that dust may have been sourced from the Golden Pike expansion area or other KCGM operations, although it was difficult to determine. It is recorded, however, that dust suppression activities were ongoing on these dates and the dust sources may have been due to gusty winds recorded on those days.

#### 3.6 CONSISTENCY WITH NOISE AND BLAST CRITERIA

#### 3.6.1 Noise Compliance

There were no instances attributed to the mining operation where operations noise exceeded the permitted levels.

#### 3.6.2 Blast Compliance

For the period 29 July to 30 September 2010, of 68 blasting events, vibration trigger events were recorded to a maximum of 67 at Site Bravo and a minimum of 48 at Site Foxtrot.

For the period 1 October to 31 December 2010, of 71 separate blasting events, vibration trigger events were recorded to a maximum of 78 at Site Charlie and a minimum of 61 triggers at Site Echo.

For the period 1 January to 31 March 2011, of 75 blasting events, vibration trigger events were recorded to a maximum of 75 at site Charlie and a minimum of 53 at site Echo.

On 1 March 2011, an overpressure reading greater than 120dB was recorded at Sites Alpha and Delta. The blast occurred at 1300 hrs within the Golden Pike Cutback area. No public complaints were received as a result of this blast.

Over the period 29<sup>th</sup> July to 31 December 2010, there were no blasts fired on a Sunday in the Fimiston Open Pit.

An unscheduled blast was fired on Sunday 16<sup>th</sup> January 2011 in the Fimiston Open Pit. This unscheduled blast was fired to maintain production rate and to avoid the need to stand down a shovel. No public complaints were received as a result of the blast.

For the period 1 April to 30 June 2011, of 75 blasting events, vibration trigger events were recorded to a maximum of 75 at Site Charlie and a minimum of 55 at Site Foxtrot.

For the period 1 July to 30 September 2011, of 87 separate blasting events, vibration trigger events were recorded to a maximum of 87 at Sites Alpha and Charlie and a minimum of 61 triggers at Site Echo.

Over the period 1 April to 30 September 2011, there were no blasts fired on a Sunday in the Fimiston Open Pit.

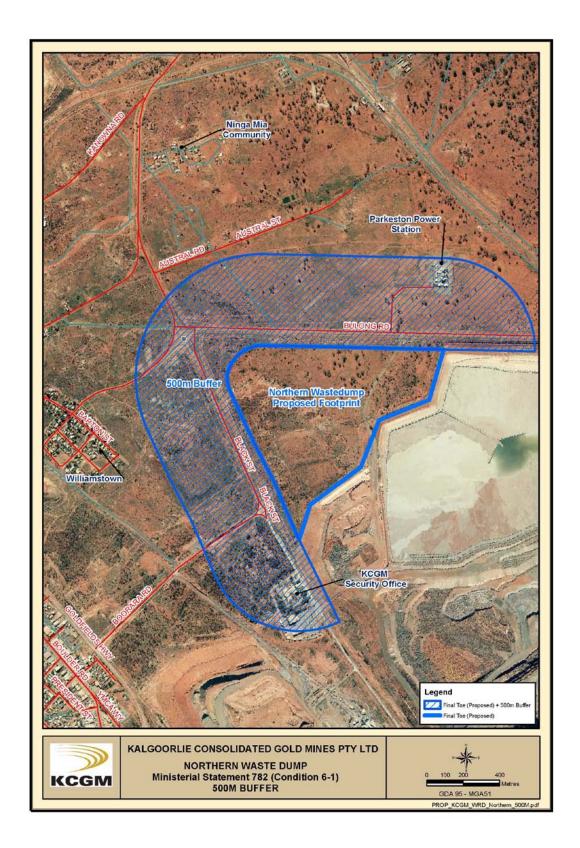


Figure 1 - Plan Indicating Toe of Waste Dump and 500 m Buffer Zone for Northern Waste Dump



Figure 2 - Plan Showing Residential Premises Located within 400 m of the Golden Pike Mining Operation

# 3.7 COMPLIANCE WITH CONDITIONS OF DEC LICENCE L6240/1988/12

#### 3.7.1 Condition 1 – Groundwater Level Limit

This condition requires the Licensee (KCGM) to ensure that groundwater levels are deeper than four metres below ground level (mbgl) in all Monitor Compliance Bores (MCB's).

The records indicate that MCB MBF8 had continued to become shallower and during the period 1 January to 31 March 2011 had been recorded at a level of 3.85 mbgl (recorded 12 March 2011). MBF8 then continued to vary its depth below ground level between 5.28 mbgl on 8 April 2011 to 3.95 mbgl on 15 June 2011. The shallow recordings continued into the period 1 July to 30 September 2011 with MCB MBF8 recording depths varying between 3.78 to 3.55 mbgl.

This shallow level requires KCGM to commence pumping from the bore within two quarters.

Following receipt of the 1<sup>st</sup> quarter groundwater monitoring report, on 6<sup>th</sup> April, 2011, KCGM advised the Kalgoorlie office of DEC of the breach of conditions. The bore was re-measured on 5<sup>th</sup> April 2011 and the level was found to have reduced to 4.18 mbgl. Another re-measuring on 11<sup>th</sup> April found that the groundwater had again decreased to 4.85 mbgl (below the reporting level).

Subsequently, KCGM investigated this occurrence and believes that the increase in groundwater level in March was due to rainfall infiltration into the bore from an adjacent seepage interceptor trench. This followed substantial rainfall events during the months of January and February 2011.

On 13<sup>th</sup> April 2011, KCGM advised the DEC that it had identified several corrective actions that could assist with maintaining the groundwater levels below 4 mbgl. These include:

- Review alternative dewatering systems (dedicated sumps within Seepage Interception Trench/mobile trailer mounted pump) to hasten removal of surface water
- Conduct a review of surface water management practices, particularly to identify priority areas such as MBF8.

KCGM was planning to install additional production bores to the north of MBF8 to increase seepage recovery and lower groundwater levels below 6 mbgl. The installation of these bores was delayed by concerns over land tenure. However, they have now been installed (April 2012) to the south and east of MBF8 and are being equipped with pumps.

#### 3.7.2 Condition 2 - Groundwater Level Target

This condition requires the Licensee to increase groundwater recovery capacity within nine months of becoming aware that the groundwater levels were less than six mbgl.

During the audit period, Monitoring Compliance Bore (MCB) MBF8 was the only bore recorded with a groundwater level less than six mbgl for the period 29 July 2010 to 30 September 2011.

Management of MBF8 is a priority for KCGM to have the groundwater levels return to greater than six mbgl (see Section 3.7.1).

#### 3.7.3 Condition 3 - Groundwater Quality Target

This condition requires the Licensee to increase groundwater recovery capacity within nine months of being aware that Weak Acid Dissociable Cyanide levels ( $CN_{WAD}$ ) exceeded 0.5 mg/L in Production or MCB's.

The records sighted for the audit periods indicated that there had not been any exceedence of the limit of  $0.5 \text{ mg/L CN}_{WAD}$ .

## 3.7.4 Condition 4 - Implementation of the Fimiston Operations Seepage and Groundwater Management Plan (FOSGMP)

The auditor is satisfied that KCGM has implemented and continues to operate under the FOSGMP.

#### 3.7.5 Conditions 5 and 6 – Audit of the FOSGMP

This condition requires an annual audit of the FOSGMP by a qualified professional with a report submitted to the DEC Director by 31 August of each year.

The annual audit was completed and a copy of the covering letter dated 31 August 2011 sent to the DEC with the audit report was sighted.

#### 3.7.6 Conditions 7, 8 and 9 – Groundwater Monitoring Programme

This condition requires the Licensee to undertake groundwater monitoring to include measurement of standing water level and collection and analysis of groundwater samples from the specified monitoring bores around the Tailings Storage Facilities (TSF). The analyses of samples vary in elements to be monitored and the frequency of sampling.

The auditor was able to verify from the groundwater reports that KCGM is undertaking the monitoring required by these conditions. The auditor is also able to verify that the samples were analysed according to the requirements of Table 2 of the DEC Licence. In addition, the auditor verifies that the samples were collected at the frequency required in compliance with Table 2.

The samples were collected and preserved by KCGM in compliance with Condition 8 of the Licence and in compliance with the relevant Australian standards.

The auditor also verifies that the samples were forwarded to and analysed by a NATA registered laboratory in compliance with Condition 9 of the Licence.

#### 3.7.7 Conditions 10 and 11 - Vegetation Monitoring Programme

A vegetation monitoring program is required at specific transects in the vicinity of the Fimiston TSF. A report is required to be submitted with the Annual Report forwarded to

the DEC. The Annual Report for 2011 was sighted and included the required reports which incorporated the reporting requirements set out in Condition 10.

#### 3.7.8 Condition 12 – Action Required to Protect Vegetation

This condition requires the Licensee to further reduce groundwater levels to protect native vegetation if advised by the DEC Director.

The auditor confirms that no advice or directive was received from the DEC requiring any action by KCGM at this point in time.

#### 3.7.9 Conditions 13 to 18 – Reporting Conditions

These conditions set down requirements for reporting to the DEC Director for:

- Condition 13 Groundwater Monitoring quarterly
- Conditions 14 to 16 Exceedence of groundwater limit (<4 mbgl) within 24 hours
  of becoming aware of the limit being exceeded, the Licensee is to provide a
  report on the exceedence</li>
- Condition 17 Submission of an Annual Report to the Director. This report was forwarded to the Director on 30<sup>th</sup> March 2011.
- Condition 18 Annual Audit Compliance Report. This report was forwarded to the Director on 28 February 2011.

The auditor is able to certify that Conditions 13, 17 and 18 are in compliance.

#### 4.0 CONCLUSION

The additional two independent environmental audits for the periods 29 July 2010 to 31 March 2011 (KLA 2011b) and 1 April to 30 September 2011 (KLA 2012) have been completed and provided to the CRG.

KCGM has sophisticated systems for reporting noise, dust and groundwater levels and management programmes to enable immediate action to be taken if adverse conditions arise.

All relevant records and reports were sighted.

There were no limits exceeded or non-compliances sighted that could be attributed to the expansion of the Fimiston Operations as set down by the Ministerial Conditions (Statement No. 782) or by the DEC operating licence (L6420/1988/12).

As the auditor has completed five audits and there were no exceedences or non-compliances identified during the audits, and as KCGM have effective management practices to immediately mitigate any exceedences, the Auditor recommends that no further audits be undertaken as required under Ministerial Statement No. 782.

Therefore, Ministerial Conditions 782:M5.3 and 782:M5.4 are considered to be completed.

#### 5.0 **BIBLIOGRAPHY**

Department of Environment and Conservation (2007). *Performance and Compliance Reporting – Guidelines for Proponents*. Department of Environment and Conservation, Government of Western Australia. Draft, August 2007.

Keith Lindbeck and Associates – KLA (2010a). Compliance Report by Independent Environmental Auditor. Audit Period 29 January to 28 July 2009. Fimiston Gold Mine Operations Extension (Stage 3 – Golden Pike Cutback) and Mine Closure Planning, Kalgoorlie Consolidated Gold Mines Pty Ltd. Unpublished Report prepared for the Community Reference Group, Kalgoorlie. January 2010.

Keith Lindbeck and Associates – KLA (2010b). Second Compliance Report by Independent Environmental Auditor. Audit Period 29 July 2009 to 28 January 2010. Fimiston Gold Mine Operations Extension (Stage 3 – Golden Pike Cutback) and Mine Closure Planning, Kalgoorlie Consolidated Gold Mines Pty Ltd. Unpublished Report prepared for the Community Reference Group, Kalgoorlie. April 2010.

Keith Lindbeck and Associates – KLA (2010c). Third Compliance Report by Independent Environmental Auditor. Audit Period 29 July 2009 to 28 January 2010. Fimiston Gold Mine Operations Extension (Stage 3 – Golden Pike Cutback) and Mine Closure Planning, Kalgoorlie Consolidated Gold Mines Pty Ltd. Unpublished Report prepared for the Community Reference Group, Kalgoorlie. November 2010.

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Keith Lindbeck and Associates – KLA (2011b). Fourth Compliance Report by Independent Auditor. Audit Period 29 July 2010 to 31 March 2011. Fimiston Gold Mine Operations Extension (Stage 3 – Golden Pike Cutback) and Mine Closure Planning. Kalgoorlie Consolidated Gold Mines Pty Ltd. Unpublished Report prepared for the Community Reference Group, Kalgoorlie. November 2011.

Keith Lindbeck and Associates – KLA (2012). Fifth Compliance Report by Independent Auditor. Audit Period 1 April 2011 to 30 September 2011. Fimiston Gold Mine Operations Extension (Stage 3 – Golden Pike Cutback) and Mine Closure Planning. Kalgoorlie Consolidated Gold Mines Pty Ltd. Unpublished Report prepared for the Community Reference Group, Kalgoorlie. April 2012.

#### **ATTACHMENT 1**

# AUDIT TABLE FOR COMPLIANCE WITH MINISTERIAL STATEMENT NO. 782

#### **Environmental Management Consultants**



# AUDIT TABLE KCGM Independent Audit for the Period 1 April 2011 to 30 September 2011

PROJECT: FIMISTON GOLD MINE OPERATIONS EXTENSION (STAGE 3) AND MINE CLOSURE PLANNING

#### Note:

- Phases that apply in this table = **Pre-Construction, Construction, Operation, Decommissioning, Overall (several phases)**
- This audit table is a summary and timetable of conditions and commitments applying to this project. Refer to the Minister's Statement for full detail/precise wording of individual elements.
- Code prefixes: M = Minister's condition; P = Proponent's commitment; A = Audit specification; N = Procedure.
- Any elements with status = "Audited by proponent only" are legally binding but are not required to be addressed specifically in compliance reports, if complied with.
- Acronyms list:- Minister for the Environment Min for Env; Chief Executive Officer CEO; DEC Dept of Environment and Conservation; Evaluation Division Part IV; Pollution Prevention Division Part V; Waste Management Division WMD; Department of Mines and Petroleum DMP; Environmental Protection Authority EPA; Health Department of WA HDWA; Water and Rivers Commission WRC; Bush Fires Board BFB; Department of Planning & Infrastructure DPI; WA Planning Commission WAPC.

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice Pha	ase	When	Compliance Status	Evidence Sighted
782:G										
782:M1.1	Proposal Implementation	The proponent shall implement the proposal as documented and described in schedule I of this statement subject to the conditions and procedures of this statement.	Project implemented in accordance with these conditions.	Compliance Report (CR)	Min for Env	Ov	verall		N/A	N/A
782:M2.1	Proponent Nomination and Contact Details	The proponent for the time being nominated by the Minister for the Environment under sections 38(6) or 38(7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal.			Min for Env	Ov	verall		Completed	
782:M2.2	Proponent Nomination and Contact Details	The proponent shall notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.	Letter notifying the CEO of any change in proponent details.	Letter notifying the CEO of any change in proponent details.	DEC		verall	Within 30 days of such change	Completed	N/A
782:M3.1	Time Limit of Authorisation	The authorisation to implement the proposal provided for in this statement shall lapse and be void within five years			Min for Env	Ov	verall	On or before the expiration of five years froth the date of this statement. 29 January 2014	N/A	N/A

# Environmental Management Consultants ABN 36 150 274 469



### **AUDIT TABLE**

		after the date of this statement if the proposal to which this statement relates is not substantially commenced.							
782:M3.2	Time Limit of Authorisation	The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.	Letter notifying the CEO that the proposal has substantially commenced.	Written evidence.	DEC	Overall	On or before the expiration of five years from the date of this statement. 29 January 2014	N/A	N/A
782:M4.1	Compliance Reporting	The proponent shall submit to the CEO environmental compliance reports annually reporting on the previous twelve-month period, unless required by the CEO to report more frequently.	Submit annual compliance reports, covering the conditions of this audit program, unless otherwise required by the CEO to report more frequently.	CR	DEC	Overall	Annually on or before 29 March	N/A	Annual compliance report not due during this audit period
782:M4.2	Compliance Reporting	The environmental compliance reports shall address each element of an audit program approved by the CEO and shall be prepared and submitted in a format acceptable to the CEO.	Submit annual compliance reports, in a format approved by the CEO.	CR	DEC	Overall	Annually on or before 29 March	N/A	Annual compliance report not due during this audit period
782:M4.3	Compliance Reporting	The environmental compliance reports shall:  1. be endorsed by signature of the proponent's chief executive officer or a person, approved in writing by the CEO, delegated to sign on behalf of the proponent's chief executive officer;  2. state whether the	Submit annual compliance reports, covering the conditions of this audit program.	CR	DEC	Overall	Annually on or before 29 March	N/A	Annual compliance report not due during this audit period.

#### **Environmental Management Consultants**



### **AUDIT TABLE**

						<u>,                                      </u>			
		proponent has complied							
		with each condition and							
		procedure contained in							
		this statement; 3.							
		provide, verifiable							
		evidence of compliance							
		with each condition and							
		procedure contained in							
		this statement; 4: state							
		whether the proponent							
		has complied with each							
		key action contained in							
		any environmental							
		management plan or							
		program required by this							
		statement; 5. provide							
		verifiable evidence of							
		conformance with each							
		key action contained in							
		any environmental							
		management plan or							
		program required by this							
		statement; 6. identify all							
		non-compliances and							
		non-conformances and							
		describe the corrective							
		and preventative actions							
		taken in relation to each							
		non-compliance or non-							
		conformance; 7. review							
		the effectiveness of all							
		corrective and							
		preventative actions							
		taken; and 8. describe							
		the state of							
		implementation of the							
		proposal.							
782:M4.4	Compliance	The proponent shall	Place environmental	CR available on website	DEC	Overall	Within 2 weeks of	In	Previous
	Reporting	make the environmental	compliance reports on the					Compliance	compliance
		compliance reports	KCGM website				DEC	-	report placed on
		required by condition 4-	www.superpit.com.au						the KCGM web
		1 publicly available in a							site on 21 March
		manner approved by the							2011
		CEO.							
782:M5.1	Performance	The proponent shall	Performance Review report	Performance Review	Min for Env	Overall	Every five years after	N/A	N/A
	Review	submit a Performance	submitted every five years	report	, , ,		the start of mining		
		_ 5-011110 to 1 0111011101100		1 1 1	1				1

#### **Environmental Management Consultants**



### **AUDIT TABLE**

Review report every five	after the start of mining			activities	
years after the start of	activities addressing the				
mining activities forming	relevant issues.				
part of the expanded and					
revised proposal to the					
Environmental					
Protection Authority,					
which addresses: 1. the					
major or environmental					
issues associated with					
implementing the					
project; the					
environmental objectives					
for those issues; the					
methodologies used to					
achieve these; and the					
key indicators of					
environmental					
performance measured					
against those objectives;					
2. the level of progress in					
the achievement of					
sound environmental					
performance, including					
industry benchmarking,					
and the use of best					
available technology					
where practicable; 3.					
significant					
improvements gained in					
environmental					
management, including					
the use of external peer					
reviews; 4. stakeholder					
and community					
consultation about					
environmental					
performance and the					
outcomes of that					
consultation, including a					
report of any on-going					
concerns being					
expressed; and 5. the					
proposed environmental					
objectives even the next					
objectives over the next					
I HVA VASE INCHINING	, I		1	1	

# Environmental Management Consultants ABN 36 150 274 469



### **AUDIT TABLE**

782:M5.2	Performance Review	improvements in technology and management processes.  The proponent shall make the Performance Review reports required by condition 5-1 publicly available in a manner approved by the CEO.	Place Performance Review reports on the KCGM website www.superpit.com.au	Performance Review reports available on website	DEC	Overall	Within 2 weeks of submission to the DEC	N/A	N/A
782:M5.3	Performance Review	The proponent shall appoint and fund an independent environmental auditor for an initial period of eighteen months to report to the community through the community reference group and to the Minister for the Environment on the environmental performance of the proponent. The auditor shall: 1. check on compliance with the Ministerial Conditions contained in this Statement; 2. report on the results of dust monitoring and actions taken where dust levels have exceeded set criteria and can be attributable to the proponent; 3. report on consistency with the noise criteria set through the Regulation 17 approval process; 4. report on compliance with conditions set in the licence and performance against environmental criteria set by the licence; 5. report six monthly to the	KCGM appoint an independent environmental auditor.  6 Monthly environmental performance review reports to CRG for initial 18 month period.  Overall 18 month environmental performance review to Minister for Environment.	Environmental performance review reports. CRG Minutes.	Min for Env	Overall	An initial 18 month period  Report six monthly to the community reference group any non-compliance of conditions or inconsistency with environment criteria as soon as practicable after identifying that non-compliance or inconsistency  Overall review after eighteen months and advise the Minister for the Environment as to whether the independent auditing should continue.	In Compliance	Independent Environmental Auditor appointed 17 June 2009. First audit report to CRG 11 February 2010. Second audit report to CRG 13 May 2010. Third audit report to CRG 9 December 2010. Review and recommendation to Minister 14 <sup>th</sup> April 2011. Fourth audit report to CRG 8 March 2012. Fifth audit report to CRG expected to occur 10 <sup>th</sup> May 2012.

## Environmental Management Consultants



### **AUDIT TABLE**

		community reference group any non-compliance of conditions or inconsistency with environment criteria as soon as practicable after identifying that non-compliance or inconsistency; and 6. carry out an overall review after eighteen months and advise the Minister for the Environment as to whether the independent auditing should continue.							
782:M5.4	Performance Review	Subject to the outcomes of the eighteen month review described in item 6 of condition 5-3, the proponent will continue to fund the independent environmental auditor after the initial period of eighteen months for such time as determined by the Minister for the Environment.	If required continue to fund the independent auditor to report 6 monthly to the CRG for such time as determined by the Minister for the Environment.	Environmental performance review reports. CRG Minutes.	Min for Env	Overall	Until determined by the Minister for Environment	In Compliance	Two additional audit periods required by the Minister in a letter from Minister dated 3 June 2011. Summary report and recommendation to the Minister for the Environment expected to be forwarded in May 2012.
782:M6.1	Dumping of Waste within five hundred metres of Residences	Prior to the dumping of waste within five hundred metres of residences, the proponent shall prepare and implement a management plan for waste dumping to ensure that there is no unacceptable detrimental effect on the residents, to the requirements of the Minister for the Environment on advice	Prepare and implement a management plan for waste dumping.	Waste dumping management plan. CR	Min for Env DEC	Overall	Prior to the dumping of waste within five hundred metres of residences	In Compliance – no dumping of waste rock will occur within 500 m of any residence	Plan showing extent of waste dumping with 500 m buffer.

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### **AUDIT TABLE**

		of the Department of Environment and Conservation.								
782:M6.2	Dumping of Waste within five hundred metres of Residences	In the preparation of the management plan for waste dumping required by condition 6-1, the proponent shall consult with residents within five hundred metres of the dumping of waste and the environmental health staff of the City of Kalgoorlie-Boulder.	Consult with environmental health staff of the City of Kalgoorlie-Boulder and residents within 500m of the waste dumping in preparation of waste dumping management plan.	Relevant records of consultation from environmental health staff of the City of Kalgoorlie-Boulder. Registered letters sent to residents and records of feedback received from residents.	Min for Env	Environmental health staff of the City of Kalgoorlie- Boulder	Overall	Prior to the dumping of waste within five hundred metres of residences	In Compliance – no dumping of waste rock occurring within 500 m of any residence	Plan showing extent of waste dumping with 500 m buffer.
782:M7.1	Air Quality	Within three months following the issuing of the notice to the decision-making authorities under section 45(7) of the Environmental Protection Act 1986, the proponent shall implement the Air Quality Management Plan (September 2007) to the requirements of the Minister for the Environment on advice of the Department of Environment and Conservation and the Department of Health.	Implement the Air Quality Management Plan (September 2007) within 3 months of the issuing of the notice to the decision-making authorities to the requirements of the Minister for the Environment on advice of the Department of Environment and Conservation and the Department of Health.	Relevant records of consultation from the Department of Environment and Conservation and the Department of Health.	Min for Env	DEC, DoH	Overall	Within three months following the issuing of the notice	Completed	Records of correspondence with DEC & Dept of Health
782:M7.2	Air Quality	The proponent shall review the Air Quality Management Plan referred to in condition 7-1 at twelve-monthly intervals, unless otherwise required by the Environmental Protection Authority, and shall amend the Plan to the requirements of the Minister for the Environment on advice	Annual review of the Air Quality Management Plan to the requirements of the Minister for the Environment on advice of the Department of Environment and Conservation and the Department of Health.	Relevant records of consultation from the Department of Environment and Conservation and the Department of Health.	Min for Env	DEC, DoH	Overall	Annually from the date published	In Compliance	Annual review completed and submitted 3 February 2012.

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### **AUDIT TABLE**

782:M7.3	Air Quality	of the Department of Environment and Conservation and the Department of Health.  The proponent shall implement the amended Air Quality Management Plan required by condition 7-2.	Implement the amended Air Quality Management Plan at twelve monthly intervals or as otherwise required by the Environmental Protection	CR	Min for Env	Overall		In Compliance	Air Quality Management Plan implemented
782:M7.4	Air Quality	The proponent shall only detonate explosives at surface level on the premises when wind directions favour the carriage of dust away from the residential areas of Kalgoorlie-Boulder, unless undertaken in accordance with regulation 8.28 (4) of the Mines Safety and Inspection Regulations 1995.	Authority.  Detonate explosives at surface level on the premises when wind directions favour the carriage of dust away from the residential areas of Kalgoorlie-Boulder, unless undertaken in accordance with regulation 8.28 (4) of the Mines Safety and Inspection Regulations 1995.	Sample email notification of wind dependent shots that were cancelled due to unfavorable winds. Air Quality Management Plan (Blasting Dust Management Plan). CR.	Min for Env	Overall		In Compliance	
782:M7.5	Air Quality	The proponent shall make available continuous dust monitoring data on their website within 24 hours of the recording of that data.	Continuous dust monitoring data is available on the KCGM website within 24 hours of the recording of that data.	Monitoring data available on website.	Min for Env	Overall	Within 24 hours of recording data.	In Compliance	Monitoring data available on the web page within 24 hours as required
782:M7.6	Air Quality	The proponent shall install two additional dust monitoring stations, which are to be colocated with the existing wind speed and wind direction monitoring stations.	Install two additional dust monitoring stations co-located with the existing wind speed and wind direction monitoring stations at MEX and MTC.	Installation and commissioning documents for new monitoring stations.	Min for Env	Overall		Completed	
782:M7.7	Air Quality	The proponent shall keep and make publicly available a register of complaints regarding air emissions; investigate those complaints; and keep a record of the	Keep and make publicly available a register of complaints regarding air emissions; investigate those complaints; and keep a record of the investigations and actions taken with regard to the	CR	Min for Env	Overall		In Compliance	Records sighted at KCGM Super Pit Shop, Boulder

## Environmental Management Consultants



### **AUDIT TABLE**

		investigations and actions taken with regard to the complaint.	complaint. All public feedback and complaints are recorded in the PIL system including all investigation and control measures implemented. PIL information is made publicly available through presentations at the Community Reference Group meetings and is available to the public upon request through the KCGM Super Pit Shop.						
782:M8.1	Noise	The proponent shall not conduct any mining activities forming part of the expanded and revised proposal unless and until approval has been granted under regulation 17(7) of the Environmental Protection (Noise) Regulations 1997. Note: In this condition "mining activities" does not include construction work within the meaning of regulation 13 of the Environmental Protection (Noise) Regulations 1997.	Do not conduct any mining activities forming part of the expanded and revised proposal unless and until approval has been granted under regulation 17(7) of the Environmental Protection (Noise) Regulations 1997.	Environmental Protection (Fimiston Gold Mine Noise Emission Approval) 2009.	Min for Env		Overall	In Compliance	Approval gazette 14 July 2009 and one appeal received. The appeal was determined by the Minister for the environment on 24 March 2010 and the appeal was dismissed.
782:M8.2	Noise	The proponent shall undertake noise modeling to determine whether a special control area is required in accordance with the Goldfields-Esperance Regional Planning Strategy.	Undertake noise modeling to determine whether a special control area is required in accordance with the Goldfields-Esperance Regional Planning Strategy.	Relevant records of consultation to the Department of Planning and Infrastructure and the City of Kalgoorlie-Boulder.	Min for Env		Overall	In Compliance	Records of consultation sighted
782:M8.3	Noise	The proponent shall consult with the Western Australian Planning Commission, Department of Planning	Consult with the Department of Planning and Infrastructure (on behalf of the Western Australian Planning Commission) and the City of	Relevant records of consultation from the Department of Planning and Infrastructure and the City of Kalgoorlie-	Min for Env	Western Australian Planning Commission, Department of	Overall	In Compliance	Records of consultation sighted (18 December 2009 and minutes of

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### **AUDIT TABLE**

		and Infrastructure, and the City of Kalgoorlie- Boulder in the implementation of Condition 8-2.	Kalgoorlie-Boulder in the implementation of Condition 8-2.	Boulder.		Planning and Infrastructure, and the City of Kalgoorlie- Boulder			meeting held 24 July 2009.
782:M9.1	Airblast Overpressure and Vibration from Blasting	The proponent shall only detonate explosives on the premises between the hours of 0700 hours and 1800 hours unless undertaken in accordance with regulation 8.28 (4) of the Mines Safety and Inspection Regulations 1995.	Detonate explosives on the premises between the hours of 0700 hours and 1800 hours unless undertaken in accordance with regulation 8.28 (4) of the Mines Safety and Inspection Regulations 1995. Blast in accordance with the Fimiston Air Quality Management Plan.	Blast times are provided to the DEC in the Noise and Blast Monitoring Quarterly Reports.	Min for Env	Ove	rall	In Compliance	Blast reports sighted.
782:M9.2	Airblast Overpressure and Vibration from Blasting	Where explosives are detonated on the premises outside the requirements specified in conditions 7-4 and 9-1, the circumstances which led to such detonation being necessary shall be reported by the proponent to the CEO within 36 hours following detonation.	Report to the CEO within 36 hours following detonation of explosives on the premises outside the requirements specified in 7-4 and 9-1 including the circumstances which led to such detonation being necessary.	Reports to CEO of any blasts outside of hours 0700 hours and 1800 hours	DEC	Ove	rall Within 36 hours following detonation.	In Compliance	No blasts outside the permitted hours recorded or reported.
782:M9.3	Airblast Overpressure and Vibration from Blasting	The proponent shall ensure that all airblast overpressure levels due to blasting comply with Regulation 11 of the Environmental Protection (Noise) Regulations 1997.	Blast in accordance with the Noise and Vibration Monitoring and Management Programme to ensure that all airblast overpressure levels due to blasting comply with Regulation 11 of the Environmental Protection (Noise) Regulations 1997.	Blast data are provided to the DEC in the Noise and Blast Monitoring Quarterly Reports.	Min for Env	Ove	rall	In Compliance	Blast data quarterly reports sighted
782:M9.4	Airblast Overpressure and Vibration from Blasting	The proponent shall make all reasonable effort to avoid blasting on Sundays.	Blast in accordance with the Noise and Vibration Monitoring and Management Programme and make all reasonable effort to avoid blasting on Sundays.	Noise and Vibration Monitoring and Management Programme. Blast dates are provided in the Noise and Blast Monitoring Quarterly Reports.	Min for Env	Ove		In Compliance	Blast data quarterly reports sighted
782:M9.5	Airblast Overpressure	For all blasting, the proponent shall comply	Blast in accordance with the Noise and Vibration	Blast data are provided to the DEC in the Noise and	Min for Env	Ove	rall	In Compliance	Blast data quarterly reports

#### **Environmental Management Consultants**



### **AUDIT TABLE**

	and Vibration	with the following	Monitoring and Management	Blast Monitoring					sighted.
	from Blasting	vibration limits,	Programme to comply with the	Quarterly Reports.					Signou.
		measured or calculated	following vibration limits,	Noise and Vibration					
		in accordance with	measured or calculated in	Monitoring and					
		section J4.2 of	accordance with section J4.2 of	Management Programme.					
		Australian Standard	Australian Standard 2187.2						
		2187.2 2006, for the	2006 for the protection of						
		protection of human	human comfort at any houses						
		comfort at any houses	and low rise buildings,						
		and low rise buildings,	theatres, schools and other						
		theatres, schools and	similar buildings occupied by						
		other similar buildings	people and not owned by the						
		occupied by people and	proponent: 1. the peak particle						
		not owned by the	velocity shall not exceed 5						
		proponent: 1. the peak	millimetres per second for						
		particle velocity shall not	90% of blasts per year; 2. the						
		exceed 5 millimetres per	peak particle velocity shall not						
		second for 90% of blasts	exceed 10 millimetres per						
		per year; 2. the peak	second for any blast; and 3. no						
		particle velocity shall not	more than one in ten						
		exceed 10 millimetres	consecutive blasts shall exceed						
		per second for any blast;	5 millimetres per second peak						
		and 3. no more than one	particle velocity.						
		in ten consecutive blasts							
		shall exceed 5							
		millimetres per second							
782:M9.6	Airblast	peak particle velocity.  Within six months	This Programme shall include:	Noise and Vibration	Min for Env	Overall	Within six months	In	Following
/62.W19.0		following the issuing of	1. Locations of the air blast	Monitoring and	Willi for Elly	Overall	following the issuing	Compliance	Ministerial
	Overpressure and Vibration	the notice to the	overpressure and ground	Management Programme.			of the notice	Compilance	Determination of
	from Blasting	decision-making	vibration monitors and	Letter of acceptance from			of the notice		the appeal
	Hom Diasting	authorities under section	demonstration that these	the DEC.					against the
		45(7) of the	locations meet the	the BEC.					Regulation 17
		Environmental	requirements of regulation 21						Noise
		Protection Act 1986, the	of the Environmental						Assessment, the
		proponent shall revise	Protection (Noise) Regulations						revised NVMMP
		the Revised Noise and	1997 and section J3.2.2 of						was approved by
		Vibration Monitoring	Australian Standard 2187.2 -						the DEC 6
		and Management	2006; 2. Description of the						December 2010.
		Programme, dated June	monitoring equipment and						
		2004, to the	demonstration that the						
		requirements of the	equipment complies with the						
		Minister for the	requirements of schedule 4 of						
		Environment on advice	the Environmental Protection						
		of the Department of	(Noise) Regulations 1997 and						
		Environment and	section J3.2.1 of Australian						

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### **AUDIT TABLE**

		Conservation.	Standard 2187.2-2006; 3. Calibration by an approved calibration laboratory and field checks of the monitoring equipment in accordance with schedule 4 of the Environmental Protection (Noise) Regulations 1997 and the manufacturer's specifications and section J3.1.2 of Australian Standard 2187.2 - 2006 (or any subsequent amendment) and recording of calibration; 4.  Procedures for the recording of blast information in accordance with section J3.4 of Australian Standard 2187.2-2006; 5. Procedures for the reporting of air blast and vibration monitoring to the Department of Environment and Conservation; and 6.  Details of a complaints procedure and recording of complaints and action undertaken to resolve						
782:M9.7	Airblast Overpressure and Vibration from Blasting	The proponent shall implement the Revised Noise and Vibration Monitoring and Management Programme required by condition 9-6.	complaints.  Implement the Revised Noise and Vibration Monitoring and Management Programme within six months following the issuing of the notice.	CR.	Min for Env	Overall		Completed	Implemented from December 2010.
782:M9.8	Airblast Overpressure and Vibration from Blasting	The proponent shall review the Revised Noise and Vibration Monitoring and Management Programme as required by the Environmental Protection Authority, and shall amend the Programme to the requirements of the	Review the Revised Noise and Vibration Monitoring and Management Programme as required by the Environmental Protection Authority, and amend the Programme to the requirements of the Minister for the Environment on advice of the Department of Environment and Conservation.	Letters of request from the EPA and letters of advice from the DEC.	Min for Env	DEC Overall	As required by the Environmental Protection Authority	N/A	N/A – no requests for review from the EPA.

## Environmental Management Consultants



### **AUDIT TABLE**

782:M9.9	Airblast Overpressure and Vibration from Blasting	Minister for the Environment on advice of the Department of Environment and Conservation.  The proponent shall implement the amended Revised Noise and Vibration Monitoring and Management Programme required by condition 9-8.	Implement the amended Revised Noise and Vibration Monitoring and Management Programme as required.	CR	Min for Env	Overall	N/A	N/A
782:M10.1	Set-back for Mining Activities	The proponent shall not undertake active mining operations within 400 metres of a property zoned "Residential" under the Town Planning Scheme without the written consent of the owner and occupier of that property.	Obtain written consent from the owners and occupiers of all property zoned "Residential" under the Town Planning Scheme within 400 metres of active mining.	Letters of consent from owner/occupiers of residential property.	Min for Env	Overall	Completed	Active mining commenced during audit period – signed letters of consent from all owners/occupiers sighted
782:M10.2	Set-back for Mining Activities	The proponent shall liaise with the Heritage Council of Western Australia to minimise environment impacts associated with active mining, on State Registered Places know as the Boulder Railway Station, Subway and Loopline, and Cornwall Hotel.  Note: "Active mining" means any method of working by which the earth or any rock structure, coal seam, stone, fluid, or mineral-bearing substance is disturbed, removed, washed, sifted, crushed, leached, roasted, floated, 'distilled, evaporated, smelted, refined,	Liaise with the Heritage Council of Western Australia to minimise environment impacts associated with active mining, on State Registered Places know as the Boulder Railway Station, Subway and Loopline, and Cornwall Hotel.	Relevant records of consultation from the Heritage Council of Western Australia regarding the Boulder Railway Station, Subway and Loopline, and Cornwall Hotel.	Min for Env	Heritage Council of Western Australia	In Compliance	Active mining commenced during audit period.

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### **AUDIT TABLE**

sintered, pelletised, or'			
dealt with for the			
purpose of obtaining any			
mineral or rock from it			
for commercial purposes			
or for subsequent use in			
industry, whether it has			
been previously			
disturbed or not, and			
includes: 1.			
developmental and			
construction work			
associated with opening			
up or operating a mine;			
2. the removal and			
disposal of overburden			
or waste or residues by			
mechanical or other			
means and the stacking,			
depositing, storage, and			
treatment of any			
substance considered to			
contain any mineral; and			
3. transport of ore or			
other mining product			
that takes place on a road			
which is not a road as			
defined in the Road			
Traffic Act 1974, but for			
the purpose of this			
condition does not			
include: 4. construction			
of a noise bund which is			
not part of any active			
mining activity; 5.			
rehabilitation of any			
area; 6. administration			
buildings or other similar			
facilities from which			
noise emissions comply			
with the Environmental			
Protection (Noise,)			
Regulations 1997• 7.			
exploration operations;			
8. operations for the			
care, security and			
,			

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### **AUDIT TABLE**

	maintenance of a mine and plant at the mine undertaken during any period when production or development operations at the mine are suspended; 9. operations undertaken to leave a mine safe to be abandoned; and 10. underground mining.								
Rehabilitation and Closure Management Plan	Prior to 30 April 2010, the proponent shall prepare a Rehabilitation and Closure Management Plan to the requirements of the Minister for Environment and the Minister for Mines and Petroleum on advice of the Environmental Protection Authority and shall submit the Plan to the Department of Environment and Conservation.	This Plan shall include: 1. the final form of land forms and voids; 2. the proposed land use for the mine site post-mining operations determined after consultation with relevant stakeholders; 3. removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders; 4. long-term management of ground and surface water systems affected by mining operations; 5. long-term management of potential acid-generating material; 6. long-term management of pits, including the Superpit and public safety provisions; 7. long-term management of tailings storage facilities; 8. a detailed Rehabilitation and Revegetation program which includes local vegetation, performance criteria and a timetable to be met; 9. identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities; 10. post-closure maintenance and monitoring; 11. re-instatement/retention of historically significant	Rehabilitation and Closure Management Plan.	Min for Env, Min for Mines and Petroleum	EPA	Overall	Prior to 30 April 2010	Completed	Rehabilitation and Closure Plan submitted 21 April 2010

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### **AUDIT TABLE**

			structures; 12. a contingency							
			plan for a care and							
			maintenance phase; and 13.							
			long-term management, of							
			vegetation significant to							
			adjacent ethnographic sites;							
782:M11.2	Rehabilitation	In the preparation of the	Meet the requirements of the	Relevant records of	Min for Env	DMP, DEC,	Overall		Completed	Rehabilitation
702.11111.2	and Closure	Rehabilitation and	following agencies in	consultation and	TVIIII TOT EIIV	DPI, WAPC,	Overan		Completed	and Closure Plan
	Management	Closure Management	preparation of the	satisfaction from the		City of				reviewed by
	Plan	Plan required by	Rehabilitation and Closure	Department of Mines and		Kalgoorlie-				statutory
		condition 11-1, the	Management Plan.: 1.	Petroleum, Department of		Boulder, DoW				authorities.
		proponent shall meet the	Department of Mines and	Environment and		and Registrar of				Responses
		requirements of the	Petroleum regarding items 1-3,	Conservation,		Aboriginal				received from
		1 -	5-10, and 12 of condition 11-1;	· ·		Sites				OEPA (8 July
		following agencies: 1.		Department of Planning		Sites				` •
		Department of Mines	2. Department of Environment	and Infrastructure,						2010), DEC (21
		and Petroleum regarding	and Conservation regarding	Western Australian						June 2010), DoP
		items 1-3, 5-10, and 12	items 4, 8, 9 and 10 of	Planning Commission,						(17 November
		of condition 11-1; 2.	condition 11-1; 3. Department	City of Kalgoorlie-						2010), DIA
		Department of	of Planning and Infrastructure,	Boulder, Department of						(November
		Environment and	Western Australian Planning	Water and Registrar of						2010), DoW (15
		Conservation regarding	Commission and City of	Aboriginal Sites on the						December 2010)
		items 4, 8, 9 and 10 of	Kalgoorlie-Boulder regarding	relevant sections of the						and DMP
		condition 11-1; 3.	item 1, 2, 3 and 9 of condition	Closure Management						(undated 2010).
		Department of Planning	11-1. 4. Department of Water	Plan.						
		and Infrastructure,	regarding item 4 of condition							
		Western Australian	11-1; and 5. Registrar of							
		Planning Commission	Aboriginal Sites regarding							
		and City of Kalgoorlie-	item 13 of condition 11-1.							
		Boulder regarding item								
		1, 2, 3 and 9 of condition								
		11-1. 4. Department of								
		Water regarding item 4								
		of condition 11-1; and 5.								
		Registrar of Aboriginal								
		Sites regarding item 13								
		of condition 11-1.								
782:M11.3	Rehabilitation	The proponent shall	Review the Rehabilitation and	Biennial Reviews of the	Min for Env	DMP, DEC,	Overall	Every 2 years from	Not applicable	N/A
	and Closure	review the Rehabilitation	Closure Management Plan	Rehabilitation and		DPI, WAPC,		the date published	to this audit	
	Management	and Closure	every two years and amend the	Closure Management		City of		1	period.	
	Plan	Management Plan	Plan as required in	Plan.		Kalgoorlie-			1	
		required by condition	consultation with the agencies	Relevant records of		Boulder, DoW				
		11-1 every two years,	referred to in condition 11-2,	consultation from the		and Registrar of				
		and shall amend the Plan	to the requirements of the	relevant agencies on the		Aboriginal				
		as required in	Minister for the Environment	Rehabilitation and		Sites				
		consultation with the	on advice of the relevant	Closure Management						
		agencies referred to in	agencies indicated in condition							
	<u> </u>	ageneres referred to ill	agencies muicated ill condition	1 1411.		]				

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### **AUDIT TABLE**

		11.2 11.2 3	11.0	Ī		T T			1
		condition 11-2, to the	11-2.						
		requirements of the							
		Minister for the							
		Environment on advice							
		of the relevant agencies							
		indicated in condition							
		11-2.							
782:M11.4	Rehabilitation	The proponent shall	Implement the amended	CR	Min for Env	DMP, DEC, Ove	rall Until determined by	Not required	N/A
702.111111	and Closure	implement the amended	Rehabilitation and Closure		William for Elliv	DPI, WAPC,	the Minister for the	at this stage	1 1/11
	Management	Rehabilitation and	Management Plan required by			City of	Environment	at this stage	
	Plan	Closure Management	condition 11-3 until such time			Kalgoorlie-	Liiviioiiiieit		
	1 Iaii		as the Minister for the			Boulder, DoW			
		Plan required by							
		condition 11-3 until such				and Registrar of			
		time as the Minister for	the closure responsibilities			Aboriginal			
		the Environment	have been fulfilled.			Sites			
		determines that the							
		proponent's closure							
		responsibilities have							
		been fulfilled.							
		Note: The Department of							
		Mines and Petroleum							
		shall be the lead agency							
		for coordinating the							
		Rehabilitation and							
		Closure process, with							
		certain items of the Plan							
		being administered by							
		the appropriate agency							
		as follows: 1. Department							
		of Mines and Petroleum							
		for items 1-3, 5-10, and							
		12 of condition 11—1; 2.							
		Department of							
		Environment and							
		Conservation for items 4,							
		8, 9 and 10 of condition							
		1 1-1; 3. Department of							
		Water regarding item 4							
		of condition 11-1; and 4.							
		Registrar of Aboriginal							
		Sites regarding item 13							
		of condition 11-1							
782:M11.5	Rehabilitation	The proponent shall	Make the Rehabilitation and	Rehabilitation and	DEC	Ove	rall Within 2 weeks of	Required by	N/A
/02.1111.3					DEC			20 <sup>th</sup> A mil	11/11
	and Closure	make the Rehabilitation	Closure Management Plan	Closure Management			submission to DEC		
	Management	and Closure	required by condition 11-1 and	Plan including revisions				2012	
	Plan	Management Plan	subsequent revisions required	available on the website.					

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### **AUDIT TABLE**

KCGM Independent Audit for the Period 1 April 2011 to 30 September 2011 PROJECT: FIMISTON GOLD MINE OPERATIONS EXTENSION (STAGE 3) AND MINE CLOSURE PLANNING

		required by condition 11-1 and subsequent revisions required by condition 11-3 publicly available in a manner approved by the CEO.	by condition 11-3 publicly available on the KCGM website www.superpit.com.au							
782:M12.1	Aboriginal Heritage	Prior to commencement of proposed works, the proponent shall submit an Aboriginal Cultural Heritage Management Plan that meets the objectives specified in Condition 12-3 as determined by the Minister for Indigenous Affairs.	Submit an Aboriginal Cultural Heritage Management Plan that meets the objectives specified in Condition 12-3 as determined by the Minister for Indigenous Affairs prior to the commencement of proposed works.	Relevant records of consultation and satisfaction from the Department of Indigenous Affairs on the Cultural Heritage Management Plan.	Department of Indigenous Affairs	Department of Indigenous Affairs	Design	Prior to commencement of proposed works	In Compliance	Aboriginal Cultural Heritage Management Plan submitted to the DIA on 29 December 2009. Plan accepted by DIA 9 February 2010.
782:M12.2	Aboriginal Heritage	The proponent shall consult with the Department of Indigenous Affairs in the preparation of the Plan.	Consult with the Department of Indigenous Affairs in the preparation of the Plan	Relevant records of consultation from the Department of Indigenous Affairs on the Cultural Heritage Management Plan.	Department of Indigenous Affairs	Department of Indigenous Affairs	Design	Prior to commencement of proposed works	In Compliance	Meeting held with DIA 26 November 2009.
782:M12.3	Aboriginal Heritage	The Plan shall include protocols and procedures for appropriate management of any Aboriginal sites or skeletal remains identified during the proposed works.	Include protocols and procedures for appropriate management of any Aboriginal sites or skeletal remains identified during the proposed works in the Aboriginal Cultural Heritage Management Plan.	Cultural Heritage Management Plan.	Department of Indigenous Affairs		Design	Prior to commencement of proposed works	In Compliance	Contained in the ACHMP Sections 5.0 and 6.0.
782:M12.4	Aboriginal Heritage	The proponent shall implement the Aboriginal Cultural Heritage Management Plan.	Implement the Aboriginal. Cultural Heritage Management Plan.	CR.	Department of Indigenous Affairs		Overall		In Compliance	Plan being implemented.

Note:

<sup>&</sup>quot;N/A" within the Compliance status column refers to items that have not yet commenced or are not applicable at this stage. Terms used in the "Compliance Status" column have been used as described in DEC (2007).