

MINISTERIAL STATEMENT 188
MINISTERIAL STATEMENT 782

1 JANUARY TO 31 DECEMBER 2021



KALGOORLIE CONSOLIDATED GOLD MINES PTY LTD





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KCGM

FIMISTON GOLD MINE COMPLIANCE ASSESSMENT REPORT

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1. CORPORATE ENDORSEMENT

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On behalf of Kalgoorlie Consolidated Gold Mines Pty Ltd, I, Nickolas Strong (Registered Manager) do hereby confirm that to the best of my knowledge, the information provided within this Compliance Assessment Report are true and correct and address the legal requirements of Ministerial Statement 782 and Ministerial Statement 188.

Signature	. Viet from	(Registered Manager
Date	. 23/02/2022	



2. INTRODUCTION

Kalgoorlie Consolidated Gold Mines Pty Ltd (KCGM) is a wholly owned subsidiary of Northern Star Resources Ltd and is responsible for operating the Fimiston Gold Mine Operations which is located immediately east of the City of Kalgoorlie-Boulder in the Goldfields Region of Western Australia, approximately 600 km east of Perth (Figure 1). The Fimiston Gold Mine Operations include the Fimiston Open Pit, Fimiston Processing Plant, three Tailings Storage Facilities (TSFs), waste rock dumps, Run of Mine Pad, infrastructure corridors and workshop areas.

In December 2004 KCGM publicly released its "KCGM Concept Plan" which outlined the proposed final dimensions of the Fimiston Open Pit and options to extend operations beyond the estimated mine life. To continue open pit mining KCGM submitted a Public Environmental Review (PER) in 2006 for assessment by the Environmental Protection Authority (EPA) to undertake the *Fimiston Gold Mine Operations Extension* (Stage 3) and Mine Closure Planning (Project). The Project sought approval for a cutback of the Fimiston Open Pit (the Golden Pike Cutback) and additional areas for waste rock dumps and tailings storage, to extend the life of the mine from 2012 to around 2017.

Following formal assessment of the Project by the EPA the Minister for Environment (Minister) issued Ministerial Statement 782 (MS782) on the 29 January 2009 approving the Project.

On average, the Fimiston Gold Mine Operations Plant, in conjunction with the Gidji Gold Processing Plant, produces up to 600,000 ounces of gold each year. The Fimiston Open Pit and Mt Charlotte Underground having a combined gold reserve of approximately 10 million ounces. The current production mine life will see mining continue until 2034.

Compliance against the requirements of MS782 is assessed in this Compliance Assessment Report (CAR) in accordance with Condition 4 of MS782 *Compliance Reporting*. Also considered in this CAR is the previous Fimiston Operations Ministerial Statement 188 *Fimiston Project Stage II – Mine and Waste Dumps (248)* (MS188) published on 24 October 1991.

The following Environmental Management Plans relevant to MS188 and MS782 are also assessed in this CAR:

- Fimiston Air Quality Management Plan (FAQMP);
- Noise and Vibration Monitoring and Management Plan (NVMMP);
- Aboriginal Cultural Heritage Management Plan (ACHMP); and
- Mine Closure Plan (MCP).



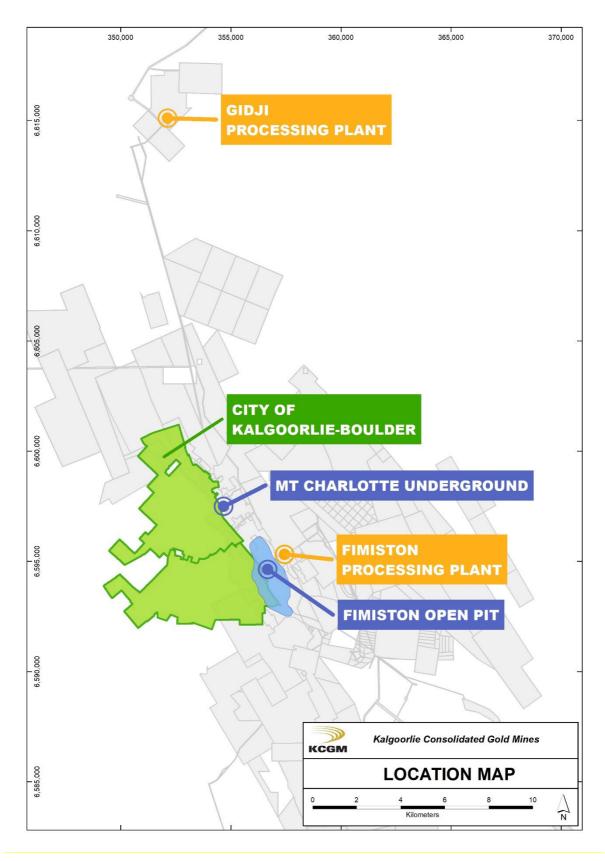


Figure 1: Location of the Fimiston Project



3. PURPOSE

In accordance with Condition 4-1 of MS782, a CAR must be submitted annually to the CEO of the Department of Water and Environmental Regulation (DWER). In December 2010 the (then) OEPA approved the reporting period of the CAR to reflect the calendar year with submission due by 28 February of the following year. This CAR covers the period 1 January to 31 December 2021.

Condition 4-3 of MS782 outlines the requirements for the CAR as listed in Table 1.

Table 1: Requirements for the CAR

	REQUIRED INFORMATION	SECTION OF THIS REPORT
1.	Be endorsed by signature of the proponent's Chief Executive Officer (CEO) or a person, approved in writing by the CEO, delegated to sign on behalf of the proponent's Chief Executive Officer	Section 1
2.	State whether the proponent has complied with each condition and procedure contained in this statement	Appendix A: Ministerial audit table
3.	Provide verifiable evidence of compliance with each condition and procedure contained in this statement	Appendix A: Ministerial audit table
4.	State whether the proponent has complied with each key action contained in any environmental management plan or program required by this statement	Appendix B: Management Plan audit tables
5.	Provide verifiable evidence of conformance with each key action contained in any environmental management plan or program required by this statement	Appendix B: Management Plan audit tables
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	Section 5
7.	Review the effectiveness of all corrective and preventative actions taken; and	Section 5
8.	Describe the state of implementation of the proposal.	Section 4





4. PROJECT IMPLEMENTATION STATUS

4.1. Project Milestones

A breakdown of the project implementation is provided in Table 2. Please note that milestones recorded between 2009 and 2019 can be found in the "Fimiston Gold Mine Operations (Ministerial Statement 782) – 5 Year Performance Review" reports which are published on the Super Pit website (www.superpit.com.au).

Table 2: Project Milestones

DATE	MILESTONE
2020 January	FAQMP (November 2019) approved by the DWER.
2020 January	2018 MCP approved by the DWER (EPA Services).
2020 April	Resubmission of Change to Proposal to MS782: Fimiston II TSF Expansion Project
2020 August	Change to Proposal to MS782: Fimiston South Project – submitted to the DWER.
2020 September	Attachment 7 to MS782 - change to proposal approved under section 45C of the EP Act (Fimiston II TSF Expansion Project and Fimiston South Project).
2020 December	Inspection of the Fimiston Gold Mine Operations conducted by DWER to assess compliance against MS782 implementation conditions.
2021 February	2020 Fimiston Compliance Assessment Report submitted to DWER
2021 February	FAQMP: Commissioning and licensing of the Fimiston Processing Plant Emissions Reduction Project (ERP) was approved by DWER, authorising the operation of the Kiln Off Gas Cleaning System and the storage of mercury onsite.
2021 March	2021 MCP submitted to DMIRS and DWER.
2021 March	KCGM notified that the Compliance Audit, conducted by DWER in December 2020, determined that KCGM is compliant with the implementation conditions of MS782.
2021 July	Fimiston South (Stage 1) - Mining Proposal approval received following EPA approval of the Change to Proposal to MS782 (September 2020).



4.2. Key Statement Amendments

A summary of key amendments made to MS782 is provided in Table 3.

Table 3: Key Amendments to Ministerial Statement 782

DATE	CHANGE	APPROVAL PROCESS
2009 January	Fimiston Gold Mine Operations Extension (Stage 3) and Mine Closure Planning PER approved.	Proposal assessment and publication of Ministerial Statement 782.
2010 September	Change to Proposal: Kaltails Clearing - Clearing for Kaltails TSF, contingency clearing for infrastructure post Kaltails recommissioning, and inclusion of hydrogen peroxide dosing facility.	Section 45C of the EP Act (Attachment 1).
2012 August	Notice of Change to Implementation Conditions – Fimiston Air Quality Management Plan: Approval given for the submission of the FAQMP to increase from a 12-month interval (Annual) to a 36-month interval (3 Yearly), unless otherwise required.	Approved by letter from the OEPA.
2013 July	Notice of Changes to Implementation Conditions: Mine Closure Plan Submission: The proponent shall review the Mine Closure Plan required by condition 11-1 every three years (increase from every two to every three years).	Section 46C of the EP Act (Attachment 2).
2015 June	Change to Proposal: Fimiston II Embankment Raise (40-65m): Remove different options for management of tailings in the description of the proposal;	Section 45C of the EP Act (Attachment 3).
	Update description of the proposal including the 'Proposal footprint' and 'Mine Development Envelope'; and	
	• Removal of elements that are not key proposal characteristics relevant to the environment or managed under other legislation.	
2016 May	Modification of the Disturbance Footprint: The Disturbance Footprint was changed to accommodate changes to Waste Rock Dump locations to accommodate the Eastern Waste Rock Dump.	Approved by letter from the OEPA.
2017 June	Change to Proposal: Minor Modification to the Fimiston Open Pit. The Authorised Extent of the Fimiston Open Pit (and consequently the Environmental Noise Bund) was changed to accommodate remediation of the western wall following localised movement of oxide material (i.e., a slip).	Section 45C of the EP Act (Attachment 4).
	There was no change to the authorised extent of clearing within the Development Envelope.	
2018 June	Change to Proposal: Morrison and Brownhill Mining Projects and TSF Infrastructure Projects. The Authorised Extent of clearing within the Development Envelope increased by 200 hectares (ha).	Section 45C of the EP Act (Attachment 5).
2018 October	Change to Proposal: Kaltails Managed Aquifer Recharge (MAR) Project. The Development Envelope increased by 526 ha. The authorised extent of clearing within the Development Envelope increased by 73 ha.	Section 45C of the EP Act (Attachment 6).
2020 September	Change to Proposal: Fimiston II TSF Extension Project and Fimiston South Project. The Development Envelope increased by 272 ha. The authorised extent of clearing within the Development Envelope increased by 409 ha.	Section 45C of the EP Act (Attachment 7).



4.3. Five Year Performance Report

Condition 5-1 of MS782 requires that the proponent shall submit a Performance Review Report every five years after the start of mining activities forming part of the expanded and revised proposal to the Environmental Protection Authority which addresses:

- the major 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;
- the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;
- significant improvements gained in environmental management, including the use of external peer reviews;
- stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
- the proposed environmental objectives over the next five years, including improvements in technology and management processes.

The first Five Year Performance Review Report prepared for MS782 covered the period 1 January 2010 to 31 December 2014 and was submitted to the (then) OEPA on the 30 April 2015.

The second Five Year Performance Review Report prepared for MS782 covered the period 1 January 2015 to 31 December 2019 and was submitted to the DWER on the 31 March 2020.

In accordance with Condition 5-2 of MS782, copies of the Performance Review reports are made publicly available on the KCGM website (www.superpit.com.au).

The next 5 Performance Review Report will cover the calendar year periods from 2020 to 2024 and is due for submission to the DWER by the 31 March 2025.

4.4. Operational Areas

The Authorised Extent of the Project was first defined within Schedule 1 of MS782 with regards to the approximate area of the Fimiston Open Pit being 346 ha.

In August 2014, KCGM submitted a Change to Proposal to the (then) OEPA requesting approval under section 45C of the EP Act to increase the height of the Fimiston II TSF (one of the elements listed in Table 1 – Key Proposal Characteristics of MS782). During the assessment process, the OEPA implemented a Development Envelope of 5,116 ha to define the boundary of the Fimiston Gold Mine Operations; within which clearing of up to 3,243 ha was authorised. The authorised extent of clearing for the Fimiston Open Pit (346 ha), Environmental Noise Bund (137 ha), and other key infrastructure (2,760 ha), referred to as the Disturbance Footprint, was indicated in Figure 1 of Attachment 3 to MS782 and defined by coordinates in Table 3 of Attachment 3 to MS782.

On 8 April 2016, KCGM sought confirmation from the OEPA to modify the Disturbance Footprint to accommodate changes to Waste Rock Dump locations. The OEPA advised in a letter dated 11 May 2016 that the modification is in accordance with Table 2 of Attachment 3 to MS782, provided that that the modifications do not result in clearing of more than 2,760 ha [authorised extent of the Disturbance Footprint] within the Development Envelope.





On 3 May 2017 KCGM applied to the OEPA to modify the Disturbance Footprint of MS782 under section 45C of the EP Act. This was to allow for a minor modification to the Fimiston Open Pit area to undertake remediation works on a section of the western wall where localised movement of oxide material resulted in a wall slip in March 2017. In a letter dated 11 May 2017 the OEPA considered that the modification will not have a significant detrimental effect on the environment in addition to, or different from, the effect of the original proposal. Subsequently Attachment 4 to MS782 was issued 12 June 2017.

In October 2017, KCGM wrote to the DWER regarding the installation of a new power line (infrastructure corridor) on the western side of the Fimiston Open Pit. In a letter dated 06 November 2017, the OPEA noted that the infrastructure corridor relates to the installation of a new power line and access tracks within the approved Development Envelope, with no clearing of native vegetation and managed in accordance with Table 2 of Attachment 4¹.

In February 2018, KCGM applied to the DWER to modify the Disturbance Footprint of MS782 under section 45C of the EP Act. This was to allow for mining of the Morrison and Brownhill reserve areas of the Fimiston Open Pit and to install additional infrastructure, within the approved Development Envelope, associated with the Fimiston II and Kaltails TSFs. Implementing the proposed projects required a modification of the Open Pit Envelope and an additional 200 ha of clearing within the Development Envelope. The proposed change was approved and subsequently Attachment 5 to MS782 was issued authorising clearing of up to 3,491 ha within the Development Envelope of 5,116 ha.

In September 2018, the DMIRS referred a Mining Proposal, regarding implementation of the Kaltails Managed Aquifer Recharge scheme (Kaltails MAR Project), to the DWER. The DWER determined that the Kaltails MAR Project was inconsistent with the activities currently authorised under MS782 and requested that KCGM submit a Change to Proposal application under Section 45C of the EP Act to incorporate the Kaltails MAR Project into MS782. Subsequently Attachment 6 to MS782 was issued authorising clearing of up to 3,564 ha (+73 ha) within a Development Envelope of 5,642 ha (+526 ha).

In December 2019, KCGM applied to the DWER to modify the Disturbance Footprint of MS782 under section 45C of the EP Act. This was to allow for construction of a three cell TSF adjoining the current Fimiston II TSF, the project was called the Fimiston II TSF Extension. The proposed change included up to 649 ha of clearing and expansion of the development envelope by 822 ha (from 5,641 ha to 6,463 ha). KCGM received notification from the DWER in February 2020 that approval of the changes is unlikely to be granted under s45C of the EP Act unless the proposed change is significantly reduced in extent, and further studies provided to support the change.

Subsequently, KCGM resubmitted a Change to Proposal application to the DWER in April 2020. This was to allow for construction of a two cell TSF. The proposed change included up to 295 ha of clearing and expansion of the development envelope by 272 ha (from 5,641 ha to 5,914 ha).

In early-2020 KCGM was approached by the Premier, Hon. Mark McGowan, to assist with the fast-tracking of projects to provide jobs for Western Australians and to help rebuild the economy suffering from the effects of COVID-19. KCGM reviewed upcoming projects and identified a portion of its Fimiston South Project as an opportunity with minimal environmental impact, and the ability to provide up to 700 additional jobs if brought forward. In August 2020, KCGM applied to the DWER to modify the Disturbance Footprint of MS782 under section 45C of the EP Act to progress the pit cutback portion of the Fimiston South Project. The proposed change did not modify the Development Envelope or the overall authorised extent for clearing, rather

¹ The letter received from the OEPA referred to "Table 2 of Schedule 1". However, Attachment 4 replaced Schedule 1 and Attachment 3; KCGM believe that the OEPA intended to refer to "Table 2 of Attachment 4".





reallocation of existing approved disturbance areas (i.e., 21 ha reallocated from the Environmental Noise Bund and 114 ha reallocated from the Disturbance Footprint to increase the Open Pit area to 135 ha).

In September 2020, Attachment 7 to MS782 was issued authorising clearing of up to 3,973 ha (+409 ha) within a Development Envelope of 5,914 ha (+272 ha); combining the approval for the Fimiston II TSF Extension Project and the Fimiston South Project.

The currently approved authorised extent of the Fimiston Gold Mine Operations is shown in Figure 2.



Figure 2: Authorised Extent of the Fimiston Gold Mine Operations as per Attachment 7



5. COMPLIANCE

5.1. Non – Compliances

Appendix A of this report is the KCGM Ministerial Audit Table (based on the EPA format) which assesses compliance against MS188 and MS782.

There was one potential non-compliance identified against MS782. The potential non-compliance is summarised below:

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."

1. PM10 monitoring data was not made available on the KCGM website within 24 hours of the recording of that data on one occasion on the 23 November 2021. A summary report of the daily dust monitoring data is made available on the Superpit website daily via an automated process, with a manual process in place to check that the report has uploaded. Although this manual checking process identified that the 23 November 2021 report had not uploaded, it could not be automatically reloaded as on that day the Superpit website was undergoing a migration to an alternative digital platform. The migration was successful, and the report was uploaded on the 24 November 2021. As a result of the event KCGM has implemented a process to upload the report manually, should the automated process fail.

5.2. Non – Conformances

Appendix B of this report contains the KCGM Environmental Management Plan Audit Tables which assesses conformance against Environmental Management Plans relevant to MS188 and MS782.

There were 3 potential non-conformances identified against **Fimiston Air Quality Management Plan** and the **Noise and Vibration Monitoring and Management Plan** during the audit period, as summarised below.

1. Fimiston Air Quality Management Plan (Section 4.2.1)

"Complete quarterly calibration of dust monitoring equipment."

Quarterly calibrations of the dust monitoring equipment were completed during the audit period for Quarter 1 (18-20 January 2021), Quarter 2 (25-27 May 2021), and Quarter 3 (6-8 September 2021). However, the Quarter 4 calibrations, originally scheduled for December 2021, were delayed due to the unavailability of a specialist contractor and a delay in the arrival of replacement monitoring parts required to complete the calibration. The Quarter 4 calibrations were completed as soon as the specialist contractor and the replacement parts became available, and this was between 19-23 January 2022. As a result of this event KCGM has reviewed the scheduling of the dust monitor calibrations with future calibrations to be scheduled as close to the start of each quarter as practicable.



2. Fimiston Air Quality Management Plan (Section 6.1)

"Daily PM₁₀ dust monitoring results (24-hour averages) are made available on the KCGM website at www.superpit.com.au."

PM10 monitoring data was not made available on the KCGM website within 24 hours of the recording of that data on one occasion on the 23 November 2021. A summary report of the daily dust monitoring data is made available on the Superpit website daily via an automated process, with a manual process in place to check that the report has uploaded. Although this manual checking process identified that the 23 November 2021 report had not uploaded, it could not be automatically reloaded as on that day the Superpit website was undergoing a migration to an alternative digital platform. The migration was successful, and the report was uploaded on the 24 November 2021. As a result of the event KCGM has implemented a process to upload the report manually, should the automated process fail.

Note: this is the same event reported under "5.1 Non – Compliances".

3. Noise and Vibration Monitoring and Management Plan (Section 5.2.5)

"The continuous noise monitoring equipment is NATA calibrated every two years."

The annual calibration of the blast monitors was scheduled to occur in Quarter 2, 2021. However, WA State Government COVID-19 travel restrictions prevented Texcel staff, who are Queensland based, from safely travelling to WA, without having to quarantine. The annual calibrations will be conducted as soon as WA travel restrictions allow Texcel staff to travel to WA. *Please note that whilst the annual calibration of the blast monitors has been delayed, a performance check of the blast monitoring equipment is completed daily with a copy of the performance report sent to KCGM Drill and Blast personnel for quality assurance purposes.*



5.3. External Audits

No external audits were conducted during the reporting period.

Following the Compliance Audit conducted in December 2020 KCGM was advised via a letter from the DWER dated 10 March 2021 (Ref: DWERA-000212) that it was compliant with the implementation conditions of MS782.

5.4. Environmental Management Plans

Fimiston Air Quality Management Plan (FAQMP)

The FAQMP was initially developed by KCGM to integrate several management plans that covered various air quality aspects of the Fimiston Operations. The FAQMP was implemented in May 2009 in accordance with Condition 7-1 of MS782.

Initially the FAQMP required review on an annual basis, however this was amended to a three yearly revision cycle following approval of the 2012 FAQMP by the OEPA on 14 August 2013. The most recent revision of the FAQMP was submitted to the relevant government agencies on 24 June 2019. Following feedback from the DWER in October 2019, the FAQMP was resubmitted 13 November 2019 and was subsequently approved by the DWER on 16 January 2020.

The next revision of the FAQMP is due by 16 January 2023.

Noise and Vibration Monitoring and Management Plan (NVMMP)

The NVMMP was initially revised in accordance with Condition 9-6 of MS782 and submitted to the DER in August 2009. However due to an appeal against the *Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2009*, approval of the NVMMP was delayed whilst the appeal was determined. An Appeals Committee was appointed and their report was submitted for review by the Minister. Whilst the Minister dismissed the appeal in March 2010 two recommendations were made by the Appeals Committee and required inclusion in the NVMMP. KCGM submitted a revised NVMMP to the OEPA in October 2010 which was subsequently approved on 6 December 2010.

The NVMMP was updated following gazettal of *the Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016* in March 2016. The revised the NVMMP (June 2016) was submitted to the DER and the OEPA on 22 June 2016 and was approved by the DER on 19 September 2016 and by the OEPA on 1 November 2016.

KCGM included a revised NVMMP with the Change to Proposal to MS782 submitted to the DWER in February 2018. The revised NVMMP proposed relocating the Echo blast monitoring site to a point further south of the current site. The relocation was based on a recommendation by George Boucher Consulting following a blast assessment conducted in 2017 for KCGM's proposed Morrison mining project. KCGM formally submitted the revised NVMMP for approval by the CEO (of the DWER) in August 2018. The NVMMP (August 2018) was subsequently approved 27 September 2018.

No amendments were made to the NVMMP during the reporting period.

Aboriginal Cultural Heritage Management Plan (ACHMP)

In accordance with Condition 6 of MS782, KCGM developed the ACHMP in consultation with the (then) Department of Indigenous Affairs (DIA). The plan includes the protocols and procedures for the appropriate management of any aboriginal sites or skeletal remains identified during proposed works. The ACHMP was approved by the DIA on 8 February 2010.

No amendments were made to the ACHMP during the reporting period.



Mine Closure Plan (MCP)

KCGM developed a MCP in accordance with Condition 11 of MS 782 with the first submission made on 14 April 2010.

The MCP is reviewed and updated in accordance with the Guidelines for Preparing Mine Closure Plans (Department of Mines and Petroleum and Environmental Protection Authority, 2011) and feedback received from Regulators on a 3 yearly basis.

KCGM's second update of the MCP was submitted to the relevant government authorities on 30 April 2012. Feedback was received from the DMP via correspondence dated 16 May 2012 requesting further information which KCGM responded to on 12 June 2012. Further feedback was received from the DMP during a meeting held on 21 September 2012, requesting additional geotechnical information, specifically for the Mt Charlotte and Mt Percy areas. This information was provided to the DMP in a revised version of the Closure Plan in December 2012. KCGM received correspondence from the OEPA on 4 November 2013 approving the 2012 MCP.

On the 22 May 2013 KCGM requested that an administrative change be made to the implementation of Condition 11.3 of MS782; namely that the submission cycles of the KCGM MCP be altered from a 2 yearly cycle to a 3 yearly cycle to avoid conflicting legal requirements. The OEPA responded to the request in July 2013 approving the 3 yearly submission cycles.

The 2015 MCP was submitted in March 2015 and approved by the OEPA on 19 November 2015, and by DMIRS on 27 November 2015.

The MCP was reviewed and submitted to the DWER (EPA Services) in March 2018. The 2018 MCP was approved by DMIRS on 06 August 2018. Following feedback from the EPA (DWER) in May 2019, a revised version of the MCP, which expanded on completion criteria development, was resubmitted to DWER (EPA Services) on 20 December 2019 and was accepted by the DWER (EPA Services) on 31 January 2020.

The 2021 MCP was submitted to DMIRS and DWER (EPA Services) in March 2021 in accordance with the 3-yearly review and submit cycle. As of 31 December 2021, the 2021 MCP was under assessment by DMIRS and DWER (EPA Services).



5.5. Complaints Register

KCGM has a well-established community engagement process which utilises a range of mechanisms to engage with stakeholders and capture community input. Key consultation and engagement tools include the KCGM Community Reference Group, Public Interaction Line, website, social media, advertising, community research and publications. The range of communication channels and information provided ensure that KCGM has a strong understanding of the impacts the community experiences from our operations.

KCGM has a 24-hour Public Interaction Line (PIL) (established in 1993) which the community can utilise to discuss a wide range of issues including emergencies, complaints, enquiries and feedback. Both the public and employees (including contractors) are encouraged to use the PIL on any matter relating to the operations. It is a particularly important avenue for capturing those issues which require follow up and action.

The PIL is backed up by an electronic database which enables the categorisation of queries and the automation of subsequent action allocation and follow-up mechanisms. The database is also used to record stakeholder communications and engagement and is a very effective tool for analysing and tracking issues and impacts which are of concern to the community.

When required PIL enquiries can be referred to relevant KCGM staff for appropriate action. Once an internal review has been completed, the caller is informed of actions taken or outcomes of their enquiry or complaint. KCGM responds to all people who contact the PIL (and provide contact details) either by phone, in writing or in some cases, in person.

During the reporting period there were a total of 10 complaints received relating to environmental aspects of the Fimiston Gold Mine Operations. Of these complaints, 8 related to dust, 2 related to noise and 0 related to blasting. Figure 3 shows the number of complaints received for each environmental aspect during the last four reporting periods.

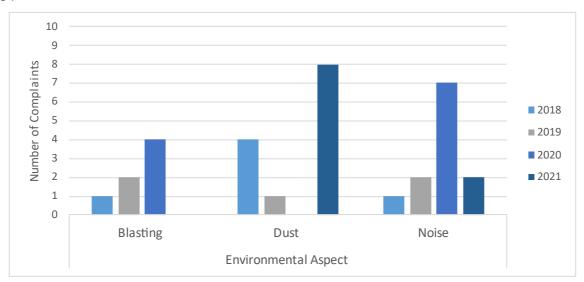


Figure 3: Complaints Relating to Environmental Aspects of the Fimiston Operations

A summary of each complaint received during the reporting period regarding environmental aspects of the Fimiston Operations is provided in Table 4.





Table 4: Fimiston Operations Complaint Summary 2021

DATE	COMPLAINT CATEGORY	SUMMARY OF COMPLAINT AND KCGM COMMENT
8/01/2021	Noise	Local resident contacted the PIL regarding noise from the Fimiston operations. An External Relations Advisor contacted the resident and left a message requesting more details regarding the resident's concern. No further correspondence has been received.
11/01/2021	Dust	Local resident contacted the PIL regarding dust coming from the Fimiston Waste Rock Dumps. It was identified that loader tipping activities were generating dust. Tipping activities were immediately stopped, and no further correspondence has been received.
21/01/2021	Dust	Local resident contacted the PIL regarding generated dust from blasting. An External Relations Advisor contacted the resident and explained the blast occurred at surface level which should subside when the pit depth increases. Further, the blast was predominantly oxide ore which generates more dust than normal had rock blasting activities. No further correspondence has been received.
21/01/2021	Dust	Local resident contacted the PIL regarding blasting. An External Relations Advisor contacted the resident who raised their concerns about excessive blasting. No further correspondence has been received.
21/01/2021	Dust	Local resident contacted the PIL regarding dust generated from blasting. An External Relations Advisor contacted the resident to explain how potential impacts are managed via wind condition monitoring prior to blasting, as well as how we use several air quality monitoring stations throughout Kalgoorlie-Boulder and that our records are publicly available. No further correspondence has been received.
21/01/2021	Dust	Local resident contacted the PIL regarding dust generated from blasting. An External Relations Advisor discussed wind condition monitoring processes prior to blasting, as well as how we use several air quality monitoring stations throughout Kalgoorlie-Boulder and that our records are publicly available. No further correspondence has been received.
29/01/2021	Dust	Local resident contacted PIL regarding generated dust from mining operations. The resident raised concerns about dust blowing into his property. Extra watercarts were immediately sent to operational areas and the resident didn't require further correspondence.
4/02/2021	Noise	Local resident contacted PIL regarding noise from blasting and frequency of blasts. The resident raised concerns about a recent loud blast and blast vibration potentially causing cracks in their property. An External Relations Advisor contacted the resident to discuss the KCGM property damage process. The advisor also explained the latest blast was larger than normal due to other blasts being cancelled earlier in the week and that the blasts occurred in a new operational area that is close to surface. No further correspondence has been received.
5/08/2021	Dust	Local resident contacted the PIL regarding generated dust coming from blasting. No further correspondence has been received.
5/08/2021	Dust	Local resident contacted the PIL regarding dust coming from blasting. No further correspondence has been received.



6. ENVIRONMENTAL MONITORING

6.1. Dust Monitoring

KCGM conducts ambient PM₁₀ dust monitoring in accordance with the Dust Monitoring and Management Programme (DMMP), as specified within the FAQMP (refer to Section 5.4); these requirements are summarised in Table 5.

MONITORING PROGRAMME	SITE ID	SAMPLING FREQUENCY	PARAMETER	DAILY PERFORMANCE CRITERIA
Ambient PM10	HEW, CLY, HOP, BSY, MEX, MTC, HGC	5-minute averages calculated from continuous monitoring	PM ₁₀	24-hour average less than 50 μg/m³

Table 5: Dust Monitoring Criteria

The objective of the DMMP is to ensure 24-hour average PM_{10} concentrations as a result of the Fimiston Operations are less than 50 μ g/m³ at the monitoring locations. This daily performance target was based on the *National Environmental Protection (Ambient Air Quality) Measure Variation 2003*.

The FAQMP also includes an annual performance target of not more than five events per annum above the daily performance target at any dust monitoring site where KCGM is considered to be a significant contributor.

During 2021, there were 23 days where 24-hour average PM_{10} concentrations of greater than 50 $\mu g/m^3$ were recorded at one or more of the six active monitoring stations.

KCGM was considered to be a significant contributor on two of these days. In accordance with the FAQMP (November 2019), these events were reported to the DWER and DoH within seven days of the event date. A summary of these events is provided in Table 6.

No sites recorded more than five events above the daily performance target demonstrating compliance with the FAQMP objective and target, as shown in Figure 4.

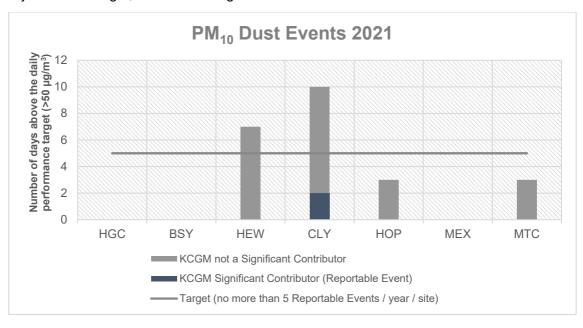


Figure 4: Summary of Ambient PM10 Dust Monitoring 2021



Table 6: Summary of PM10 Events Above the Daily Performance Target

EVENT DATE	NOTIFICATION DATE	SITE	24-HR AVERAGE PM10 (μG/M3)	NOTIFICATION PROVIDED TO
31 March 2021	7 April 2021	CLY	53.3	DWER
				DoH
15 December 2021	20 December 2021	CLY	101.0	DWER
				DoH





6.2. Noise Monitoring

KCGM conducts environmental noise monitoring in accordance with Conditions 8(1) and 8(2) of the *Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016.* Monitoring programmes for both continuous and compliance noise monitoring are specified within the NVMMP (refer to Section 5.4); these requirements are summarised in Table 7.

MONITORING SAMPLING SITE ID **PARAMETER** PERFORMANCE CRITERIA **PROGRAMME FREQUENCY** One-hour averages LA 10 calculated from **BPS** Nil L_A 50 continuous L_{A max} monitoring Continuous 5-minute averages calculated from **MEP** Nil Leq continuous monitoring Night Time Period Location L_{A10} LA max BSW, Minimum 15-minute **BSW** 45 + WIF 55 + WIF BPS, 45 + WIF sample measured **BPS** 52 + WIF L_{A 10} Compliance KTS, each quarter during KTS 45 + WIF 52 + WIF L_{A max} OSB, OUT 49 + WIF 60 + WIF night-time period YSB 49 + WIF 60 + WIF YST WIF: Weather Influencing Factor

Table 7: Noise Monitoring Criteria

Continuous Environmental Noise Monitoring

Since 1993, continuous noise monitoring, as far as practical, was conducted at the Kalgoorlie Technical School (KTS) and Boulder Primary School (BPS). In accordance with the *Environmental Protection (Fimiston Gold Mine Noise Emissions Approval 2016*) KTS was replaced by Metals Exploration Premises (MEP) as a continuous noise monitoring site. Continuous noise data was recorded at KTS until 30 June 2016, and the site decommissioned thereafter.

The MEP monitoring site was installed in October 2011 to provide publicly available real-time noise monitoring data. The data is updated every 15 minutes and is available from the KCGM website (www.superpit.com.au).

During the reporting period continuous noise monitoring was conducted in accordance with the NVMMP.

Compliance Environmental Noise Monitoring

Compliance environmental noise monitoring was implemented in August 2009 and is undertaken each quarter at five reference locations, as stipulated in the *Environmental Protection (Fimiston Gold Mine Noise Emissions)* Approval 2016. Monitoring is completed by specialist noise consultants using a manned sound level meter to determine compliance against the noise level standards set in the *Environmental Protection (Fimiston Gold Mine Noise Emissions)* Approval 2016.



During the reporting period compliance monitoring was undertaken during the night time period on the following dates:

- Quarter 1 (22 February 2021)
- Quarter 2 (3 May 2021)
- Quarter 3 (27 July 2021)
- Quarter 4 (29 November 2021)

During the reporting period the measured noise levels at all reference locations complied with the approved noise levels for the night time period. Results of continuous noise monitoring and compliance noise monitoring are included in the Quarterly Noise and Blast Monitoring Reports submitted to the DWER as required under the NVMMP on the following dates:

- Quarter 1 (11 May 2021)
- Quarter 2 (29 July 2021)
- Quarter 3 (10 November 2021)
- Quarter 4 (12 February 2022)

Noise Regulation 17 Variation

In 2009, KCGM was granted a noise variation under the *Environmental Protection (Noise) Regulations* 1997 Regulation 17(7). This variation was gazetted on 14 July 2009 as the *Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval* 2009. The 2009 Approval was valid for 5 years until 13 July 2014 unless KCGM applied for a further approval within the first four years. Accordingly, on 21 June 2013 KCGM re-applied for a Noise Regulation 17 Variation (NR17V) which the Minister referred to the (then) DER on the 22 July 2013 for assessment.

The DER's assessment was completed over a two-year period and included KCGM providing additional supporting information (November 2013), answering several queries relating to KCGM's haul truck fleet (November 2014), and the updating of "Schedule 1 – Fimiston Gold Mine Location Plan" based on DER feedback (March 2015).

In May 2015, the DER provided a draft assessment report "Noise Regulation 17 Application for Fimiston Gold Mine" for review by KCGM. After liaising with the DER on suggested amendments to the report, a final assessment report was prepared 01 July 2015.

A copy of the NR17V approval note was reviewed by KCGM and the DER were advised on the 10 December 2015. The NR17V was approved by the Minister and the *Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016* was published in the Government Gazette on 22 March 2016. No appeals were lodged against the approval.

The duration of the 2016 Approval is until 22 March 2021 or if KCGM applies for further approval within the first four years, it will continue to operate until another approval is granted or refused.

In December 2019, KCGM applied to the Minister for Environment seeking further approval under Regulation 17 to allow the emission of noise from the existing Fimiston Gold Mine Operations to vary from the standards specified in the Regulations. In accordance with regulation 17(3) of the Noise Regulations. In a letter dated 21 January 2020, KCGM were advised that the application had been referred to the Chief Executive Officer of the DWER for assessment.



As no further correspondence had been received since January 2020, KCGM contacted the DWER's Noise Service in June 2020 to determine the status of the application. KCGM's query was referred to the DWER's Regulatory Service who acknowledged that they are following up on the application. A letter from the Director General of the DWER, dated 17 August 2020, advised that the DWER is working through reprioritising resources needed to complete the assessment works, and that "Once this process is completed over the next few weeks, I will ensure that the relevant officer makes contact in regard to your application". KCGM is yet to be contacted by the relevant officer.



6.3. Blast Monitoring

Permanent blast monitoring sites for the Fimiston Open Pit were established by KCGM in 1993 as part of the NVMMP. Ground vibration and airblast are monitored using Advanced Texcel remove blast monitor (ETM) equipment. There are six monitors permanently installed at sites between the Fimiston Open Pit and the City of Kalgoorlie-Boulder.

Recording of a blast is triggered by ground vibration exceeding the set trigger level of 0.5 mm/s. The trigger level is an internal level set well below the applicable standards and regulations to track blast vibration patterns and trends.

KCGM's blast monitoring programme is specified within the NVMMP (refer to Section 5.2.5) and in accordance with Condition 9 of MS782; the requirements are summarised in Table 8 and Table 9.

SITE ID

SAMPLING
FREQUENCY

APPLICABLE STANDARDS
OR LIMITS

Alpha, Bravo
Charlie, Delta,
Echo, Foxtrot

Shall not exceed 5 mm/s for 90% of blasts per year
Shall not to exceed 10 mm/s for any blast
No more than one in ten consecutive blasts shall exceed 5 mm/s

Table 8: Blast Monitoring Criteria - Vibration

Table 9: Blast Monitoring Criteria - Airblast

SITE ID	SAMPLING FREQUENCY	TIME OF DAY	APPLICABLE STANDARDS OR LIMITS
Alpha	Each blast	0700 to 1800 hours Any Day	No blast greater than 120 dB L _{Z peak} 9 in any 10 consecutive blasts less than 115 dB L _{Z peak}
Bravo, Charlie,	Each blast	0700 to 1800 hours Monday to Saturday (excluding public holidays)	No blast greater than 125 dB L _{Z peak} 9 in any 10 consecutive blasts less than 120 dB L _{Z peak}
Delta	Each plast	0700 to 1800 hours Sunday and public holidays	No blast greater than 120 dB L _{Z peak} 9 in any 10 consecutive blasts less than 115 dB L _{Z peak}
Echo, Foxtrot	Each blast	0700 to 1800 hours Any Day	No blast greater than 125 dB L _{Z peak} 9 in any 10 consecutive blasts less than 120 dB L _{Z peak}
Alpha, Bravo, Charlie, Delta, Echo, Foxtrot	Each blast	1800 to 0700 hours	No blast greater than 90 dB L _{Z peak}

For the reporting period KCGM can confirm that:

- All blasts were detonated on the premises between 0700 hours and 1800 hours;
- No blasts were detonated outside the requirements under Condition 7-4 and 9-1 of MS782;
- All reasonable effort was taken to avoid blasting on Sundays.

There were no non-compliance events during the reporting period.

For further information please refer to the Quarterly Noise and Blast Monitoring Reports submitted to the DWER.



Amendments to the Environmental Protection (Noise) Regulations 1997 (Airblast Levels)

Amendments to the *Environmental Protection (Noise) Regulations 1997 were* gazetted on 5 December 2013. One of the key amendments which impacted KCGM was a reduction in airblast levels under Regulation 11, which became effective on 6 March 2014.

KCGM submitted an application on 6 March 2014 for approval to allow the emission of airblast as a result of blasting in the Fimiston Open Pit to vary from the standards specified in Regulation 11. The application is for the existing KCGM Fimiston Operations and that airblast levels at sensitive site blast monitoring locations remain at those previously set for this operation (i.e., no blast greater than 125 dB and levels for 9 in any 10 consecutive blasts not greater than 120 dB).

In April 2014, the Minister referred the application to the DER for assessment. In December 2015 the *Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2015* was finalised by the DER following feedback from KCGM.

In March 2016 KCGM's *Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016* was gazetted (published in the Government Gazette) allowing airblast levels to vary from the Environmental Protection (Noise) Regulations 1997 (WA) at monitoring sites Bravo, Charlie, and Delta.

No changes to the blast regulations have occurred in the reporting period.



7. STAKEHOLDER CONSULTATION

Northern Star recognises the value of building positive, proactive relationships with key stakeholders and the communities in which we operate. Across our KCGM operations, we seek to build sustainable partnerships with governments, business partners, non-government organisations, host communities and other stakeholders to support sustainable development outcomes.

KCGM operations' proximity to the City of Kalgoorlie-Boulder has necessitated a sustained effort in stakeholder engagement. We strive to engage early, openly, honestly, and regularly with stakeholders and communities impacted by our operations. Through ongoing community consultation through our Local Voices program, social impact assessments, and stakeholder engagement, we routinely consider and incorporate stakeholder feedback in our decision-making with respect to key planning, operational and closure aspects.

A summary of Northern Star's consultation with relevant government agencies and non-government agencies at KCGM operations is outlined in the below tables. Providing the community with easy ways to communicate with Northern Star and provide real-time feedback about our operations is critical to retaining a strong social licence to operate. This is evident through Northern Star's 'Local Voices' program, a community engagement initiative.

'Local Voices' provides community members in Kalgoorlie-Boulder and the wider Goldfields' region with the opportunity to provide anonymous feedback directly to our Company. Delivered through a series of quarterly online 'pulse' surveys, Local Voices helps us to better understand what issues matter most to the Goldfields communities, allowing Northern Star to develop and implement strategies to actively address these.

The results of each quarterly survey are published online, building trust, and promoting transparency. The findings of these surveys are publicly disclosed and can be accessed via the following link: voconiqlocalvoices.com/results-kcgm.

A detailed 'anchor' survey (or baseline) was conducted in 2019 to understand the key drivers of trust and acceptance between the KCGM operations and Kalgoorlie-Boulder residents. These include feeling heard and respected by the Company, as well as responsiveness to community concerns, management of environmental impacts and social investment survey questions.

Key relevant government agency consultation is listed below in Table 10 and non-government agency consultation is listed in Table 11.

GOVERNMENT AGENCIES	CONSULTATION
	Land Access and property issues
City of Kalgoorlie-Boulder (CKB)	Strategic Town Planning
City of Raigooffie-Boulder (CRB)	Town Planning Scheme
	Mine Closure Plan
Clean Energy Regulator (CER)	National Greenhouse and Energy Reporting (NGER)
Clean Energy Negulator (CEN)	Safeguard Mechanism
	Ministerial Statements
Department of Water and	Annual Compliance Assessment Report
Environmental Regulation (DWER)	Prescribed Premises Licences
	Works Approvals

Table 10: Government Agency Stakeholder Consultation



GOVERNMENT AGENCIES	CONSULTATION
	Annual Environment Report
	Annual Audit Compliance Reporting
	Annual Inspection as requested
	Fimiston Air Quality Management Plan
	PM10 dust events above the daily performance target
	Air Quality Data
	Noise Regulation 17 Variation
	Noise and Vibration Monitoring and Management Plan
	Noise and Blast Quarterly Monitoring Reports
	National Pollutant Inventory (NPI)
	Groundwater Licensing
	Mine Closure Plan
	Fimiston Air Quality Management Plan
Department of Health (DoH)	PM10 dust events above the daily performance target
	Permitting for haul truck transport on main roads
Main Roads Western Australia	Voids management
(MRWA)	Road Reserve information
	Traffic Management Plans (Blasting/Flyrock Management)
Goldfields Esperance Development Commission	Local and regional development
Regional Development Australia Goldfields Esperance	Local and regional development
	Annual Environment Reports
	Mining Rehabilitation Fund Reports
Department of Mines, Industry	Closure and rehabilitation planning (Mine Closure Plan)
Regulation and Safety (DMIRS)	Environmental and Exploration Approvals (Mining Proposals and Programme of Works)
	Standing invitation to the CRG monthly meetings
Department of Biodiversity,	Environmental and Exploration Approvals
Conservation and Attractions (DBCA)	Conservation Management Plans
	Mine Closure Plan
Department of Planning, Lands and	Heritage matters (namely the Boulder Railway Station, Subway, Loopline Railway, and Cornwall Hotel)
Heritage (DPLH)	Property leasing
	Native Title and heritage matters
National Native Title Tribunal	Native Title matters



GOVERNMENT AGENCIES	CONSULTATION
Water Corporation	Water Efficiency Management Plan
vvater Corporation	Goldfields Water Supply Scheme

Table 11: Non-government Agency Stakeholder Consultation

NON-GOVERNMENT AGENCIES	CONSULTATION					
	Mining Industry representative body					
Chamber of Minerals and Energy (CME)	Northern Star representatives attend the Goldfields Community Relations, Environment, and Procurement Forums					
KCGM Operations Community Reference Group (CRG)	Monthly CRG meetings					
	Local and regional development					
Kalgoorlie-Boulder Chamber of Commerce and Industry (KBCCI)	Monthly representation at the KBCCI City and Regional stakeholder meetings					
	Representative at committee meetings					
Kalgoorlie Boulder Urban Landcare Group (KBULG)	Urban land rehabilitation					
Group (NBGEG)	Annual tree planting day					
Goldfields Aboriginal Business Chamber	Local and regional development					
Central Regional TAFE	Regional workforce training and development					
Curtin Kalgoorlie – West Australian School of Mines	Regional workforce training and development					
E AK I WALLE BY THE REAL PROPERTY OF THE PROPE	Representative at school board meetings					
East Kalgoorlie Primary School	Regular consultation and engagement with school leaders					
Marlinyu Ghoorlie Native Title Claimant Group	Cultural heritage management					
Maduwongga Native Title Claimant Group	Cultural heritage management					





APPENDIX A: MINISTERIAL CONDITIONS AUDIT TABLE





KCGM Audit Table

Ministerial Statement No. 188 and 782

Period: 1 January to 31 December 2021

Note

- Phases that apply in this table = Pre-Construction, Construction, Operation, Decommissioning, Overall (several phases)
- 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.
- Abbreviations: Annual Environmental Report (AER); Compliance Assessment Report (CAR); Chief Executive Officer(CEO); City of Kalgoorlie-Boulder (CKB); Community Reference Group (CRG); Department of Environment Regulation (DER); Department of Mines, Industry Regulation and Safety (DMIRS); Department of Mines and Petroleum (DMP); Department of Water and Environmental Regulation (DWER); Environmental Protection Authority (EPA); Golden Mile Mining Development Planning Committee (GMMDPC); Goldfields Dust Abatement Committee (GDAC); Department of Health (DoH); Heritage Council Western Australia (HCWA); Office of the Environmental Protection Authority (OEPA); Water Authority of Western Australia (WAWA); Water and Rivers Commission (WRC).
- Compliance Status: C = Compliant, CLD = Completed, NC = Non-compliant, PNC = Potential Non-Compliance, NR = Not required at this stage.

AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS		
Ministerial Statem	Ministerial Statement 188										
188:M1	Proponent Commitments	In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the Consultative Environmental Review Mine and Waste Dumps - Fimiston.	Fulfil the environmental commitments for this project, Fimiston Project Stage II, Mine and Waste Dumps (248)	Annual Audit Compliance Report for MS188 and MS782 submitted to the DWER annually by the 28 Feb.	Minister for Environment		Overall	Ongoing	С		
188:M2.1	Detailed Implementation	Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the EPA with the proposal.	Project implemented in accordance with these conditions.	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M1.1.	Minister for Environment		Overall	Ongoing	NR		
188:M2.2	Detailed Implementation	Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the EPA, is not substantial, those changes may be effected.	Seek approval to change the implementation of the proposal.	Section 45C approved in 2000 for Croesus Rehabilitation Project. Section 45C approved in 2004 for Southern Landform Extension Project. Section 45C approved in 2005 for Southern Central Waste Dump. Section 45C approved in 2006 for the realignment of the Noise Bund and the Loopline Railway Access.	Minister for Environment		Overall	Ongoing	NR		



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
188:M3.1	Annual Rehabilitation Plan	The proponent shall, within 12 months of the date of this statement (24 October 1991), prepare and subsequently implement brief annual rehabilitation plans for the Fimiston operations to the satisfaction of the DMP on advice from the GMMDPC.	Prepare Annual Rehabilitation Plans and have them approved.	Rehabilitation activities are outlined in the KCGM Mine Closure Plan. The 2018 Mine Closure Plan was approved by the DMIRS 06 August 2018. The 2018 Mine Closure Plan was resubmitted to the DWER (EPA Services) in December 2019 and subsequently approved 31 January 2020. A copy of the MCP is made publicly available on the KCGM website (www.superpit.com.au). The 2021 Mine Closure Plan was submitted to DMIRS and DWER (EPA Services) in March 2021. It is currently under assessment by those regulators. Rehabilitation information is provided in the KCGM AER which is to be submitted to the regulators on an annual basis by the 31 March.	DMIRS	GMMDPC (no longer exists)	Operation	Annually	С
188:M4.1	Noise	Until 31st December 1991, the proponent shall operate the project in such a manner as to achieve reasonable noise levels in the surrounding residential areas to the satisfaction of the Minister of the Environment from January 1992, the proponent shall meet noise level standards to be set by the Minister of the Environment in consultation with the Minister for Mines and the CKB. Should these standards not be available by that date, then the proponent shall meet interim noise level standards set by the EPA.	Manage noise emissions	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M8.	Minister for Environment	CKB, Minister for Mines and Petroleum	Operation	Up until 31 December 1991	NR
188:M4.2	Noise		Minister for the Environment shall set noise level standards when standards are available	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M8. Noise Level Standards were issued in 1992. Superseded by Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2009, and Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016.	Minister for Environment	Minister of Environment	Operation	From January 1992 until Noise Regulation 17 Variation was approved 14 July 2009.	NR



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
188:M5.1	Noise, Vibration and Dust	In order to ensure that there are no unacceptable detrimental effects from noise, vibration and dust from this project on the amenity of nearby residents, the proponent shall, within 6 months of the date of this statement (24 October 1991), prepare and subsequently implement a noise and vibration monitoring and management programme to the satisfaction of the EPA and a dust monitoring and management programme to the satisfaction of the EPA on advice from the GDAC.	Prepare a Noise and Vibration Monitoring Programme and have it approved	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M9.6.	EPA	GDAC (no longer exist)	Operation	Within 6 months from 24 October 1991	NR
188:M5.2	Noise, Vibration and Dust		Control noise and vibration generation (i.e., implement programme)	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M9.7.	EPA		Operation	Ongoing	NR
188:M5.3	Noise, Vibration and Dust		Prepare a Dust Monitoring and Management Programme and have it approved	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M7.	EPA	GDAC (no longer exist)	Operation	Ongoing	NR
188:M5.4	Noise, Vibration and Dust		Control and monitor dust generation (i.e., implement programme)	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M7.	EPA		Operation	Ongoing	NR
188:M6.1	Waste Dumps	Prior to the dumping of waste on the proposed north-east or south-east waste dumps within 500 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 satisfaction of the Minister of the Environment on advice from the EPA.	Prepare a Waste Dumping Management Plan and have it approved	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M6.	Minister for Environment	EPA	Operation	Prior to dumping waste within 500m of residences.	NR
188:M6.2	Waste Dumps		Control the disposal of waste	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M6.	Minister for Environment		Operation	Ongoing	NR



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
188:M7.1	Borefields and Pipeline	The proponent shall ensure that there are no unacceptable detrimental effects upon the environment resulting from leakage of hypersaline borewater along the Gidji or Lakewood borefields systems. Accordingly, within six months of the date of this statement (24 October 1991), the proponent shall prepare and implement a review of the operation of the borefields and pipelines to the satisfaction of the EPA on advice from the WAWA. This review shall include proposals for improved design, maintenance and monitoring for these facilities.	Prepare a Review of the Operation of the Gidji and Lakewood borefields and pipeline systems	Hypersaline Water Management Program accepted by EPA on 28 October 1992 (EPA Reference 104/87).	EPA	WAWA	Operation		CLD
188:M7.2	Borefields and Pipeline		Implement improvements.	Saline water use and management information is provided in the KCGM AER which is to be submitted to the regulators on an annual basis by the 31 March.	DWER		Operation	Ongoing	С
188:M8.1	Decommissioning	The proponent shall be responsible for decommissioning and removal of the plant and installations and rehabilitating the site and its environs, to the satisfaction of the EPA. At least six months prior to decommissioning, the proponent shall prepare and subsequently implement a decommissioning and rehabilitation plan, to the satisfaction of the Department of Mines on advice from the GMMDPC.	Prepare a Decommissioning and Rehabilitation Plan and have it approved	The latest MCP (titled "Mine Closure Plan (March 2018) was approved by DMIRS on 06 August 2018. The 2018 Mine Closure Plan was resubmitted to the DWER (EPA Services) in December 2019 and subsequently approved 31 January 2020. Refer to Section 5.4 of this report.	EPA		Pre- decommissioning	At least 6 months prior to decommissioning.	NR
188:M9	Transfer of Proponent	No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister of the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.	Seek approval for transfer of proponent	KCGM is still the proponent.	Minister for Environment		Overall	Ongoing	NR



AUDIT CODE	SUBJECT	REQUIREMENT	ном	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
188:M10	Time Limit of Approval	If the proponent has not substantially commenced the project within five years of the date of this statement (24 October 1991), then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister of the Environment shall determine any question as to whether the project has been substantially commenced. Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period, to the Minister of the Environment by way of a request for a change in the condition under Section 46 of the Environmental Protection Act. (On expiration of the five-year period, further consideration of the proposal can only occur following a new referral to the EPA).	Substantially commence project	The project was substantially commenced within five years of the date of this statement (24 October 1991).	Minister for Environment		Pre-operation	Before 24 October 1996.	CLD
188:P1.1	Environmental Management	KCGM will prepare and implement, by December 1992, an Environmental Management Programme (EMP) for all its operations in agreement with the EPA and the DMP.	Prepare an Environmental Management Programme and have it approved	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 188:M3, 188:M5 (now 782:M9 and 782:M7) 188:M6 (now 782:M6) and 188:M7.	EPA, DMP		Operation	Before December 1992.	NR
188:P1.2	Environmental Management		Manage potential environmental impacts	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 188:M3, 188:M5 (now 782:M9 and 782:M7) 188:M6 (now 782:M6) and 188:M7.	EPA, DMP		Operation	Before December 1992.	NR
188:P2	Annual Report	KCGM undertakes to prepare annual reports of the Mining and Rehabilitation sub-programme of the broader Environmental Management Programme, as agreed with the EPA and the DMP.	Prepare Mining and Rehabilitation Annual Reports.	OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 188:M3.	EPA, DMP		Operation	Annually	NR
188:P3	Geotechnical Investigations	KCGM undertakes to continue an ongoing programme of geotechnical investigations for slope stability purposes and report the findings of these investigations to the DMP.	Continue the Geotechnical Investigations Programme and report results	Geotechnical investigations for Slope Stability are provided in the KCGM AER which is submitted annually to DMIRS by the 31 March.	DMIRS		Operation	Annually	С
188:P4.1	Surface Drainage	KCGM will develop a surface drainage system incorporating sediment detention systems and a water quality monitoring programme.	Develop a Surface Drainage System and water quality monitoring programme.	Surface Drainage System Monitoring Programme accepted by DER on 9 May 2002.	EPA		Operation		CLD
188:P4.2	Surface Drainage	The results of the sampling will be included within the annual report and updated annually.	Report sampling results in the AER	Surface drainage water quality monitoring results are provided in the KCGM AER which is required to be submitted to the DWER on an annual basis by the 31 March.	DWER		Operation	Annually	С



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
188:P5	Dust	In association with the GDAC and Kaltails, KCGM will install and support a Dust Monitoring Programme within the Kalgoorlie-Boulder area. The data obtained will be made available to the EPA via the GDAC.	Install and support a Dust Monitoring Programme	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 188:M5 (now 782:M9 and 782:M7).	GDAC (no longer exist), Kaltails (no longer exist), EPA		Overall	Ongoing	NR
188:P6	Noise	KCGM will undertake a programme of noise monitoring to ensure continued compliance with occupational health and public nuisance noise requirements. If considered necessary an ongoing monitoring strategy will be devised.	Implement an approved Noise Monitoring Programme	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 188:M5 (now 782:M9 and 782:M7).			Overall	Ongoing	NR
188:P7	Rehabilitation	KCGM will implement a progressive rehabilitation programme as outlined in Section 4.3 (Consultative Environmental Review Mine and Waste Dumps-Fimiston KCGM August 1990) as agreed with the Environmental Protection Authority in consultation with the Department on Mines.	Rehabilitate the project and environs	Not required. OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 188:M3.		EPA, DMP	Overall	Ongoing	NR



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
Ministerial Statem	nent 782 Fimiston Gold Min	e Operations Extension (Stage 3) and Mine	Closure Planning						
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.	The CAR for MS188 and MS782 (this report) is submitted to the DWER annually and details the implementation of the proposal in accordance with the conditions and procedures of MS782.	Minister for Environment		Overall	Ongoing	С
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.	Proponent to be nominated	KCGM is the proponent. Nominated in Section 1.4 of the Public Environmental Review – Fimiston Operations Extension (Stage 3) and Mine Closure Planning.	Minister for Environment		Overall	Ongoing	С
782:M2.2	Proponent Nomination and Contact Details	The proponent shall notify the CEO of the DER 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.	Notify the CEO of any change in proponent details.	KCGM is still the proponent and the address for the serving of notices has not changed.	DWER		Overall	Within 30 days of such change.	С
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 after the date of this statement if the proposal to which this statement relates is not substantially commenced.	Approval lapses within 5 years if not substantially commenced	No longer relevant as project has substantially commenced (see 782:M3.2 below).	Minister for Environment		Overall	On or before the expiration of five years from the date of this statement. 29 January 2014.	CLD The report from the OEPA Desktop Audit conducted on 10 October 2013 confirms that this condition is closed. Report dated 18 October 2013.
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.	KCGM letter dated 23 September 2010 to OEPA notifying that the Golden Pike Cutback had substantially commenced.	DER		Overall	On or before the expiration of five years from the date of this statement. 29 January 2014.	CLD The report from the OEPA Desktop Audit conducted on 10 October 2013 confirms that this condition is closed. Report dated 18 October 2013.
782:M4.1	Compliance Reporting	The proponent shall submit to the CEO environmental compliance reports annually reporting on the previous twelvemonth 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.	The CAR (this report) for MS188 and MS782 is submitted to the DWER annually by the 28 February. Approval to change the reporting period to 1 January to 31 December (and submission date from 29 March to 28 February) was received from the (then) OEPA on 6 December 2010.	DWER		Overall	Annually on or before 28 February.	С



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
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.	The CAR (this report) for MS188 and MS782 is submitted to the DWER annually by the 28 February. Report format was agreed to by DWER, prior to release and follows the format specified in "Compliance Monitoring and Reporting – Guidelines for Proponents, August 2007".	DWER		Overall	Annually on or before 28 February.	С
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 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 noncompliances and non-conformances and describe the corrective and preventative actions taken in relation to each noncompliance or non-conformance; 7. review the effectiveness of all corrective and preventative actions taken; and 8. describe the state of implementation of the proposal.	Submit annual compliance reports, covering the conditions of this audit program.	The requirements of the audit program are covered in the CAR for MS188 and MS782 which is submitted to the DWER annually by the 28 February.	DWER		Overall	Annually on or before 28 February.	С
782:M4.4	Compliance Reporting	The proponent shall make the environmental compliance reports required by condition 4-1 publicly available in a manner approved by the CEO.	Place CAR on the KCGM website www.superpit.com.au	The CAR (this report) will be made available on the KCGM website: www.superpit.com.au within 4 weeks of submission to the DWER.	DWER		Overall	Within 4 weeks of submission to the DWER.	С



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
782:M5.1	Performance Review	The proponent shall submit a Performance Review report every five years after the start of mining activities forming 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 over the next five years, including improvements in technology and management processes.	Performance Review Report submitted every five years after the start of mining activities addressing the relevant issues.	The first 5 Year Performance Report prepared for the Fimiston Operations covered the calendar year periods from 2010 to 2014 and was submitted on the 30 April 2015. (Note: An extension was granted until the 30 April 2015). The second 5 Year Performance Review Report prepared for the Fimiston Operations covered the calendar year periods from 2015 to 2019 and was submitted on the 31 March 2020.	Minister for Environment		Overall	Five yearly. The next 5 Year Performance Review will cover the period from 2020 to 2024 and is due to be submitted by the 31 March 2025.	С
782:M5.2	Performance Review	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	Copies of the 5 Year Performance Review Reports are available on the KCGM website (www.superpit.com.au).	DWER		Overall	Within 2 weeks of submission to the DWER.	С



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
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 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 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 Environment as to whether the independent auditing should continue.	KCGM to appoint an independent environmental auditor. Six Monthly environmental performance review reports to CRG for initial 18-month period. Overall 18-month environmental performance review to the Minister for Environment.	Keith Lindbeck of Keith Lindbeck and Associates was appointed as the independent auditor on 17 June 2009. The first 6 monthly performance review (period 29 January 2009 to 28 July 2009) was presented to the CRG on 11 February 2010. The second 6 monthly performance review (period 29 July 2009 to 28 January 2010) was presented to the CRG on 13 May 2010. The third 6 monthly performance review (period 29 January 2010 to 28 July 2010) was presented to the CRG on 9 December 2010. The overall review of the eighteen months was submitted to the Minister for Environment on the 14 April 2011. The review recommended that the audit period be extended to include an additional two six-month audit periods to ensure that the audits covered an eighteen-month period of active mining. (Active mining commenced in April 2010.) The two additional audit periods were consented to by the Minister for Environment on 3 June 2011. Minutes from CRG Meetings are available on the KCGM website: www.superpit.com.au.	Minister for Environment		Overall	Six Monthly environmental performance review reports to CRG for initial 18- month period ending 28 July 2010. Overall review after eighteen months and advise the Minister for the Environment as to whether the independent auditing should continue.	CLD The report from the OEPA Desktop Audit conducted on 10 October 2013 confirms that this condition is closed. Report dated 18 October 2013.
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 Environment.	If required continue to fund the independent auditor to report 6 monthly to the CRG for such time as determined by the Minister of the Environment	The eighteen months overall review was presented to the CRG on the 14 April 2011. On 3 June 2011, the Minister advised the auditor that he had accepted the recommendation for the continuation of the audit for a further two audit periods with the audit period to cease on 28 September 2011. The Minister also requested a further review and recommendation from the auditor for continuation or cessation of the audit process on completion of the second audit period (28 September 2011). On 30 June 2011 KCGM requested that the Auditor consider the two additional audit periods cover the periods 29 July 2010 to 31 March 2011 and 1 April 2011 to 30 September 2011 as these dates coincide with KCGM's quarterly reporting periods. This was agreed to by the Auditor. Both the fourth and fifth independent	Minister for Environment		Overall	Until determined by the Minister for Environment.	CLD The report from the OEPA Desktop Audit conducted on 10 October 2013 confirms that this condition is closed. Report dated 18 October 2013.



AUDIT CODE	SUBJECT	REQUIREMENT	нош	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
				environmental audits were completed. The results of the fourth audit were presented to the CRG on the 8 March 2012 and the results of the fifth audit presented to the CRG on the 17 May 2012. For both the fourth and fifth audit periods the Auditor found that "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 (MS782) or by the DER operating licence (L6420/1988/12.". In a letter dated 7 August 2012 to the General Manager of the OEPA, Mr Kim Taylor, the Auditor, stated that "As no breaches of Conditions or 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 OPEA audit classification system." In a letter from the OEPA dated 22 August 2012 and addressed to the General Manager of KCGM, the OEPA confirmed that it had reviewed the information provided by the Auditor and was satisfied that the requirements of conditions 5-3 and 5-4 had been met and that the OEPA compliance monitoring database had been updated to reflect the status of the conditions.					
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 Environment on advice of the DER.	Prepare and implement a management plan for waste dumping.	Section 45C approved in 2000 for Croesus Rehabilitation Project. Section 45C approved in 2004 for Southern Landform Extension Project. Section 45C approved in 2005 for Southern Central Waste Dump. Section 45C approved in 2006 for the realignment of the Noise Bund and the Loopline Railway Access. No dumping is occurring with 500m of residences outside of approved plans.	Minister for Environment	DER	Overall	Prior to the dumping of waste within five hundred metres of residences.	NR
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 CKB.	Consult with environmental health staff of the CKB and residents within 500m of the waste dumping in preparation of waste dumping management plan.	Not required at this stage. New condition in 2009, did not specifically apply to historical approvals outlined in 782:M6.1 (although consultation was undertaken).	Minister for Environment	СКВ	Overall	Prior to the dumping of waste within five hundred meters of residences	NR



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
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 Environment on advice of the DER and the DoH.	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 of the Environment on advice of the DER and the DoH.	OEPA Audit and Verification Report (March 2010) indicates this condition has been superseded by 782:M7.3. The FAQMP is being implemented. Consultation with the DER and the DoH in preparation of this plan was undertaken by the EPA during the PER process.	Minister for Environment	DER, DoH	Overall	Within three months following the issuing of the notice.	NR
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 EPA, and shall amend the Plan to the requirements of the Minister for Environment on advice of the DER and the DoH.	Annual review of the FAQMP to the requirements of the Minister for the Environment on advice of the DER and the DoH.	The FAQMP review was amended from annual review to a three yearly revision cycle following approval of the 2012 FAQMP on 14 August 2013. The most recent revision of the FAQMP was submitted to the relevant government agencies on 24 June 2019. Following feedback from the DWER in October 2019, the FAQMP was resubmitted 13 November 2019 and was subsequently approved on 16 January 2020.	Minister for Environment	DWER, DoH	Overall	Three yearly. The next revision of the FAQMP is due by 16 January 2023.	С
782:M7.3	Air Quality	The proponent shall implement the amended Air Quality Management Plan required by condition 7-2.	Implement the amended FAQMP at twelve monthly intervals or as otherwise required by the EPA. Review cycle approved by the OEPA to be now three yearly.	The FAQMP (November 2019) was implemented following approval on 16 January 2020, superseding the 2015 version. This CAR provides an audit table in Appendix B indicating compliance with the measures that were implemented. The FAQMP (November 2019) is available on the KCGM website: www.superpit.com.au.	Minister for Environment		Overall	Ongoing.	С
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.	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.	Detonations of explosives at surface level were undertaken in accordance with KCGM's Blasting Dust Management Plan as contained within the FAQMP. No blasts were undertaken in accordance with regulation 8.28 (4) of the <i>Mines Safety and Inspection Regulations 1995</i> for the reporting period.	Minister for Environment		Overall	Ongoing	С
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.	PM ₁₀ monitoring data is made available on the KCGM website (www.superpit.com.au) via the "KCGM Dust Report (24-hour averages for 1 month)". The report is automatically generated daily at approximately 6 am to include data for the previous 24-hour period. PM ₁₀ monitoring data was not made available on the KCGM website within 24 hours of the recording of that data on 1 occasion: 23 November 2021. Refer to Section 5.1	Minister for Environment		Overall	Within 24 hours of recording data.	PNC



AUDIT CODE	SUBJECT	REQUIREMENT	нош	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
782:M7.6	Air Quality	The proponent shall install two additional dust monitoring stations, which are to be co-located 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.	Two additional dust monitoring stations were installed at MEX and MTC in June 2009.	Minister for Environment		Overall		CLD
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 investigations and actions taken regarding the complaint.	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 regarding the complaint. All public feedback and complaints are recorded in the Public Interaction Line (PIL) system including all investigation and control measures implemented.	Complaints regarding air emissions are made publicly available in this CAR which will be made available on the KCGM website (www.superpit.com.au) within 4 weeks of submission to the DWER.	Minister for Environment		Overall	Ongoing	С
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 was gazetted 14 July 2009. One appeal was received (Appeal No. 282/2009). The appeal against the Noise Regulation 17 Variation was dismissed by the Minister of the Environment 24 March 2010. This Noise Regulation 17 Variation has since been superseded by the Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016 which was gazetted on the 22 March 2016.	Minister for Environment		Overall		CLD
782:M8.2	Noise	The proponent shall undertake noise modelling to determine whether a special control area is required in accordance with the Goldfields-Esperance Regional Planning Strategy.	Undertake noise modelling to determine whether a special control area is required in accordance with the Goldfields-Esperance Regional Planning Strategy.	Noise modelling/reports listed below were prepared for the noise assessment of the project and are available on the KCGM website. Golden Pike Noise Report June 2005. Northern Waste Rock Dump Report July 2006. Supplementary Golden Pike Noise Report July 2006. Effects of Blasting in the Golden Pike Cutback February 2006. Noise Contour Map of worse case emissions overlain on CKB Town Planning Scheme was also prepared for this condition.	Minister for Environment		Overall		CLD



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
782:M8.3	Noise	The proponent shall consult with the Western Australian Planning Commission, Department of Planning and Infrastructure, and the City of Kalgoorlie-Boulder in the implementation of Condition 8-2.	Consult with the Department of Planning and Infrastructure (on behalf of the Western Australian Planning Commission) and the City of Kalgoorlie-Boulder in the implementation of Condition 8-2.	The noise reports/maps listed in M8.2 were provided to DPI (representing Western (WAPC)) and CKB. Meeting minutes of a meeting held between DPI, CKB and KCGM on 24 July 2009. Correspondence provided to DPI, CKB 18 December 2009.	Minister for Environment	WAPC, DPI, and CKB	Overall		CLD
782:M9.1	Airblast 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 FAQMP.	All blasts were detonated on the premises between 0700 hours and 1800 hours during the audit period. Refer to Section 6.3 of this report and the Quarterly Noise and Blast Monitoring Reports.	Minister for Environment		Overall	Ongoing	С
782:M9.2	Airblast 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.	No blasts were detonated outside the requirements under conditions 7-4 and 9-1. Refer to Section 6.3 of this report.	DWER		Overall	Within 36 hours following detonation.	С
782:M9.3	Airblast and Vibration from Blasting	The proponent shall ensure that all airblast levels due to blasting comply with Regulation 11 of the Environmental Protection (Noise) Regulations 1997.	Blast in accordance with the NVMMP to ensure that all airblast levels due to blasting comply with Regulation 11 of the Environmental Protection (Noise) Regulations 1997.	All airblast levels due to blasting were in compliance with Environmental Protection (Noise) Regulations 1997 (WA) during the reporting period. In March 2016 KCGM's Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016 was gazetted allowing airblast levels to vary from the Environmental Protection (Noise)Regulations 1997 (WA). Refer to Section 6.3 of this report.	Minister for Environment		Overall	Ongoing	С
782:M9.4	Airblast and Vibration from Blasting	The proponent shall make all reasonable effort to avoid blasting on Sundays.	Blast in accordance with the NVMMP and make all reasonable effort to avoid blasting on Sundays.	Whilst no blasts are scheduled to be fired on a Sunday and all reasonable efforts are made to avoid blasting on a Sunday, Sunday blasts do occur from time to time. When they do occur, reasons for the blasts are provided to the DWER in the Noise and Blast Monitoring Quarterly Reports. Refer to Section 6.3 of this report.	Minister for Environment		Overall	Ongoing	С



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
782:M9.5	Airblast and Vibration from Blasting	For all blasting, the proponent shall comply with the following vibration limits, measured or calculated in accordance with section J4.2 of Australian Standard 2187.2 2006, for the protection of human comfort at any houses and low rise buildings, theatres, schools and other similar buildings occupied by people and not owned by the proponent: 1. the ppv shall not exceed 5 mm/sec for 90% of blasts per year; 2. the ppv shall not exceed 10 mm/sec for any blast; and 3. no more than one in ten consecutive blasts shall exceed 5 mm/sec ppv.	Blast in accordance with the NVMMP to comply with the following vibration limits: 1. the ppv shall not exceed 5 mm/sec for 90% of blasts per year; 2. the ppv shall not exceed 10 mm/sec for any blast; and 3. no more than one in ten consecutive blasts shall exceed 5 mm/sec ppv.	1. The ppv did not exceed 5 mm/s for 100% of blasts during 2021. 2. The ppv did not exceed 10 mm/s for any blast in this reporting period. 3. No more than one in ten consecutive blasts recorded a vibration level greater than 5 mm/s. Blast monitoring results are available in the Quarterly Noise and Blast Monitoring Reports. Refer to Section 6.3 of this report.	Minister for Environment		Overall	Ongoing	С
782:M9.6	Airblast and Vibration from Blasting	Within six 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 revise the Revised Noise and Vibration Monitoring and Management Programme, dated June 2004, to the requirements of the Minister for the Environment on advice of the Department of Environment and Conservation.	This Programme shall include: 1. Locations of the airblast and ground vibration monitors and demonstration that these locations meet the requirements of regulation 21 of the Environmental Protection (Noise) Regulations 1997 and section J3.2.2 of Australian Standard 2187.2 - 2006; 2. Description of the monitoring equipment and demonstration that the equipment complies with the requirements of schedule 4 of the Environmental Protection (Noise) Regulations 1997 and section J3.2.1 of Australian 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 revised 'provisional' NVMMP was submitted to the OEPA and DER 12 August 2009. Approval of the NVMMP was delayed pending an appeal determination against the Environmental Protection (Fimiston Gold Mine Noise Emission Approval) 2009. The appeal was dismissed in March 2010. The NVMMP was amended to include two recommendations made by the appeals committee and submitted in April 2010. Further revision was requested by the OEPA and the final NVMMP was submitted in October 2010 and subsequently approved by the OEPA 6 December 2010. The NVMMP was updated during 2016 following approval of the Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016. The revision of the NVMMP was submitted to the OEPA on 22 June 2016 and was approved on 1 November 2016. The NVMMP is available on the KCGM website (www.superpit.com.au).	Minister for Environment		Overall	Within six months following the issuing of the notice	CLD The report from the OEPA Desktop Audit conducted on 10 October 2013 confirms that this condition is closed. Report dated 18 October 2013.



AUDIT CODE	SUBJECT	REQUIREMENT	HOW	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
			a complaints procedure and recording of complaints and action undertaken to resolve complaints.						
782:M9.7	Airblast and Vibration from Blasting	The proponent shall implement the Revised Noise and Vibration Monitoring and Management Programme required by condition 9-6.	Implement the Revised NVMMP within six months following the issuing of the notice.	The 'provisional' NVMMP submitted 12 August 2009 was implemented. The DER accepted the NVMMP as information only (pending the outcome of the appeal against the Environmental Protection (Fimiston Gold Mine Noise Emission Approval 2009)). Superseded by 782:M9.9.	Minister for Environment		Overall	Within six months following the issuing of the notice	CLD
782:M9.8	Airblast 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 Minister for the Environment on advice of the Department of Environment and Conservation.	Review the Revised NVMMP 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.	A revised NVMMP was submitted for approval by the CEO (of the DWER) in August 2018. The NVMMP (August 2018) was subsequently approved 27 September 2018. The current version of the NVMMP (August 2018) is available from the KCGM website: www.superpit.com.au.	Minister for Environment	DWER	Overall	As required by the EPA	С
782:M9.9	Airblast and Vibration from Blasting	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.	This CAR provides an audit table in Appendix B indicating compliance with the measures that were implemented.	Minister for Environment	DWER	Overall	Ongoing	С
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.	Written consents from the Joint Venture Owners to undertake active mining operations within 400 metres of owned property zoned "Residential" under the Town Planning Scheme were received via letter of consent dated 11 January 2010. Following a change of ownership of KCGM during 2021 a letter of consent has been issued by Northern Star Resources Ltd consenting to mining within 400m of properties zoned "Residential". Consent from occupiers is included as part of Residential Tenancy Agreements.	Minister for Environment		Overall	Prior to mining within 400m of residential properties.	С
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 known 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, sintered,	Liaise with the Heritage Council of Western Australia to minimise environment impacts associated with active mining, on State Registered Places known as the Boulder Railway Station, Subway and Loopline, and Cornwall Hotel.	Letter of consultation to the Heritage Council of Western Australia regarding the Boulder Railway Station, Subway and Loopline, and Cornwall Hotel was sent 4 February 2010. Letter of satisfaction from the Heritage Council of Western Australia was received 2 March 2010.	Minister for Environment	HCWA	Overall		С



AUDIT CODE	SUBJECT	REQUIREMENT	нош	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
		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 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.							
782:M11.1	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.	Prepare a Rehabilitation and Closure Management Plan as per the requirements of Ministerial Statement 782, Condition 11-1.	The KCGM Closure and Reclamation Management Plan was submitted in April 2010.	Minister for Environment, Minister for Mines and Petroleum	EPA	Overall	Prior to 30 April 2010	CLD



AUDIT CODE	SUBJECT	REQUIREMENT	ном	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
782:M11.2	Rehabilitation and Closure Management Plan	In the preparation of the Rehabilitation and Closure Management Plan required by condition 11-1, the proponent shall meet the requirements of the following agencies: 1. Department of Mines and Petroleum regarding items 1-3, 5-10, and 12 of condition 11-1; 2. Department of Environment and Conservation regarding items 4, 8, 9 and 10 of condition 11-1; 3. Department of Planning and Infrastructure, Western Australian Planning Commission and City of Kalgoorlie-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.	Meet the requirements of the following agencies in preparation of the MCP: 1. DMP regarding items 1-3, 5-10, and 12 of condition 11-1; 2. DER regarding items 4, 8, 9 and 10 of condition 11-1; 3. DPI, WAPC and CKB regarding item 1, 2, 3 and 9 of condition 11-1. 4. DoW regarding item 4 of condition 11-1; and 5. Registrar of Aboriginal Sites regarding item 13 of condition 11-1.	The 2018 MCP was approved by the DMIRS 06 August 2018. The 2018 MCP was resubmitted to the DWER (EPA Services) in December 2019 and subsequently approved 31 January 2020. The 2021 Mine Closure Plan was submitted to DMIRS and DWER (EPA Services) in March 2021. It is currently under assessment by those regulators. Refer to Section 5.4 of this report.	Minister for Environment	DMIRS, DWER, DPIRD, WAPC, CKB, and DAA	Overall	Ongoing	С
782:M11.3 (Amended)	Rehabilitation and Closure Management Plan	The proponent shall review the Rehabilitation and Closure Management Plan required by condition 11-1 every three years and shall amend the Plan as required in consultation with the agencies referred to in condition 11-2, to the requirements of the CEO on advice of the relevant agencies indicated in condition 11-2.	Review the MCP every three years and amend the Plan as required in consultation with the agencies referred to in condition 11-2, to the requirements of the CEO on advice of the relevant agencies indicated in condition 11-2.	Letter received in July 2013 from the Minister approving a three yearly review cycle. Refer to Section 5.4 of this report.	Minister for Environment	DMIRS, DWER, DPI, WAPC, CKB, and DAA	Overall	Every 3 years from last submission date (previously 2 years). Next MCP due to be submitted 31 March 2024	С
782:M11.4	Rehabilitation and Closure Management Plan	The proponent shall implement the amended Rehabilitation and Closure Management Plan required by condition 11-3 until such time as the Minister for the Environment determines that the proponent's closure responsibilities have been fulfilled. Note: The DMP 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.	Implement the amended MCP required by condition 11-3 until such time as the Minister for the Environment determines that the closure responsibilities have been fulfilled.	This CAR provides an audit table in Appendix B indicating the compliance status with the measures that were implemented.	Minister for Environment	DMIRS, DWER, DPI, WAPC, CKB, and DAA	Overall	Until determined by the Minister for the Environment	С



AUDIT CODE	SUBJECT	REQUIREMENT	нош	EVIDENCE	SATISFY	ADVICE	PHASE	TIMEFRAME	STATUS
782:M11.5	Rehabilitation and Closure Management Plan	The proponent shall make the Rehabilitation and Closure Management Plan required by condition 11-1 and subsequent revisions required by condition 11-3 publicly available in a manner approved by the CEO.	Make the Closure and Reclamation Management Plan required by condition 11-1 and subsequent revisions required by condition 11-3 publicly available on the KCGM website www.superpit.com.au	The approved 2018 MCP is available on the KCGM website: www.superpit.com.au The 2021 MCP, submitted in March 2021, is currently under assessment by DMIRS and DWER (EPA Services).	CEO	DWER	Overall	In the month following the approval of the MCP.	С
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.	Letter of submission of ACHMP to DIA 29 December 2009. Email received from DIA 9 February 2010 advising plan meets the DIA's requirements.	DIA		Design	Prior to commencement of proposed works	CLD
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	Meeting held with DIA 26 November 2009 to discuss development of the ACHMP.	DIA		Design	Prior to commencement of proposed works	CLD
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.	Section 6 of the ACHMP outlines management of any Aboriginal sites or skeletal remains identified during the proposed works.	DIA		Design	Prior to commencement of proposed works	CLD
782:M12.4	Aboriginal Heritage	The proponent shall implement the Aboriginal Cultural Heritage Management Plan.	Implement the Aboriginal. Cultural Heritage Management Plan.	This CAR provides an audit table in Appendix B indicating the compliance status with the measures that were implemented.	DAA		Overall	Ongoing	С



APPENDIX B: ENVIRONMENTAL MANAGEMENT PLAN AUDIT TABLES







KCGM Audit Table Environmental Management Plans

Period: 1 January to 31 December 2021

Fimiston Air Quality Management Plan: 3 Potential non-conformances were recorded against the Dust Monitoring and Management Plan during the audit period.

AUDIT TABLE - FIMISTON AIR QUALITY MANAGEME	ENT PLAN			
Objective	KPI	Evidence	Timeframe	Status
BLASTING DUST MANAGEMENT PLAN				
Appropriate environmental review and managerial authorisation is required prior to firing a Wind Direction Dependent blast when wind conditions are unfavourable.	Minimise potential dust emissions associated with blasting.	During 2021 all blasts were fired in accordance with the BDMP.	As Required	С
DUST MONITORING AND MANAGEMENT PLAN				
Review either an increased number of complaints or repeated complaints to verify whether air quality management practices are being implemented effectively.	Verify implementation of air quality management practices	There was an increased number of complaints received during the reporting period regarding dust. Each complaint was reviewed, and it was confirmed that KCGM management practices continue to be implemented in accordance with the FAQMP.	As Required	С
Greater than 90% availability of the continuous PM ₁₀ data from all monitoring sites on an annual basis.	Annual data availability.	>90% data availability was achieved during 2021 at all sites. HGC BSY HEW CLY HOP MEX MTC 100% 98.1% 96.4% 100% 100% 100% 100%	Annual	С
Complete quarterly calibration of dust monitoring equipment.	Quarterly calibrations.	Calibrations were undertaken between 18-20 January 2021, 25-27 May 2021, 6-8 September 2021. Calibration reports are available upon request. The Q4 calibrations were delayed until 19 January 2022. Refer to Section 5.2.	Quarterly	PNC





Objective	KPI	Evidence	Timeframe	Status
Target of not more than five events above the daily performance target at any dust monitoring site per annum where KCGM is a significant contributor.	Annual target	During 2021, KCGM did not record any more than five events at any dust monitoring site where a 24-hour average PM $_{10}$ concentration of greater than 50 μ g/m 3 is recorded and KCGM is determined to be a significant contributor. HGC BSY HEW CLY HOP MEX MTC 0 0 0 0 0	Annual	С
		Refer to Section 6.1.		
MERCURY EMISSIONS MANAGEMENT PLAN				
Implement a Carbon Kiln Emissions Control Strategy (CKECS) to restrict operation of the carbon regeneration kilns when the wind is blowing towards Kalgoorlie-Boulder and the mercury load on the carbon is high prior to any emission reduction equipment being installed.	Minimise potential atmospheric emissions of mercury associated with carbon regeneration.	The CKECS was implemented in 2005. During 2020, the Fimiston Emissions Reduction Project was formally commissioned, which supersedes the requirement to implement the CKECS.	Ongoing	С
Mercury emissions from the Fimiston Carbon Regeneration Kilns will be estimated via a mass balance approach.	Estimate mercury emissions via mass balance.	Mercury emissions are estimated via a mass balance approach and are reported annually in the National Pollutant Inventory: www.npi.gov.au.	Annual	С
Implement the Fimiston Emissions Reduction Project to capture greater than 90% of the atmospheric mercury emissions associated with mineral processing activities at the Fimiston Processing Plant.	Capture greater than 90% of the atmospheric mercury emissions associated with the Fimiston Processing Plant.	During 2020, the Fimiston Emissions Reduction Project was formally commissioned in accordance with Works Approval W5532/2013/1. The results of post-commissioning sampling show that the mercury capture from the Carbon Regeneration Kiln Off-gas ranged from 99.92% (Run 1) to 99.95% (Run 2); well above the minimum design criteria of greater than 90% capture of mercury from the Carbon Regeneration Kiln Off-gas.	Ongoing	С





Objective	KPI	Evidence	Timeframe	Status
REVIEW CYCLE				
All components of the FAQMP are reviewed on a triennial basis in accordance with the amended Condition 782:M(7.2).	Triennial review of the FAQMP.			С
REPORTING				
Daily PM ₁₀ dust monitoring results (24-hour averages) are made available on the KCGM website at www.superpit.com.au.	Dust results available on KCGM website.	PM ₁₀ monitoring data is made available on the KCGM website (www.superpit.com.au) via the "KCGM Dust Report (24-hour averages for 1 month)". The report is automatically generated daily at approximately 6 am to include data for the previous 24-hour period. On 1 occasion PM ₁₀ monitoring data was not made available on the KCGM website within 24 hours of the recording of that data: 23 November 2021. Refer to Section 5.2	Daily	PNC
PM ₁₀ dust monitoring results will be provided in summary form to the DWER in the Annual Environment Report (AER).	Annual summary of dust monitoring results.	A summary of the 2021 dust monitoring data will be included in the 2021 AER due for submission to the DWER by 31 March 2022.	Annual	С
An analysis of seasonal and annual dust trends to review the effectiveness of dust control measures and continuous improvement in air emission controls implemented through the FAQMP will be included in the AER provided to the DWER.	Annual analysis of seasonal and annual dust trends.	The annual analysis of 2021 seasonal and annual dust trends will be included in the 2021 AER due for submission to the DWER 31 March 2022.	Annual	С
PM ₁₀ dust monitoring data is provided to the DWER, and/or DoH upon request.	Provide data upon request.	No data was requested by DWER or DoH during the audit period.	As required	С



Objective	KPI	Evidence	Timeframe	Status
Reporting of 24-hour average PM10 concentrations above the daily performance target to relevant authorities (DWER and DoH) within seven days, if KCGM is identified to be a significant contributor. Ensure the following information is included in the notification: • Appropriate wind roses and time series analysis indicating dust concentration, wind direction and wind speed; • Source contribution analysis; and • Identified mitigation measures, where appropriate.	Assess events above daily performance target (i.e., 24-hour average greater than 50 μg/m³) to determine if KCGM is a significant contributor and report to DWER and DoH as required within seven days.	During 2021, there were 23 days where 24-hour average PM ₁₀ concentrations of greater than 50 μg/m³ were recorded at one or more of the six active monitoring stations. Each of these events were assessed and KCGM was considered to be a significant contributor on 2 of these days. In accordance with the FAQMP (November 2019), these events were reported to the DWER and DoH within seven days. Refer to Section 6.1 of this report.	As required	С





Noise and Vibration Monitoring and Management Plan: Compliance was not achieved with all objectives of the NVMMP during the audit period as demonstrated in the following NVMMP Audit Table.

Objective	KPI	Evidence	Timeframe	Status
ENVIRONMENTAL NOISE MONITORING				
Continuously record levels of noise (as far as practicable) received at BPS and MEP.	Continuous noise monitoring.	Results of the continuous noise monitoring programme are provided in the Noise and Blast Monitoring Quarterly Reports submitted to the DWER. Refer to Section 6.2 of this report.	Ongoing	С
Conduct quarterly compliance noise monitoring at five reference locations (BSW, BPS, KTS, OSB and YSB) and assess compliance against the approved noise evels for KCGM's Fimiston Operations as stipulated in Condition 4 of the Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016.	Quarterly compliance noise monitoring.	All measured levels at all locations complied with the approved noise levels for the night time period. Results of the compliance noise monitoring are provided in the Noise and Blast Monitoring Quarterly Reports submitted to the DWER. Refer to Section 6.2 of this report.	Quarterly	С
Maintain a wind sensor at MEX to determine the WIF o calculate the approved noise levels for the Fimiston Gold Mine.	Weather monitoring	Wind direction and speed data were recorded at MEX during the audit period and used to determine the WIF for the weather conditions prevailing at the time the quarterly compliance noise monitoring was undertaken.	Quarterly	С
The Appeals Committee recommended that as part of the NVMMP, KCGM install and maintain a real-time moise monitoring site that is accessible by the public via the internet.	Real-time noise monitoring data available on KCGM website.	The real-time noise monitoring site was installed and commissioned at the KCGM MEP monitoring site during the 2011 reporting period. Real-time noise monitoring data are made publicly available on the KCGM website (www.superpit.com.au).	Ongoing	С
The continuous noise monitoring equipment is NATA calibrated every two years.	Noise monitoring equipment calibration	All noise monitoring equipment is within calibration. Noise monitor calibration certificates are provided in the Noise and Blast Monitoring Quarterly Reports submitted to the DWER.	Biennially	С



Objective	KPI	Evidence	Timeframe	Status
BLAST VIBRATION AND AIRBLAST MONITORING				
Record blast vibration and airblast levels at six reference locations (Alpha, Bravo, Charlie, Delta, Echo and Foxtrot); triggered by ground vibration exceeding the set trigger level of 0.5 mm/s.	Blast monitoring	Blast vibration and airblast monitoring records are provided in the Noise and Blast Monitoring Quarterly Reports. Refer to Section 6.3 in this report.	Ongoing	С
The blast monitoring equipment is NATA calibrated annually.	Blast monitoring equipment annual calibration.	The blast monitoring equipment is calibrated on an annual basis by Texcel (manufacturer and supplier). KCGM uses Advanced Texcel remote blast monitor equipment at all blast monitoring sites which are calibrated annually in accordance with the manufacturer's specifications. The annual calibration of the blast monitors was scheduled to occur in Quarter 2 2021. However, WA State Government COVID-19 travel restrictions prevented Texcel staff, who are Queensland based, from safely travelling to WA, without having to quarantine. The annual calibrations will be conducted as soon as WA travel restrictions allow Texcel staff to travel to WA. Please note that whilst the annual calibration of the blast monitors has been delayed, a performance check of the blast monitoring equipment is completed daily with a copy of the performance report sent to KCGM Drill and Blast personnel for quality assurance purposes. Refer to Section 6.3 in this report.	Annual	PNC
REPORTING PROVISIONS		Treatile deciron c.o in this report.		
Prepare a Quarterly Noise and Blast Monitoring Report for submission to the DWER.	Quarterly Noise and Blast Monitoring Report.	Quarterly Noise and Blast Monitoring Reports were submitted to the DWER during the reporting period. Refer to Section 6.3 in this report.	Quarterly	С



Objective	KPI	Evidence	Timeframe	Status
Submit a written annual noise report to the DWER.	Annual Noise Report	In accordance with the Environmental Protection (Fimiston Gold Mine Noise Emissions) Approval 2016, the Annual Noise Monitoring and Management Report was submitted to the DWER on 21 April 2021.	Annually	С
Provide the quarterly compliance noise monitoring results on the KCGM website.	Publishing of noise monitoring results	Quarterly compliance noise monitoring results are made available on the KCGM website (www.superpit.com.au).	Quarterly	С
In the event that the threshold criteria for noise, airblast or vibration are exceeded, the CEO will be notified within seven (7) days of identification of the exceedance.	Reporting exceedances	In this reporting period there were no exceedances of criteria, and so no notifications to the CEO were required. Refer to Section 6.3 of this report.	Ongoing	С





Aboriginal Cultural Heritage Management Plan: Compliance was achieved with each objective of the ACHMP during the audit period as demonstrated in the following ACHMP Audit Table.

Objective	KPI	Evidence	Timeframe	Status
Aboriginal sites that lie within the vicinity of KCGM's operations are properly respected and protected.	Protection of Aboriginal heritage sites.	As described in the Aboriginal Cultural Heritage Management Plan (ACHMP) Section 4.3.1 and 5.	Ongoing	С
Significant heritage sites are preserved.	Preservation of Aboriginal heritage sites.	No new activities occurred within the vicinity of Aboriginal heritage sites.	Ongoing	С
All such sites are identified, and locations and access conditions communicated to employees and contractors as appropriate.	Site identification and access to conditions communicated as appropriate.	As described in the ACHMP Section 5.	Ongoing	С
The Aboriginal Cultural Heritage Plan will be reviewed as required including when there is a significant change proposed to the Fimiston Operations or if there is a change in legislation relating to the identification and protection of Aboriginal	Review cycle.	The ACHMP was developed and implemented 29 December 2009. On 9 February 2010 the (then) DIA confirmed that there was no further feedback that the DIA could provide regarding the ACHMP. Review of the Aboriginal Heritage Act 1972	As required	С
sites.		During 2018 the Hon Ben Wyatt MLA, Minister for Aboriginal Affairs, announced a review of the Act, the legislation that guides the way the State Government protects Aboriginal heritage in Western Australia.		
		The department will deliver the Aboriginal Heritage Act review through a four-staged approach, which includes three consultation phases.		
		KCGM is participating in the consultation phases and will monitor the review process to assess the impacts of any changes made to the Act that may impact the ACHMP.		





Rehabilitation and Closure Management Plan: Compliance was achieved with each objective of the Mine Closure Plan (MCP) during the audit period as demonstrated in the following MCP Audit Tables for Closure Tasks and Rehabilitation Activities respectively.

AUDIT TABLE: REHABILITATION AND CLOSURE MANAGEMENT PLAN

Scheduled Closure Tasks (Table 34 of 2018 MCP)

Operational Area	Domain	Feature	Task	Timing	Outcomes	Status
			Review Pit Lake model and potential groundwater discharge	2015	Completed.	CLD
	Mining Infrastructure	Fimiston Open Pit and Sam Pearce Decline	Develop Open Pit Abandonment Strategy	2018- 2024	Third party review of geotechnical aspects of pit wall design completed; ongoing project.	NR
			Pit wall stability monitoring.	Ongoing	Ongoing and continuous operational requirement.	С
Fimiston		Refine Visual Amenity concept for WRDs.	2018	Revised version approved in Mining Proposal "KCGM Dewatering Infrastructure and Updated Waste Rock Dump Design: Registration ID 69903". Visual Amenity integrated into MCP 2018 implementation.	С	
		Trafalgar Oroya Rock Northern North Eastern Environmental Noise Bund	Waste Dump Closure Planning Strategy, including implementation of a new rehabilitation design.	2018	Mining Proposal "KCGM Dewatering Infrastructure and Updated Waste Rock Dump Design 170922 Registration ID 69903".	CLD
Timston			Review of Materials Classification System (erodibility focus).	2015	Documented in approved MCP 2015.	CLD
Waste Rock Dumps			Update Materials Balance Inventory / Rehabilitation Material Reconciliation.	2015- 2024	Documented in MCP 2018; Further refinements are expected as planning becomes more detailed.	С
			Review of Rehabilitation Monitoring Programme.	2015- 2024	Documented in MCP 2018.	С
			Refine completion criteria.	2018- 2024	Early work associated with vegetation commenced.	С
			Acquisition of Additional Topsoil.	2015	Documented in approved MCP 2015.	CLD
			Kinetic Study of Waste Materials.	2015	Documented in approved MCP 2015.	CLD



	Taillings Storage Facilities	orage Fimiston II	TSF Closure Planning Strategy Refine Visual Amenity concept as relates to TSFs Review of Materials Classification System (erodibility focus). Review of Rehabilitation Monitoring Programme.	2018- 2021 2018 2015 2015- 2021	Documented in MCP 2018. Initial concept completed; additional review planned. Documented in approved MCP 2015. Learnings from WRDs will be applied to TSF planning.	C CLD CLD
			Refine completion criteria.	2018 - 2021	Learnings from WRDs will be applied to TSF planning.	С
			Material characterisation studies.	2018	Further material characterisation erosion work completed in 2018.	С
Scheduled Reh	abilitation Acti	vities (Table 35 of	MCP 2018)			
Operational Area	Domain	Feature	Approach	Timing	Outcomes	Status
	Mining Infrastructure	Fimiston Open Pit and Sam Pearce Decline	Ongoing tracking of Black Flag and other waste material during operations.	2018 - 2024	Ongoing and continuous operational requirement. Internal tracking of waste on monthly basis, with actions if required	С
Fimiston	WRDs	Trafalgar Oroya Northern	Implement the Visual Amenity Concept.	2018	Visual Amenity Concept is integrated into WRD rehabilitation planning. Documented in the MCP 2018.	С
	VVICUS	North Eastern Environmental Noise Bund	Conduct progressive rehabilitation on available areas.	2018- 2036	Progressive rehabilitation conducted in 2015, 2016 and 2017, and reported in the AER.	С