KCGM HSSE DEPARTMENT, CLOSURE

KCGM Mine Closure Plan 2025 (v1)
Volume 3 of 3

Mineral Field 26

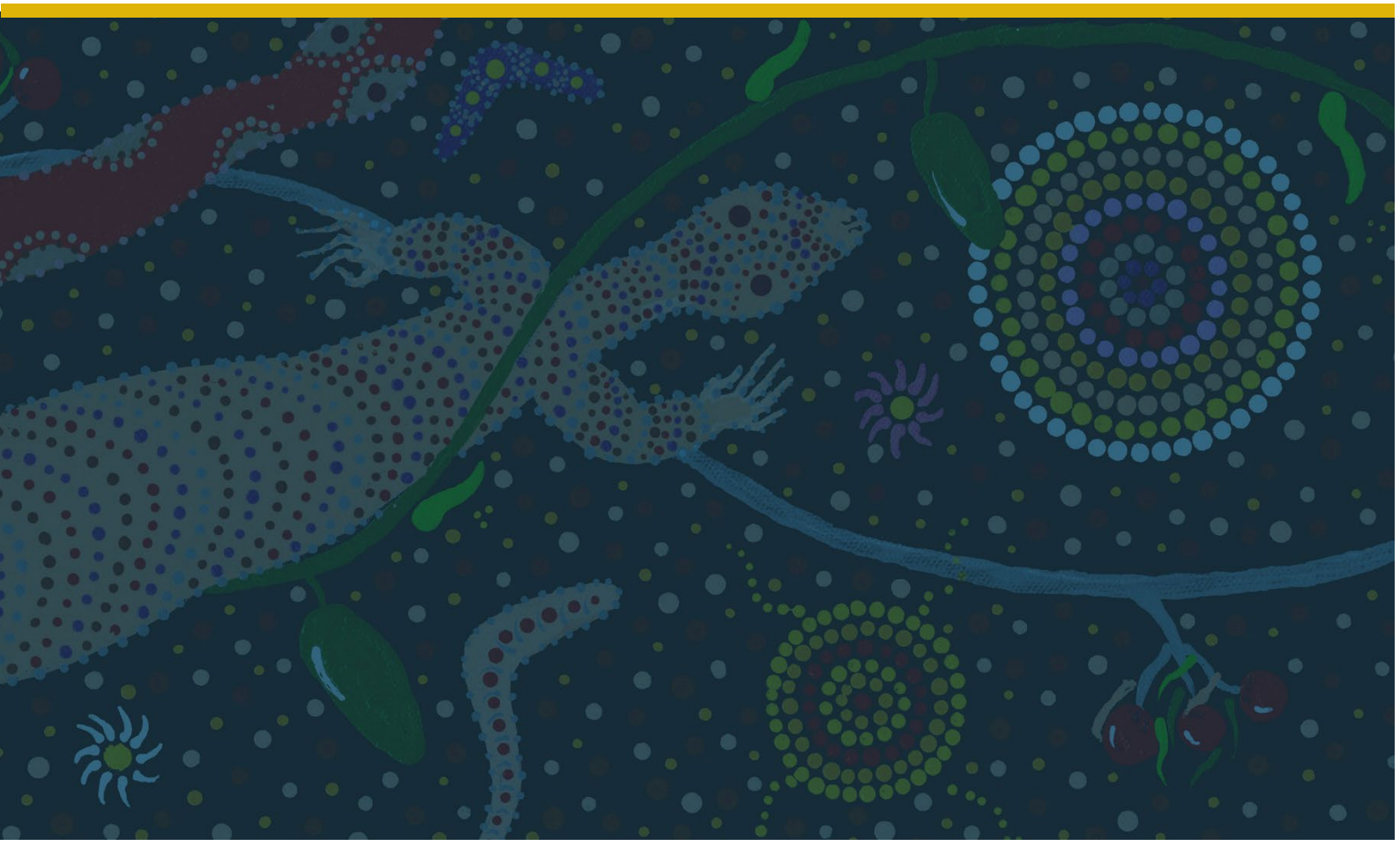


TABLE OF CONTENTS
Volume 3 of 3

1. APPENDIX 1: KCGM CLOSURE LEGAL AND OTHER OBLIGATIONS REGISTER

1.1 Legal Obligations Register: Fimiston Open Pit

1.1.1 Tenement Conditions

TENEMENT (CONDITION NUMBER)	REQUIREMENT
M26/46 (15) M26/316 (28) M26/359 (27) M26/405 (25)	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses; or All topsoil and vegetation being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.
M26/46 (27) M26/359 (29) M26/316 (32) M26/405 (35) M26/724 (15)	Placement of waste material must be such that pit wall subsidence and zone of instability will not impact upon the final footprint after rehabilitation; or Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability, to the satisfaction of the Executive Director, Environment Division, DMIRS.
M26/359 (31) M26/405 (41)	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: •2018
M26/359 (24)	The lessee diverting stormwater runoff away from areas adjacent to waste management facilities to minimise the threat of accidental loss of stored matter due to flooding or erosion.
M26/46 (9)	Upon cessation of open pit mining operations, all pits being securely fenced, the walls battered and ground within 50 metres of the periphery of such pits being rehabilitated to the satisfaction of the District Mining Engineer.
M26/316 (29)	All rubbish and scrap is to be progressively disposed of in a suitable manner.
M26/316 (30)	The Lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.
M26/316 (31)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.

1.1.2 Commitments in Approval Documents

REFERENCE DOCUMENT	COMMITMENT
Ministerial Statement 188	**General Condition 8:** "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 Environmental Protection Authority. 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 Golden Mile Mining Development Planning Committee." **Proponents Commitments 7:** "KCGM will implement a progressive rehabilitation programme as outlined in section 4.3 as agreed with the EPA in consultation with the Department of Mines."
Ministerial Statement 782	**Condition 11 Rehabilitation and Closure Management Plan:** "Prior to 30 April 2010, the proponent shall prepare a Rehabilitation and Closure Management Plan to the requirements of the Minister for Environment and the Minister for Mines and Petroleum on advice of the Environmental Protection Authority and shall submit the Plan to the Department of Environment and Conservation. This plan shall include: 1. final form of landforms and voids; 2. the proposed land use for the mine site post mining operations determined after consultation with relevant stakeholders… 6. long-term management of pits, including the Superpit and public safety provisions; 10. post-closure maintenance and monitoring; 12. a contingency plan for a care and maintenance phase; and **11-2:** in the preparation of the Rehabilitation and Closure Management Plan … the proponent shall meet the requirements of the following agencies": 1. Department of Mines and Petroleum (DMP): a. final form of landforms and voids; b. the proposed land use for the mine site post mining operations determined after consultation with relevant stakeholders… c. long-term management of pits, including the Superpit and public safety provisions… d. a detailed Rehabilitation and Revegetation program which includes local vegetation, performance criteria and a timetable to be met, e. post-closure maintenance and monitoring; and

REFERENCE DOCUMENT	COMMITMENT
	f. contingency plan for a care and maintenance phase 2. Department of Planning and Infrastructure (DPI), Western Australian Planning Commission (WAPC) and City of Kalgoorlie-Boulder (CKB); a. final form of landforms and voids; b. the proposed land use for the mine site post mining operations determined after consultation with relevant stakeholders…"
Mine Closure Plan 2012: Resubmission December 2012 dated 21 December 2012 signed by Ian Butler – General Manager (Acting) and retained on Department of Mines and Petroleum file no. (*EARS-MCP-35227 on DOCID: 2170786 and Doc ID: 3425137).*	See MCP document for details – significant commitments outlined within.
(Reg ID 54418) "Kalgoorlie Consolidated Gold Mines, Mine Closure Plan March 2015" dated 30 March 2015 signed by Ian Butler - General Manager and retained on Department of Mines and Petroleum File No. EARS-MCP-54418 as Doc ID 3504973;	See MCP document for details – significant commitments outlined within.
"Consultative Environmental Review, Mine and Waste Dumps - Fimiston (Draft)" dated August 1990, retained on Department of Minerals and Energy File No. 1198/91;	**Page 3:** "KCGM undertakes to continue an ongoing programme of geotechnical investigations or slope stability purposes and report the findings of these investigations to the Department of Mines" **Page 44:** "Ultimately the most important consideration for the Mining Zone is ensuring that the pit area is made safe with adequate slope stability and perimeter bunding."
"Fimiston Stage II, Water Supply Development - Notice of Intent" dated February 1991 and retained on Department of Minerals and Energy	Document Reviewed – No commitments relevant to Fimiston Open Pit.

REFERENCE DOCUMENT	COMMITMENT
File No. 1365/90;	
"Notice of Intent - Sitewater Water Supply Rationalization" dated September 1991 and retained on Department of Minerals and Energy file No 1273/91	Document Reviewed – No closure commitments relevant to Fimiston Pit.
Letter from KCGM dated 19 August 1992 and signed by B Smith and retained on Department of Minerals and Energy File No. 2174/92.	Document Reviewed – No closure commitments relevant to Fimiston Pit.
"Letter of Intent" dated 7 May 1992 and retained on Department of Minerals and Energy File No. 2001/93	Document Reviewed – No closure commitments relevant to Fimiston Pit.
"Permission to Alter Approved KCGM Environmental Bund" dated 1 September 1992 and retained on Department of Minerals and Energy File No. 2174/92;	Document unable to be reviewed.
"Chafers Shaft Dewatering" dated 23 April 1993 and retained on Department of Minerals and Energy File No. 2058/93.	Document unable to be reviewed.
"Application for Oxide Waste Dumping on Mining Lease 26/405" dated 30 December 1993 and retained on Department of Minerals and Energy File No.2212/93;	Document unable to be reviewed.
"Notice of Intent - Mt Charlotte to Fimiston Overland Conveyor" dated 2 December 1994 and retained on Department of Minerals and Energy File No. 2010/95	Document Reviewed – No closure commitments relevant to Fimiston Pit.
"Mt Charlotte Decline Notice of Intent	Document Reviewed – No closure commitments relevant to Fimiston Pit.

REFERENCE DOCUMENT	COMMITMENT
Amendment" dated 6 December 1994 signed by Mr A King - Manager - Mining and retained on Department of Minerals and Energy File No. 1258/90	
"Movement of 50,000 BCM's of Tailings Material" facsimile dated 31 October 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on Department of Minerals and Energy File No. 2083/96; and	Document unable to be reviewed.
"Retreatment of Croesus, Mt Trafalgar and Old Croesus Tailings Dumps- Notice of Intent" dated 3 July 1998;	Document Reviewed – No closure commitments relevant to Fimiston Pit.
"Retreatment of Croesus and Mt Trafalgar Tailings dumps- Plan of Operations dated July 1998;	Document unable to be reviewed – unlikely to contain any closure commitments relevant to Fimiston Pit.
Letters dated 7 July 1998 and 1 September 1998 signed by Resident Manager- Mr Phil Evers	Document unable to be reviewed.
"Minor Variation to KCGM Current Mining Approvals - Trafalgar Area - M26/405, M26/83 and M26/267" (NOI 3675) dated 13 March 2001 and signed by Mr Gary Lye, Project Manager - Strategic Mine Development, Kalgoorlie Consolidated Gold Mines and retained on Department of Minerals and Energy File No. 4355/00;	Document unable to be reviewed.
"Installation of Security Fence and Track" dated 20 February 2003 (NOI	Document unable to be reviewed.

REFERENCE DOCUMENT	COMMITMENT
4203) signed by Mr Neil Rankine - Land Administrator and retained on Department of Mineral and Petroleum Resources File No. 5100/02.	
"Access road to new Super Pit Lookout - M26/316" dated 19 March 2003 signed by Mr Neil Rankine - Land Administrator (NOI 4241) and retained on Department of Industry and Resources File No. 2561/03.	Document unable to be reviewed.
"Minor Southward Extension of Fimiston Open Pit Noise Bund - M26/405" dated 19 March 2003 signed by Mr Neil Rankine - Land Administrator (NOI 4240) and retained on Department of Industry and Resources File No. 2561/03.	Document Reviewed – No commitments relevant to Fimiston Pit.
"Amendment to Low Impact Mining - Notice of Intent" dated 9 February 2004 and retained on Department of Industry and Resources File No. 4297/01.	Document unable to be reviewed – unlikely to contain any closure commitments relevant to Fimiston Pit.
"Notice of Intent - Low Impact Mining Operation - Removal of Calcine Tailings on M26/405 (NOI 4719)" dated 29 June 2004 and signed by Cobb Johnston and retained on Department of Industry and Resources File No. 5168/02.	Document Reviewed – No commitments relevant to Fimiston Pit.
"Ground Disturbance Approval	Document unable to be reviewed

REFERENCE DOCUMENT	COMMITMENT
Application for Mining Lease 26/359 (EMP 2141) dated 22 September 2004, retained on Department of Industry and Resources File No. 11058/02.	
"Letter of Variation to Consultative Environmental Review Mine and Waste Dumps - Fimiston August 1990, Southern Central Waste Rock Dump Extension" prepared by KCGM Safety and Environment Department dated January 2005,	Document Reviewed – No commitments relevant to Fimiston Pit.
"Southern Extension of Fimiston Open Pit Waste Rock Dump Footprint at KCGM" signed by Cobb Johnston, General Manager - KBGM dated 6 January 2005	Document Reviewed – No commitments relevant to Fimiston Pit.
"Rehabilitation of the Southern Waste Rock Dump Footprint" signed by Cobb Johnston, General Manager, KCGM dated 22 April 2005 (NOI 4901) and retained on Department of Industry and Resources File No. E2561/200305	Document Reviewed – No commitments relevant to Fimiston Pit.
"Saline Water System Modification" (NOI 5028), signed by Dr Jim Bawden, Manager - Safety and Environment, KCGM "Correspondence titled Saline Water System Modification", dated 24 June 2005 and signed by Jim Bawden,	Document unable to be reviewed – unlikely to contain any closure commitments relevant to Fimiston Pit.

REFERENCE DOCUMENT	COMMITMENT
Manager - Safety and Environment, KCGM and retained on Department of Industry and Resources File No. E2561/200306.	
"Notice of Intent Letter of Variation to Consultative Environmental Review Mine and Waste Dumps – Fimiston August 1990; Partial Realignment of the Environmental Noise Bund and Loopline Railway Access" (MP 5240), dated 7 February 2006 with a covering letter signed by Cobb Johnstone, General Manager KCGM and retained on Department of Industry and Resources File No. E2561/200307;	Document Reviewed – No commitments relevant to Fimiston Pit.
"KCGM Mining Proposal Resubmission Fimiston Gold Mine Operations Extension (Stage 3) - Golden Pike Cutback and Northern Waste Landform" (Reg ID 24671) dated 3 December 2009 signed by Russell Cole, General Manager and retained on Department of Mines and Petroleum File No. E0159/201001	**Page viii – xi:** "One of the main risks associated with closure of the KCGM Operations has been identified as inadvertent public access to the open pit. Inadvertent public access to the Fimiston Pit will be prevented by the existing waste landforms on the eastern and southern sides. These waste landforms will act as an abandonment bund and provide a significant barrier to unauthorised access. KCGM considered several options for preventing access to the open pit from the west, which is the most likely access point given the proximity to the City of Kalgoorlie-Boulder. The most effective methods for preventing inadvertent access are considered to be a combination of: • The Environmental Noise Bund; • A conventional abandonment bund; • The existing ring lock fence (6 foot); and • Information signs." **Page 93:** "The Super Pit Lookout will contribute to the tourism industry of the area after mining is completed." "The Fimiston Pit (including the Golden Pike Cutback) and will remain as a void which will partially fill with water from rainfall, surface runoff and groundwater inflow." "Due to the high salinity of the local groundwater, the water contained within the pit will also be hypersaline and not suitable for

REFERENCE DOCUMENT	COMMITMENT
	recreational activities such as boating or fishing. The open pit is also likely to be used for the management of: • TSF recovery water after decommissioning of the Fimiston Mill; and • Surface water runoff from the surrounding waste landforms." **Page 97:** "… KCGM preferred option is to maintain the existing ring lock fence post closure as well as the noise bund and construction of a conventional abandonment bund behind (Option 8) as this has the lowest risk of people entering the pit. Long term maintenance of the fence post closure will be determined as part of the process of developing the KCGM Closure and Reclamation Plan." "Information signs will also be placed at regular intervals along the noise bund and at the Super Pit Lookout. The signs may be used to display the following information: • Dangers associated with entering the open pit area; • Where the open pit can be safely viewed (at the Super Pit Lookout); and • Entering the open pit area without authorisation is prohibited." **Page 100:** Table 23 Rehabilitation Completion Criteria. Access to pit restricted by construction of: • Environmental Noise Bund (existing); • 6 foot ring lock fence (existing); • Conventional abandonment bund; and • Information signs.
Correspondence titled: "Kalgoorlie Gold Mines Pty Ltd - Golden Pike Mining Proposal" signed by Russell Cole, General Manager - KCGM dated 7 January 2010 and retained on Department of Mines and Petroleum File No. E0159/201001	Document Reviewed – No commitments relevant to Fimiston Pit.
"Letter of Variation to Consultative Environmental Review Mine and Waste Dumps - Fimiston August 1990"dated 6 April 2000 (NOI 3334) and retained on the Department of	**Page i:** "… backfilling of the Croesus Open Pt therefore facilitating early mine site rehabilitation and improving long term public safety"

REFERENCE DOCUMENT	COMMITMENT
Minerals and Energy File No. 2464/99	
"Notice of Intent - Fimiston Expansion 1994/95" dated 11 August 1994 and retained on Department of Minerals and Energy File No.2068/94	Document Reviewed – No commitments relevant to Fimiston Pit.
(MP Reg ID 67627) "Mining Proposal Western Wall Remediation" dated 9 May 2017 signed by Ian Butler and retained on Department of Mines and Petroleum File No. EARS-MP-67627 as Doc ID 4992171	**Page 22:** "The Wall Stability Monitoring and Management Plan implemented for the Golden Pike Cutback included the installation of a network of survey pillars adjacent to the pit crest, noise bund and Bypass Road as well as accessible positions within the Golden Pike Cutback area. This provided a monitoring baseline for the western wall of the Fimiston Open Pit and will continue to provide monitoring for the Life of Mine and post-closure timeframes." "Guidelines developed by the DMP (DOIR, 1997) require that upon abandonment, a bund or fence will be established around the mine workings to minimise inadvertent public access. The bund should be constructed outside the area designated as being susceptible to wall collapse, known as the 'zone of instability'. In the absence of any geotechnical investigations, the guidelines establish generic criteria for the location of the bund based on experience with abandoned pits in Western Australia. The DMP guidelines provide a comprehensive list of issues to be addressed in determining the location of the abandonment bund. These issues were addressed by BFP Consultants Pty Ltd (2005) when calculating the required location for an abandonment bund for the Golden Pike Cutback in relation to the zone of instability. As a result, the abandonment bund position recommended by BFP was closer to the pit edge than the position of the Environmental Noise Bund, on the basis that the fresh rock slopes are not at risk of overall failure and that location of the abandonment bund on the projection of 25º from the base of the weathered zone was suitable. The study concluded that the proposed location would meet the requirements of the DMP's guidelines and it was therefore determined that the Environmental Noise Bund would double as the mine abandonment bund for closure purposes. The proposed remedial cutback will not change the current zone of instability, as the remedial cutback will not change the current position of the fresh rock slopes. Therefore, the Environmental Noise Bund will remain as a suitable mine abandonment bund as detailed in KCGM's approved Mine Closure Plan (2015)."

1.2 Legal Obligations Register: Fimiston Waste Rock Dumps

1.2.1 Tenement Conditions

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
All	Various	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: •2018
Northern	M26/383 (40)	The integrity and long term use of the Bulong Road (road no. 5005) and Black Street (road no. 5040) and associated road reserves to be preserved at all times. The final toe of the landform and all associated earthworks shall be a minimum of 40m from the edge of the road reserve. Suitable cut-off drains being constructed within the boundary of the waste dump to prevent water or sediment discharging onto the road or road reserve.
Northern	M26/383 (41)	Rehabilitation of the waste dump to include revegetation and/or suitable dust suppressant treatments. As well as minimisation of dust, the rehabilitation works should also take into consideration the aesthetics of the final surface treatment and its impact on the community.
Northern	M26/383 (42)	The lessee submitting to Director, Environment Division ("the Director") additional detailed landform design and rehabilitation prescriptions for the northern waste dump by 30 June 2010 of an acceptable standard. The lessee submitting to the Director further details as required by him within specified timelines detailing any outstanding aspects identified by the Director.
Northern & North Eastern	M26/383 (13) G26/160 (8)	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.
Northern & North Eastern	M26/383 (18)	All ore stockpile areas and roads constructed in the course of mining being left level and rehabilitated with trees or natural scrub to the satisfaction of the Director, Environment Division DOIR.
Northern & North Eastern	M26/383 (15) G26/160 (12)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Director, Environment Division, Department of Industry and Resources; or

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
		On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMIRS.
North Eastern	G26/160 (10)	The Lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.
North Eastern	G26/160 (11)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.
North Eastern	G26/160 (14)	All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, DMIRS
Oroya	G26/8 (7) M26/39 (10) M26/83 (4 & 18) M26/86 (19) M26/120 (16) M26/155 (5 & 14) M26/294 (18) M26/405 (25)	All topsoil being removed ahead of mining operations and stockpiled for replacement in accordance with the directions of the District Mining Engineer; or All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progress; or All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.
Oroya	G26/8 (8 & 10) M26/155 (15 & 17) M26/120 (17 & 19) M26/294 (19)	At the completion of operations, or progressively where possible all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer; or At the completion of operations, or progressively where possible all access roads, ore stockpile areas and other disturbed areas being covered with a layer of waste soil, re-spread with topsoil, deep ripped and revegetated to the satisfaction of the Regional Mining Engineer or his nominee; or

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
		At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.
Oroya	M26/120 (12)	Except with the approval of Council, all mining, excavations or drilling operations being backfilled and the ground reinstated and revegetated at the completion of operations to the satisfaction of Council.
Oroya	M26/155 (10)	All mining, excavations or drilling operations being backfilled and the ground reinstated and revegetated at the completion of operations to the satisfaction of the Shire of Boulder.
Oroya	M26/86 (32)	Upon discontinuation of use, or abandonment, the lessee to flush each vat, if necessary with a suitable oxidising agent, such that subsequent testing confirms the absence of free cyanide within the vat leach dam.
Oroya	G26/8 (19) M26/86 M26/405 (39)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
Oroya & Trafalgar	M26/83(12)	Such further reasonable conditions as may from time to time be imposed by the Minister for Minerals and Energy for preventing, reducing or making good injury to the surface of the land.
Oroya & Trafalgar	G26/9 (16) M26/39 (13) M26/78 (24) M26/83 (22) M26/86 (38) M26/95 (35) M26/267 (26) M26/268 (21) M26/294 (24)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
	M26/326 (26) M26/518 (16)	
Oroya & Trafalgar	M26/39 (15) M26/83 (24)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
Oroya & Trafalgar	G26/8 (20) G26/9 (18) M26/39 (14) M26/83 (23) M26/95 (36) M26/155 (24) M26/267 (27) M26/268 (22) M26/405 (35) M26/518 (17) M26/748 (18) M26/800 (14)	Placement of waste material must be such that pit wall subsidence and zone of instability will not impact upon the final footprint after rehabilitation; or Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability, to the satisfaction of the Executive Director, Environment Division, DMIRS.
Oroya & Trafalgar	M26/39 (12) M26/268 (20) M26/294 (28) M26/448 (23) M26/518 (15)	The lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
Trafalgar	G26/9 (8) M26/78 (2 & 11) M26/81 (15) M26/83 (4) M26/86 (19) M26/95 (21) M26/267 (20) M26/268 (13) M26/326 (17) M26/373 (12) M26/377 (14) M26/405 (25) M26/448 (14) M26/518 (13)	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled for later respreading or immediately respread as rehabilitation progresses; or All topsoil being removed ahead of mining operations and stockpiled for replacement in accordance with the directions of the Environmental Officer, Department of Industry and Resources; or All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.
Trafalgar	M26/78 (12, 14 & 20) M26/81 (16 & 21) M26/86 (20, 22 & 37) M26/95 (22, 24 & 37) M26/267 (22, 31 & 28) M26/268 (16)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources DOIR; or At the completion of operations, or progressively where possible, noise bund outslopes being battered down, covered with topsoil, deep ripped on the contour and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources; or At the completion of operations or progressively where possible, waste dump outslopes being battered down, covered with topsoil, deep ripped on the contour and revegetated with local native grasses, shrubs and trees to form a safe, stable landform to the satisfaction of the Environmental Officer, Department of Industry and Resources; or On the completion of operations or progressively where possible, all waste dumps, tailings storage facilities,

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
	G26/9 (9 & 11) M26/326 (18 & 20) M26/373 (13, 15 & 22) M26/377 (12) M26/405 (28) M26/448 (15, 17 & 26) M26/518 (18)	stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP; or At the completion of operation all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.
Trafalgar	M26/78 (21) M26/268 (19) M26/326 (23)	The lessee submitting to Director, Environment Division ("the Director") a Mine Closure Plan (MCP) by 30 April 2010 of an acceptable standard and consistent with the ANZMEC.MCA guidelines "Strategic Framework on Mine Closure" 2000, including closure and rehabilitation cost estimates; and a Rehabilitation Management Plan (RMP) by 31 January 2008 of an acceptable standard, with auditable time lines of progressive rehabilitation, detailing landform design, waste characterisation and vegetation/rehabilitation outcomes. The lessee submitting to the Director further details as required by him within specified timelines detailing any outstanding aspects of the MCP and/or RMP identified by the Director.
Trafalgar	M26/78 (19) M26/78 (25) M26/81 (20) M26/95 (38) M26/326 (27) M26/373 (21) M26/448 (25)	Placement of waste material must be such that pit wall subsidence and zone of instability will not impact upon the final footprint after rehabilitation; or Placement of noise bund must be such that the final footprint after rehabilitation will not be impacted on by pit wall subsidence and zone of instability.
Trafalgar	M26/86 (32)	Upon discontinuation of use, or abandonment, the lessee to flush each vat, if necessary with a suitable oxidising agent, such that subsequent testing confirms the absence of free cyanide within the vat leach dam.

WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
Environmental Noise Bund (Croesus Noise Bund)	M26/359 (24)	The lessee diverting stormwater runoff away from areas adjacent to waste management facilities to minimise the threat of accidental loss of stored matter due to flooding or erosion.
Environmental Noise Bund (Croesus Noise Bund)	M26/359 (16)	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.
Environmental Noise Bund (Croesus Noise Bund)	M26/359 (18)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources DOIR.
Environmental Noise Bund (Croesus Noise Bund)	M26/46(24) M26/359 (24)	The lessee diverting stormwater runoff away from areas adjacent to waste management facilities to minimise the threat of accidental loss of stored matter due to flooding or erosion.
Environmental Noise Bund (Croesus Noise Bund)	M26/46 (27)	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability.
Environmental Noise Bund (Croesus Noise Bund)	M26/46 (28)	On the completion of operations or progressively where possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
Environmental Noise Bund	M26/46(15)	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or

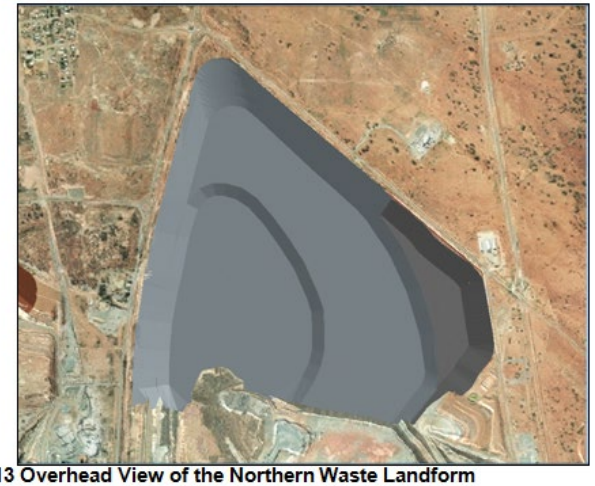
WASTE DUMP	TENEMENT (CONDITION NUMBER)	REQUIREMENT
(Golden Pike Noise Bund)	M26/78 (11) M26/95 (21) M26/405 (25)	immediately respread as rehabilitation progresses; or All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.
Environmental Noise Bund (Golden Pike Noise Bund)	M26/95 (24) M26/359 (18) M26/405 (28)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources DOIR.
Environmental Noise Bund (Golden Pike Noise Bund)	M26/46 (28) M26/95 (37) M26/359 (30) M26/405 (39)	On the completion of operations or progressively where possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
Environmental Noise Bund (Golden Pike Noise Bund)	M26/78 (19) M26/78 (25) M26/95 (38) M29/359 (29) M26/405 (35)	Placement of waste material must be such that pit wall subsidence and zone of instability will not impact upon the final footprint after rehabilitation; or Placement of Noise Bund must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence and zone of instability.
Environmental Noise Bund (Southern Noise Bund)	G26/9 (11)	At the completion of operations, or progressively where possible, noise bund outslopes being battered down, covered with topsoil, deep ripped on the contour and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources

1.2.2 Commitments in Approval Documents

REFERENCE	COMMITMENT
All	
Ministerial Statement 188	"3. The proponent shall within 12 months of the date of this statement, prepare and subsequently implement brief annual rehabilitation plans for the Fimiston operations to the satisfaction of the Department of Mines on advice from the Golden Mile Mining Development Planning Committee." "8. "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 Environmental Protection Authority. 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 Golden Mile Mining Development Planning Committee." **Proponents Commitments 7:** "KCGM will implement a progressive rehabilitation programme as outlined in section 4.3 as agreed with the EPA in consultation with the Department of Mines."
Ministerial Statement 782	**Condition 11-2:** "in the preparation of the Rehabilitation and Closure Management Plan … the proponent shall meet the requirements of the following agencies": 3. Department of Mines and Petroleum (DMP): a. final form of landforms and voids; b. the proposed land use for the mine site post mining operations determined after consultation with relevant stakeholders… d. long-term management of ground and surface water systems affected by mining operations; g. a detailed Rehabilitation and Revegetation program which includes local vegetation, performance criteria and a timetable to be met… i. post-closure maintenance and monitoring; and j. contingency plan for a care and maintenance phase 4. Department of Environment Regulation (DER):and Department of Parks and Wildlife (DPAW): a. long-term management of ground and surface water systems affected by mining operations; b. detailed Rehabilitation and Revegetation program which includes local vegetation, performance criteria and a timetable to be met…

REFERENCE	COMMITMENT
	d. post-closure maintenance and monitoring. 5. Department of Planning and Infrastructure (DPI), Western Australian Planning Commission (WAPC) and City of Kalgoorlie-Boulder (CKB); a. final form of landforms and voids; b. the proposed land use for the mine site post mining operations determined after consultation with relevant stakeholders; 6. Department of Water (DoW): a. long-term management of ground and surface water systems affected by mining operations. **Condition 11-3 (Rehabilitation and Closure Management Plan), and an amendment: "**KCGM is required to "review the Rehabilitation and Closure Management Plan … every three years, and shall amend the Plan as required in consultation with [the] agencies … to the requirement of the Minister for the Environment on advice of the relevant agencies …"
(MP Reg ID 69903) "Mining Proposal - Version 2" dated 20 October 2017 signed by Cecile Thaxter and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-69903 as Doc ID 5342316	**Page 56:** "…the proposed new rehabilitation design is the addition of rocky bands (10 – 15 m wide depending on soil erodibility characteristics for the specific WRD, materials used for rehabilitation and the height of the WRD lift) to control erosion, and utilising a high percentage rock cover (approximately 20 - 30% rock on the surface, with particle size greater than 20 mm and excluding boulders)."

<table>
<tr><th>REFERENCE</th><th>COMMITMENT</th></tr>
<tr><td></td><td>
Table 10: Rehabilitation Activities for Waste Rock Dumps
<table>
<tr><th>DOMAIN</th><th>FEATURE</th><th>APPROACH</th></tr>
<tr><td>Waste Rock Dumps</td><td>Trafalgar,
Oroya,
Northern,
North Eastern,
Environmental Noise Bund</td><td>• Implement the Visual Amenity Concept;
• Encapsulation of historic TSFs and TSF footprints that are within the waste dump footprint;
• Encapsulation of any dispersive oxide material;
• Conduct progressive rehabilitation on available areas.
For new landforms progressive rehabilitation:
• Profile outer batters of landform to reduce long term erosion and promote stability;
• Construction of robust crest bunds;
• Where appropriate, profile upper surface for water control;
• Cover outer surface with appropriate rehabilitation materials if available; and
• Cross ripping to ensure correct rock cover on surface, and seed with native species of local provenance.
For existing landforms/rehabilitation:
• Specifications in alignment with original approvals.</td></tr>
</table>
</td></tr>
<tr><td colspan="2">Northern WRD</td></tr>
<tr><td>Correspondence titled Kalgoorlie Gold Mines Pty Ltd - Golden Pike Mining Proposal signed by Russell Cole, General Manager KCGM dated 7 January 2010</td><td>“KCGM commits to undertaking rehabilitation of the Northern waste rock landform in accordance with the prescriptions detailed in the PER, and associated documentation (e.g. Rehabilitation Management Plans) and in accordance with relevant tenement conditions. KCGM understands that should alternative rehabilitation techniques wish to be introduced in the future, appropriate stakeholder consultation will need to occur.”</td></tr>
<tr><td>Mining Proposal Resubmission Fimiston Gold Mine Operations Extension (Stage 3) -</td><td>Page viii: “The waste rock landform will be designed … by:
Managing materials with adverse properties;
Minimising long term erosion (and resulting generation of sediment);</td></tr>
</table>

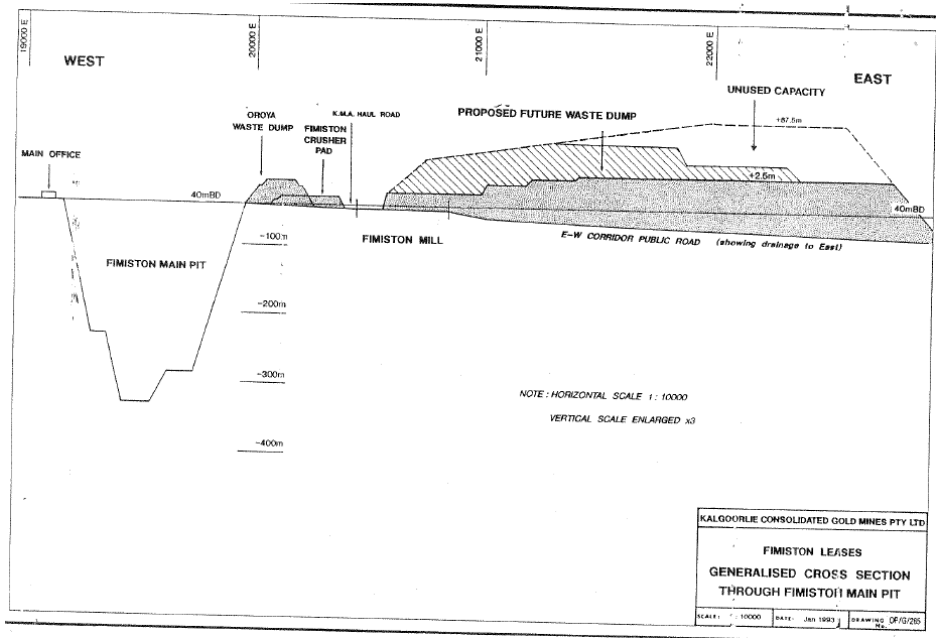
REFERENCE	COMMITMENT
Golden Pike Cutback and Northern Waste Landform (REG ID: 24671) dated 3 December 2009 signed by Russell Cole, General Manager	Maximising long term stability; Managing the erosive potential of surface drainage; and Maximising the beneficial use of benign materials." To maximise vegetation growth on those areas where revegetation is designated the following management measures will be implemented by KCGM: Seeding disturbed areas with local provenance species of the goldfields region; Conducting monitoring to measure progress of the rehabilitation and identify if further work is required; and Rehabilitating waste landforms as soon as practicable. Planting of seedlings will also be undertaken around the toe of the Northern Waste Landform to minimise the visual impact as soon as possible and to promote rapid revegetation of the area." **Page 35:**  Figure 13 Overhead View of the Northern Waste Landform  Figure 14 Aerial View of the Northern Waste Landform **Page 36 & 37 (modified):**

REFERENCE	COMMITMENT

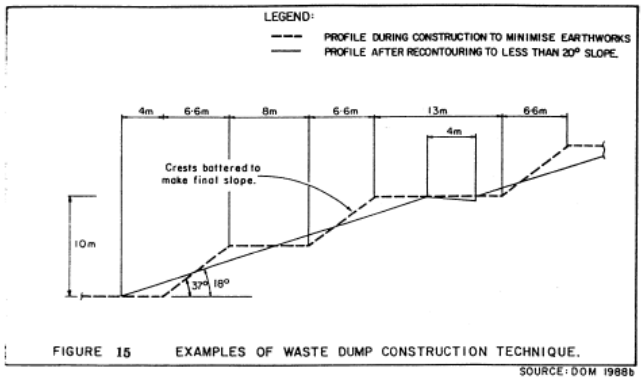
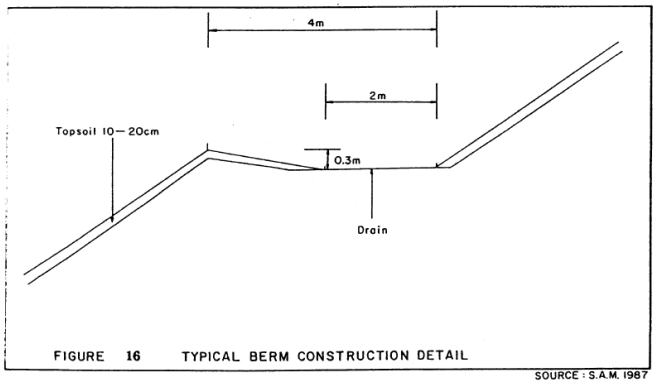
Information in PER	Design in Mining Proposal
The northwest waste rock landforms will cover approximately 115ha and be constructed to a maximum height of 100m.	The footprint of the Northern Waste Landform is 79ha. The height of the waste landform proposed within this Mining Proposal is 60m.
Waste rock landforms will be stable and non-eroding and constructed to comply with the standard height restrictions applicable.	The Northern Waste Landform has been designed to minimise erosion and be stable. The Northern Waste Landform is proposed to be constructed to a height of 60m, which complies with the standard height restrictions.
KCGM undertakes continual review and optimisation of waste rock dumping plans.	The design for the waste landform included in this Mining Proposal is based on ongoing review and optimisation of the design.
KCGM continues to work on designing the final form of waste rock landforms to ensure that where possible they are integrated into the landscape.	The design for the waste landform included in this Mining Proposal has been designed to blend in with the existing waste landforms and the Fimiston I TSF. The height of the waste landform has also been decreased from the 100m included in the PER to minimise the visual impact of the landform as viewed from the City of Kalgoorlie-Boulder.
The key objective of rehabilitation at KCGM is to ensure that decommissioned sites are left in a safe and stable condition after taking into account beneficial uses of the site and the surrounding land.	The Northern Waste Landform has been designed to minimise erosion in order to create a safe and stable landform.
Waste rock landforms are created and shaped to final designs by adhering to specifications to reduce erosion that may affect long-term stability and integrity of the landforms.	The Northern Waste Landform has been designed to reduce erosion. The waste landform will be constructed in adherence to the design specifications.
Waste rock landforms are generally built in 20m high lifts with a wide berm between the lifts and are designed to be geotechnically stable.	The Northern Waste Landform will be constructed in 20m high lifts. A berm of width 30m will be constructed between each lift to contain surface water runoff and sediment generated from the upstream batter. The proposed concave slope with wide berm design is designed to be geotechnically stable.
Slopes are battered and normally angled between 14° and 20°.	The batters of the Northern Waste Landform will be angled to approximately 25° (top of concave slope) and 15° (bottom of concave slope). With the inclusion of wide berms the overall slope angles will be less than 14°.
The control of erosion and water run off is an important factor in rehabilitation.	The Northern Waste Landform design includes wide berms with bunds to manage water runoff. Erosion is managed through construction of concave slopes.
A berm will be installed where possible to "break" the slope when the bund is more than 15m vertical in height. These will be backsloping to control runoff and promote infiltration.	A wide backsloping berm with a crest bund is being constructed at each lift which has been designed to manage the surface water runoff from the upstream batter. As these berms have been designed to control the runoff from the 20m high batter there is no need to install extra berms at 15m intervals.
Installation of bunds and flat areas and berms (perpendicular to the contour to compartmentalise the berm) to promote water storage and infiltration (if required).	A crest bund will be constructed on the berms installed between the 20m high lifts to manage surface water.

Page 38: "After rehabilitation earthworks the final outslope of the Northern Waste Landform will consist of:
three 20m high lifts with dual angle concave slopes with angles of 25° (top) and 15° (bottom);
three 30m wide berms with crest bunds; and

REFERENCE	COMMITMENT
	deep ripping of the slope surface. "…A berm will be constructed between each of the lifts. The berm widths will be designed to provide water retention and infiltration… Bunds will be constructed at the crest of each batter… A bund will be also constructed around the crest of the top surface of the waste rock landform. The bund will be designed to prevent any excess water overtopping the top surface of the landform during high rainfall events." **Page 56:** "The design of the Northern Waste Landform includes the capping of the Old Croesus, Herliette and Fimiston I TSFs with waste rock." **Page 79:** "Rehabilitation of waste landforms and disturbed areas as soon as practicable." "Closure criteria for the project will be developed during consultation with regulatory and community stakeholders and incorporated in the Closure and Reclamation Plan."
North Eastern WRD	
Letter Minor Change to Waste Rock Dump Footprint Fimiston I – North East Waste Rock Dump dated 19 December 2000 signed by John Shipp, General Manager	"KCGM is currently stripping topsoil and preparing immediately to the south of this landfill in an area already approved for waste rock dumping. An ideal opportunity exists for us to make a minor extension to the approved waste rock dump footprint to cover this landfill and also to use some of the topsoil in immediate rehabilitation of the site. Further the rock armouring of this site will provide a more secure rehabilitation face in this south east corner of the Fimiston I tailings storage facility."
"Request for Amendment - Fimiston Waste Dump Boundaries" dated 5 March 1996, signed by Mr A King - Manager Mining, KCGM	Documents unable to be reviewed.
Notice of Intent - Fimiston Expansion 1994/95" dated 11 August 1994 and	Document reviewed. No additional closure commitments relevant to the North Eastern WRD.
"Letter of Intent - Tenement Mining Lease 26/383" dated 25 August 1994 and retained on Department of	Documents unable to be reviewed.

REFERENCE	COMMITMENT
Minerals and Energy File No. 2068/94	
Letter dated 3 February 1993 both titled 'Consultative Environmental Review - Request for Amendment' signed by A O'Neil Manager - Mining (KCGM)	Change to cross section surface of waste dumps to align with new OLS after changes to airport runway as following on from letter dated 18 November 1992. 
Letter dated 18 November 1992 titled 'Consultative Environmental Review – Request for Amendment' signed by A O'Neil Manager - Mining (KCGM)	Request to change to cross section surface of waste dumps to align with new OLS after changes to airport runway. No other closure commitments.
Consultative Environmental Review Mine and Waste	**Page 4:** "KCGM will implement a progressive rehabilitation programme as outlined in section 4.3 as agreed with the EPA in consultation with the Department of Mines."

REFERENCE	COMMITMENT
Dumps - Fimiston - August 1990	**Page 17:** "This eastern creek line drains directly to Hannans Lake. The creek line has been recognised… as a natural constraint to the eastern extension of the Golden Mile waste dumps, and the planned waste dumps will not encroach upon this watercourse." **Page 35:** "The waste dumps have been located to ensure that the natural eastern drainage channel is not blocked or modified. With the development of the waste dumps and associated infrastructure, an artificial drainage system will be required to ensure that run-off from major rainfall events will not cause flooding in and around the dump area. The design of the dumps and associated drainage system will aim to maximise water harvesting and *in situ* recharge. Runoff from major storm event will be handled by a constructed drainage system. The system will incorporate sediment retention sumps with the aim of minimising the transport of sediment off-site." **Page 42:** "…[rehabilitation] objectives have been established: 1. Within the limit of practical landform constraints evaluate possible end land use options; 2. Minimise off-site environmental impacts; 3. Establish a soil profile which is appropriate for the proposed end land use; 4. Establish a stable landform which as far as possible is sympathetic to the regional landscape; 5. Consider incorporating micro-topographical modifications within the waste dumps design to aid in increasing the diversity and complexity of the vegetation and improving the potential for providing a greater range of habitats; 6. Design and establish a favourable on-site and off-site hydrology. 7. Ensure that an appropriate access system is maintained following the mining period. **Page 43:** "…the waste zone area [is restricted] to within approximately two kilometre arc east of the Fimiston plant…a maximum height restriction for the dumps has been imposed by the aviation safety requirements associated with the existing airport… These constraints restrict the final landform options to the development of large "mesa" or "table top" structures… Therefore the final landform of the waste dump… offers opportunities as a lookout, communication tower, or water reservoir site. Access will be maintained so that such end land use options are maintained. Across the major proportion of the dumps the initial goal will be revegetation, with the primary purpose of surface stabilisation. As far as practically possible, microtopographic modification will be incorporated into the final design…provision for dumping of sub-grade ore within 1000 metres of the Fimiston Plant has been made. Beyond that distance waste will be progressively dumped and the outer surfaces rehabilitated…" **Page 45:** "…waste dump management is to provide an end product which is stable, erosion free, aesthetically pleasing and has minimal site environmental impact." **Page 47:** "although the risk of [ARD] is considered to be low, KCGM will undertake an investigation of the geochemical characteristics of the waste. The factors to be investigated will include the total sulphur content and the form of sulphur present, the capacity of the fresh waste to neutralise acid, the solubility of the constituents in the waste under a range of pH conditions and the total elemental composition…If problems are predicted from the investigations, KCGM will incorporate containment measures within the waste dump

REFERENCE	COMMITMENT
	design, appropriate to ensure the integrity of the surrounding environment." "At present the design concepts for the waste dumps have been based on 20º interberm slopes to ensure that the total volume of waste can be accommodated... KCGM has assumed a long terms commitment to reduce slopes below 20º wherever practicable" **Page 48:** "A programme of investigation will be implemented to identify the most practical and effective use of materials available. This will involve an evaluation of topsoil availability, material handling/earthmoving sequences and methods and soil profile construction techniques utilising waste materials. Topsoils will be routinely stripped, used immediately as a cover on prepared slopes or stockpiled for future use. **Page 50:** "Revegetation of existing disturbed areas within the mining zone and buffer zone to be undertaken on an opportunistic basis" "Landscaping around the Fimiston Plant …. will involve the planting of a tree belt around the plant site" **Page 51 - 53:** "Batter to designed angle and develop berms at 10 metre vertical intervals for 20º slopes (Figure 15). The berms provide access and act as contour drains (Figure 16). Berm width should be four to five metres wide, sufficient to accommodate earthmoving equipment during topsoil spreading… berms will have surveyed slope of 0.5 per cent along their length and lead to vertical rock lined drains. Figure 16 shows a schematic cross section of berms."  FIGURE 15 EXAMPLES OF WASTE DUMP CONSTRUCTION TECHNIQUE. SOURCE: DOM 1988b  FIGURE 16 TYPICAL BERM CONSTRUCTION DETAIL SOURCE : S.A.M. 1987 "Vertical waterways should be constructed using competent rock capable of resisting erosion. The spacing… should be such that catchment areas do not exceed two hectares… distance between vertical drains should not normally exceed 300 metres apart. At the base of the vertical waterways, rockfilled, energy absorbing sediment traps of approximately 10 m diameter should be constructed. The sediment trap will flow out in a toe drain taking water off-site in major storm events. Figure 17 provides design details for these structures."

REFERENCE	COMMITMENT

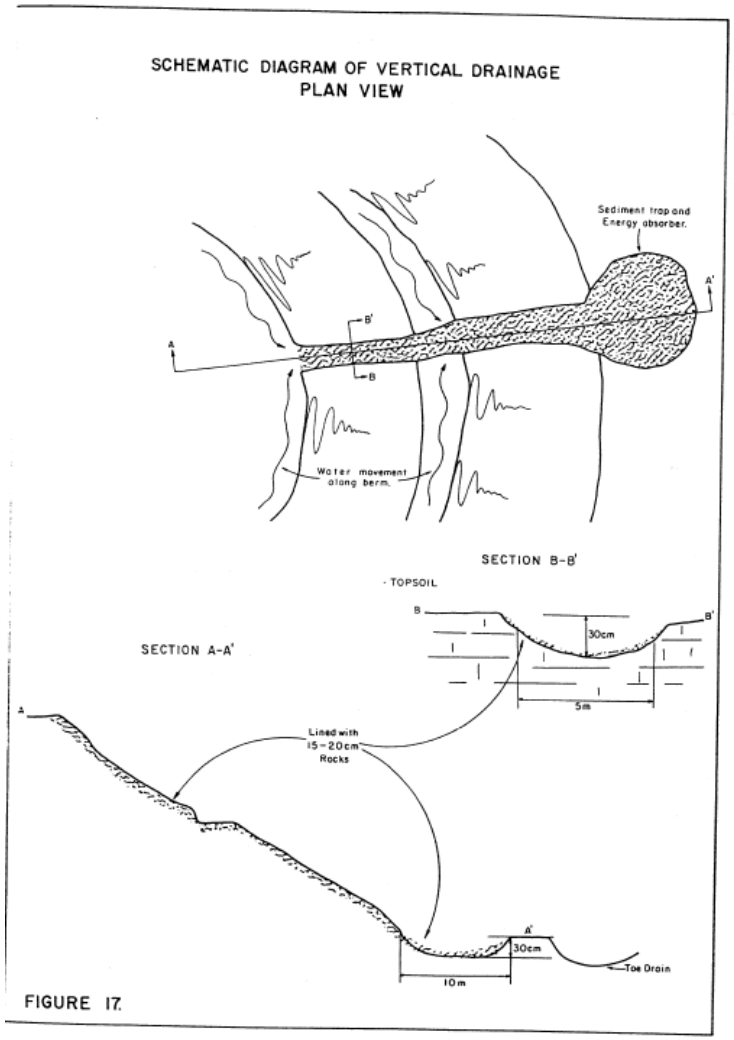


FIGURE 17.

REFERENCE	COMMITMENT
	“After battering of the slopes, approximately 50 cm of oxide waste material should be spread over the fresh rock” “Topsoil material should then be spread to a depth of 20 cm” “If available, light vegetation stripped prior to topsoil removal, bush litter, and road sweepings from Kalgoorlie-Boulder could be incorporated into the topsoil spreading programme” “Fertiliser - 400kg/ha of Agras Cu-Mo-Zn broadcast before deep ripping” “Deep ripping to a minimum of 0.75 m should be carried out on the contour. The ripping should be carried out at intervals of <2 m. Ripping should aim to key the topsoil, oxide waste and rock materials together. The final surface should have a rough texture and incorporate stony material.” “Seeding - 8 - 10 kg/ha of seed should be spread after the ripping programme. Seeding should be carried out before April each year. If fresh topsoil is available the rate of seed application could be reduced to 5 - 8 kg/ha.”
Retreatment of Croesus, Mt Trafalgar and Old Croesus Tailings Dumps- Notice of Intent dated 3 July 1998	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
Letters dated 7 July 1998 and 1 September 1998 signed by Resident Manager- Mr Phil Evers	Documents unable to be reviewed.
Letter re: CKGM Bore Replacement signed by P Rowe, Manager Mineral Processing KCGM (Oct 1995)	The CKGM bores sites will be rehabilitated to a standard satisfactory to the District Mining Engineer
Letter dated 3 February 1993 both titled 'Consultative Environmental Review - Request for Amendment' signed by A O'Neil Manager - Mining (KCGM)	Change to cross section surface of waste dumps to align with new OLS after changes to airport runway as following on from letter dated 18 November 1992

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	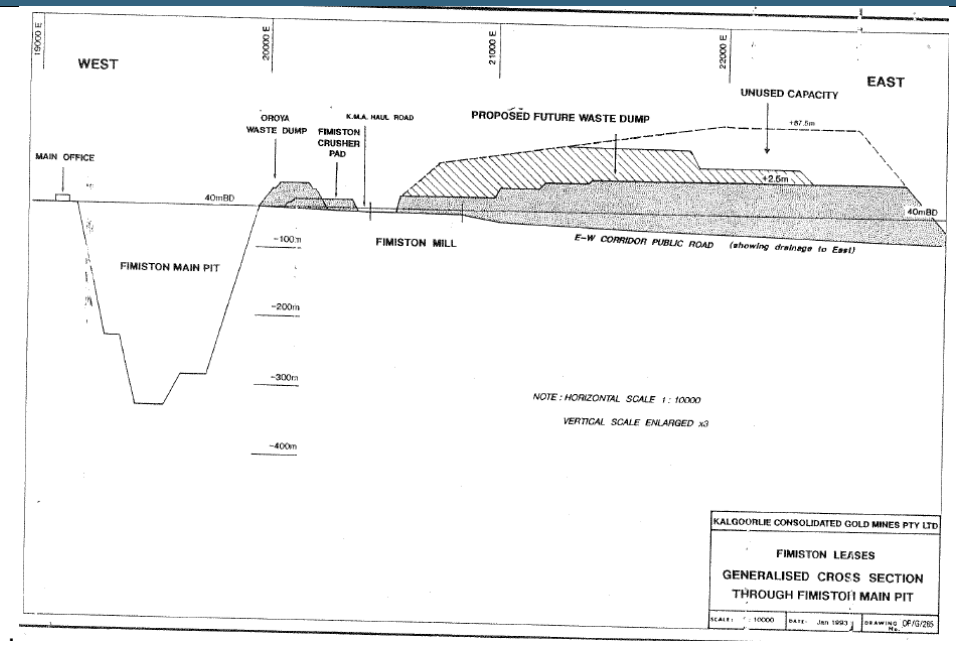
Letter dated 18 November 1992 titled 'Consultative Environmental Review – Request for Amendment' signed by A O'Neil Manager - Mining (KCGM)	Request to change to cross section surface of waste dumps to align with new OLS after changes to airport runway. No other closure commitments.
Consultative Environmental Review Mine and Waste Dumps - Fimiston - August 1990	**Page 4:** "KCGM will implement a progressive rehabilitation programme as outlined in section 4.3 as agreed with the EPA in consultation with the Department of Mines." **Page 17:** "This eastern creek line drains directly to Hannans Lake. The creek line has been recognised… as a natural constraint to the eastern extension of the Golden Mile waste dumps, and the planned waste dumps will not encroach upon this watercourse." **Page 35:** "The waste dumps have been located to ensure that the natural eastern drainage channel is not blocked or modified. With the development of the waste dumps and associated infrastructure, an artificial drainage system will be required to ensure that run-off from

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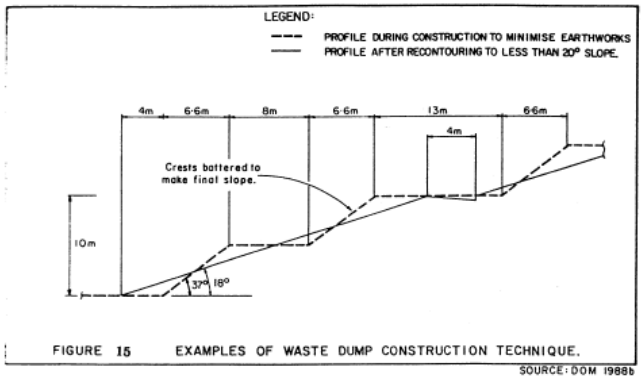
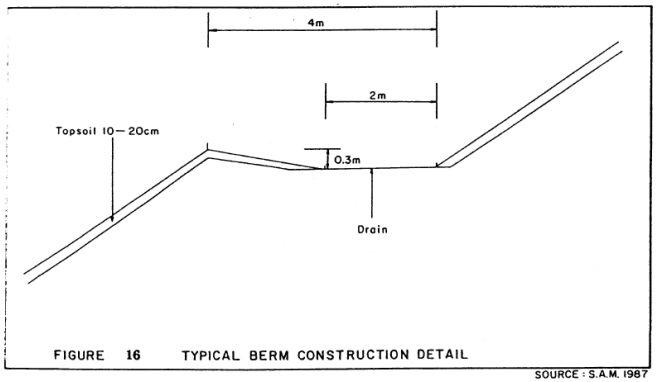
	involve an evaluation of topsoil availability, material handling/earthmoving sequences and methods and soil profile construction techniques utilising waste materials. Topsoils will be routinely stripped, used immediately as a cover on prepared slopes or stockpiled for future use. **Page 50:** "Revegetation of existing disturbed areas within the mining zone and buffer zone to be undertaken on an opportunistic basis" "Landscaping around the Fimiston Plant …. will involve the planting of a tree belt around the plant site" **Page 51 - 53:** "Batter to designed angle and develop berms at 10 metre vertical intervals for 20º slopes (Figure 15). The berms provide access and act as contour drains (Figure 16). Berm width should be four to five metres wide, sufficient to accommodate earthmoving equipment during topsoil spreading… berms will have surveyed slope of 0.5 per cent along their length and lead to vertical rock lined drains. Figure 16 shows a schematic cross section of berms."  FIGURE 15 EXAMPLES OF WASTE DUMP CONSTRUCTION TECHNIQUE. SOURCE: DOM 1988b  FIGURE 16 TYPICAL BERM CONSTRUCTION DETAIL SOURCE : S.A.M. 1987 "Vertical waterways should be constructed using competent rock capable of resisting erosion. The spacing… should be such that catchment areas do not exceed two hectares… distance between vertical drains should not normally exceed 300 metres apart. At the base of the vertical waterways, rockfilled, energy absorbing sediment traps of approximately 10 m diameter should be constructed. The sediment trap will flow out in a toe drain taking water off-site in major storm events. Figure 17 provides design details for these structures."

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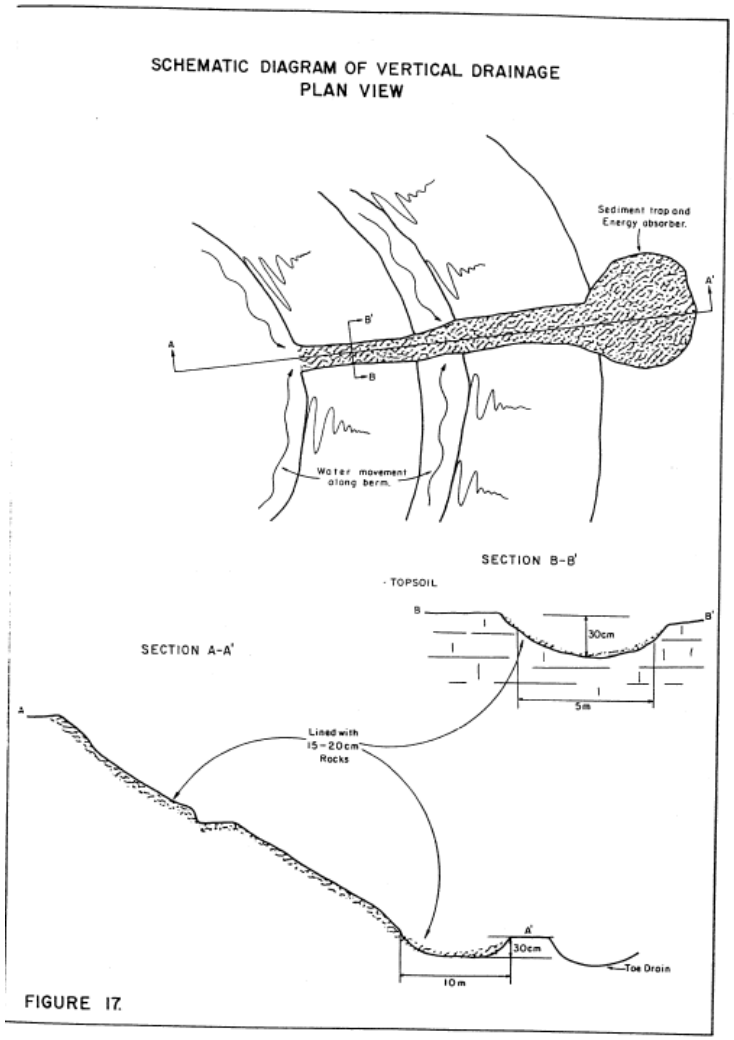


FIGURE 17.

REFERENCE	COMMITMENT
	“After battering of the slopes, approximately 50 cm of oxide waste material should be spread over the fresh rock” “Topsoil material should then be spread to a depth of 20 cm” “If available, light vegetation stripped prior to topsoil removal, bush litter, and road sweepings from Kalgoorlie-Boulder could be incorporated into the topsoil spreading programme” “Fertiliser - 400kg/ha of Agras Cu-Mo-Zn broadcast before deep ripping” “Deep ripping to a minimum of 0.75 m should be carried out on the contour. The ripping should be carried out at intervals of <2 m. Ripping should aim to key the topsoil, oxide waste and rock materials together. The final surface should have a rough texture and incorporate stony material.” “Seeding - 8 - 10 kg/ha of seed should be spread after the ripping programme. Seeding should be carried out before April each year. If fresh topsoil is available the rate of seed application could be reduced to 5 - 8 kg/ha.”
"Request for approval to Strip and Stockpile Topsoil" dated 1 August 1996 signed by Mr J Innes - Superintendent, Fimiston Open Pits	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
Notice of Intent - Sitewide Water Supply Rationalisation' dated September 1991 and retained on Mines Department File No. 1273/91	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
"KCGM Mining Proposal Resubmission Fimiston Gold Mine Operations Extension (Stage 3) - Golden Pike Cutback and Northern Waste Landform" (Reg ID 24671) dated 3 December 2009 signed by Russell Cole, General	Document reviewed. No additional closure commitments relevant to the Oroya WRD.

REFERENCE	COMMITMENT
Manager and retained on Department of Mines and Petroleum File No. E0159/201001	
Correspondence titled: "Kalgoorlie Gold Mines Pty Ltd - Golden Pike Mining Proposal" signed by Russell Cole, General Manager - KCGM dated 7 January 2010 and retained on Department of Mines and Petroleum File No. E0159/201001;	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
"Recommissioning of the Kaltails Tailings Storage Facility" (Reg ID 28110) dated 24 August 2010 signed by Russell Cole and retained on Department of Mines and Petroleum File No. E2561/200319;	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
(MP Reg ID 48329) "Addendum to Mining Proposal: Recommissioning of the Kaltails Tailings Storage Facility (Reg ID 28110) - minor infrastructure works - pipeline corridor" dated 5 June 2014 signed by Graeme Smith and retained on Department of	Document reviewed. No additional closure commitments relevant to the Oroya WRD.

REFERENCE	COMMITMENT
Mines and Petroleum File No. EARS-MP-48329 as Doc ID 2954613	
"Application for Oxide Waste Dumping on Mining Lease 26/405" dated 30 December 1993 and retained on Department of Minerals and Energy File No.2212/93;	Document unable to be reviewed.
"Installation of Security Fence and Track" dated 20 February 2003 (NOI 4203) signed by Mr Neil Rankine - Land Administrator and retained on Department of Mineral and Petroleum Resources File No. 5100/02.	Document unable to be reviewed. Unlikely to contain any additional closure commitments relevant to the Trafalgar WRD.
"Notice of Intent - Low Impact Mining Operation - Removal of Calcine Tailings on M26/405 (NOI 4719)" dated 29 June 2004 and signed by Cobb Johnston and retained on Department of Industry and Resources File No. 5168/02.	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
"Minor Southward Extension of Fimiston Open Pit Noise Bund - M26/405" dated 19 March	Document unable to be reviewed. Unlikely to contain any additional closure commitments relevant to the Trafalgar WRD.

REFERENCE	COMMITMENT
2003 signed by Mr Neil Rankine - Land Administrator (NOI 4240) and retained on Department of Industry and Resources File No. 2561/03.	
"Amendment to Low Impact Mining - Notice of Intent" dated 9 February 2004 and retained on Department of Industry and Resources File No. 4297/01.	Document reviewed. No additional closure commitments relevant to the Oroya WRD.
"Movement of 50,000 BCM's of Tailings Material" facsimile dated31 October 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on Department of Minerals and Energy File No. 2083/96;	Document unable to be reviewed. Unlikely to contain any additional closure commitments relevant to the Trafalgar WRD.
"Movement of 50,000 BCM's of Tailings Material" facsimile dated 4 November 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on Department of Minerals and Energy File No.	Document unable to be reviewed. Unlikely to contain any additional closure commitments relevant to the Trafalgar WRD.

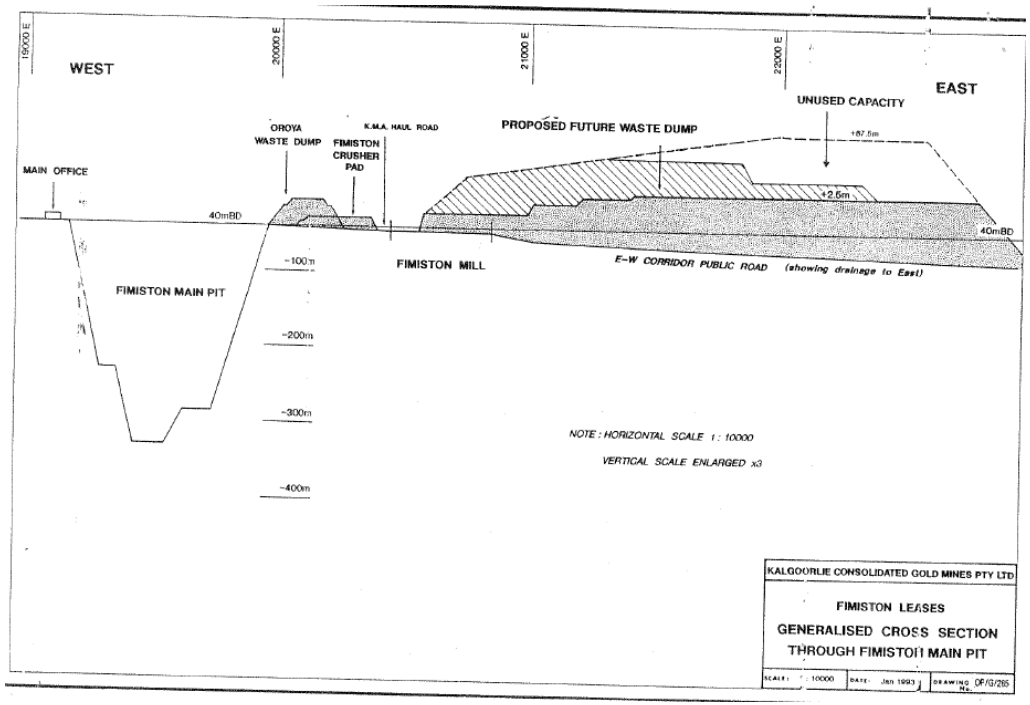
REFERENCE	COMMITMENT
2083/96.	
Trafalgar WRD	
"KCGM Mining Proposal Resubmission Fimiston Gold Mine Operations Extension (Stage 3) - Golden Pike Cutback and Northern Waste Landform" (Reg ID 24671) dated 3 December 2009 signed by Russell Cole, General Manager and retained on Department of Mines and Petroleum File No. E0159/201001	Document reviewed. No additional closure commitments relevant to the Trafalgar WRD.
Correspondence titled: "Kalgoorlie Gold Mines Pty Ltd - Golden Pike Mining Proposal" signed by Russell Cole, General Manager - KCGM dated 7 January 2010 and retained on Department of Mines and Petroleum File No. E0159/201001	Document reviewed. No additional closure commitments relevant to the Trafalgar WRD.
"Fimiston Stage II, Water Supply Development - Notice of Intent" dated February 1991 and retained on Department of Minerals and Energy File No. 1365/90;	Document reviewed. No additional closure commitments relevant to the Trafalgar WRD.

REFERENCE	COMMITMENT
Letter of Intent" dated 7 May 1992 and retained on Department of Minerals and Energy File No. 2001/93 and " Permission to Alter Approved KCGM Environmental Bund" dated 1 September 1992 and retained on Department of Minerals and Energy File No. 2174/92;	Documents unable to be reviewed.
"Chafers Shaft Dewatering" dated 23 April 1993 and retained on Department of Minerals and Energy File No. 2058/93.	Document unable to be reviewed.
"Application for Oxide Waste Dumping on Mining Lease 26/405" dated 30 December 1993 and retained on Department of Minerals and Energy File No.2212/93;	Document unable to be reviewed.
"Movement of 50,000 BCM's of Tailings Material" facsimile dated31 October 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on Department of Minerals and Energy File No. 2083/96; and	Documents unable to be reviewed. Unlikely to contain any additional closure commitments relevant to the Trafalgar WRD.

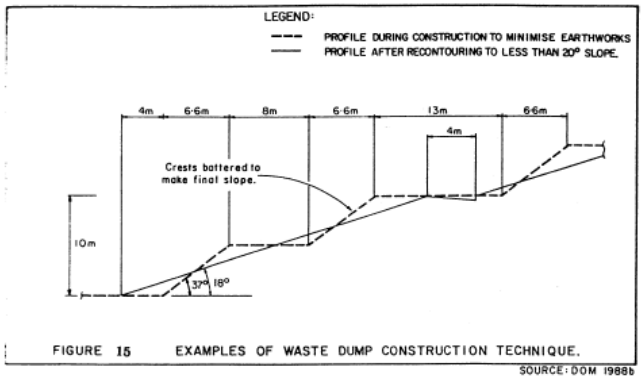
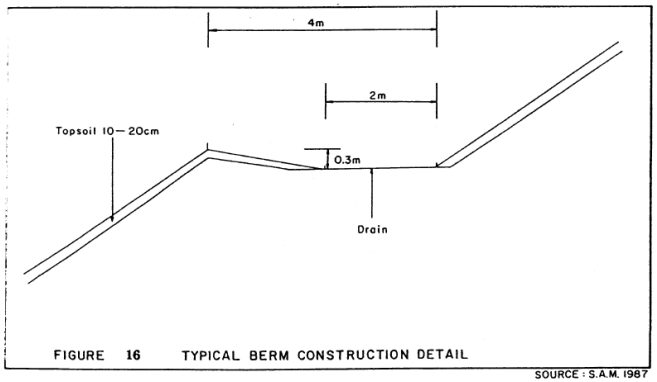
REFERENCE	COMMITMENT
"Movement of 50,000 BCM's of Tailings Material" facsimile dated 4 November 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on Department of Minerals and Energy File No. 2083/96.	
"Minor Southward Extension of Fimiston Open Pit Noise Bund - M26/405" dated 19 March 2003 signed by Mr Neil Rankine - Land Administrator (NOI 4240) and retained on Department of Industry and Resources File no. 2561/03.	Document unable to be reviewed. Unlikely to contain any additional closure commitments relevant to the Trafalgar WRD.
Letter of Variation to Consultative Environmental Review Mine and Waste Dumps - Fimiston August 1990, Southern Central Waste Rock Dump Extension KCGM signed by Cobb Johnston, General Manager dated January 2005	**Page ii:** "The vegetation surrounding the project area has been rehabilitated by KCGM to semi-mature (eight-year-old) Eucalypt open woodland. The lower (14°) slope of the project will support transitional Eucalypt/Acacia open woodland and the upper (20°) slope Acacia shrubland. The lower canopies will include a variety of annual and perennial shrubs and grass species." **Page iv:** "KCGM will rehabilitate and make safe areas involved in this operation… Rainfall will be managed by preparing rehabilitation sites so as to encourage water harvesting and infiltration." **Page 15:** "In rehabilitation areas potable water will be used." **Page 16:** "A native seed mix will be spread over the rehabilitation areas by hand. The seeding rate will be 10 kg/ha and supplemented by 100kg/ha of Agras® copper zinc moly fertiliser. **Page 20:** "Where possible any topsoil or suitable growth media will be removed from the site and stockpiled for later use. The successful rehabilitation of the site will result in a natural looking landform… The flat areas at the toe of this landform will be revegetated to a Eucalypt/Chenopod open woodland, typical of the Kalgoorlie region… To achieve this, the slope of the hill will have a final face maximum

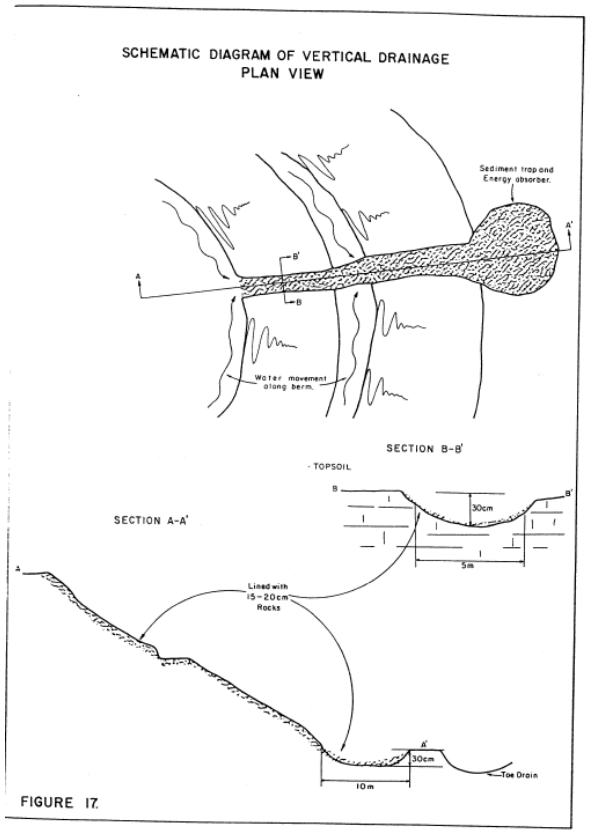
REFERENCE	COMMITMENT
	angle of 20°. The final face will have appropriate berms to consolidate the wall and to help in the success of the rehabilitation. Trees will be planted onto the site and target areas will be those where water ponding is likely. For example; the bases of slopes, flat areas, areas of change in slope angle, contour banks and crest and toe drains. Depending on seedling availability the species used will be endemic to the region…" "To minimise erosion and weathering on outer faces of the waste rock dump a number of water management strategies will be implemented. The face will be battered to a maximum of 20° to mimic the topography of greenstone hills that are found in the region. A series of contour drains will be installed on the face. These will be surveyed in to minimise operator error in the construction phase. These structures will not only provide effective water management but will also harvest and hold water as run-on areas, which will substantially benefit vegetative growth. A berm will be installed between all changes of slope and a significant crest drain and toe drain will be installed to minimise sheet water flows. All ripping on site will be undertaken to a nominal depth of 1m. Winged ripping tynes will further enhance soil mounding, to control runoff and maintain moisture along the contour."
Rehabilitation of the Southern Waste Rock Dump Footprint signed by Cobb Johnston, General Manager, KCGM dated 22 April 2005 (NOI 4901)	"KCGM reconfirms our commitment to progressive and timely rehabilitation of available areas with a focus on waste rock dumps."
Letter of Variation to Consultative Environmental Review Mine and Waste Dumps - Fimiston August 1990 - Southern Expansion of the Environmental Noise Bund and Waste Rock Dump (NOI 4582) dated February 2004 corporately endorsed by Mr Russell Cole	**Page vi:** "KCGM will rehabilitate and make safe areas involved in this operation… Rainfall will be managed by preparing rehabilitation sites so as to encourage water harvesting and infiltration." **Page 18:** "In rehabilitation areas potable water will be used…a native seed mix will be spread over the rehabilitation areas by hand… 10kg/ha and supplemented by 100kg/ha of Agras copper zinc moly fertiliser… Trees will also be hand planted and target areas will be those where water ponding is likely." **Page 22 *Post Mining Landuse*:** "The slopes of the project area will support Eucalypt/Acacia open woodland and Acacia shrubland. The lower canopies will include a variety of annual and perennial shrubs and grass species. Community groups and tour operators may be able to use the area as an elevated viewpoint for mining and rehabilitation in the area."

REFERENCE	COMMITMENT
Minor Variation to KCGM Current Mining Approvals - Trafalgar Area - M26/405, M26/83 and M26/267 (NOI 3675) dated 13 March 2001 and signed by Mr Gary Lye, Project Manager - Strategic Mine Development, Kalgoorlie Consolidated Gold mines	Document unable to be reviewed.
Retreatment of Croesus and Mt Trafalgar Tailings Dumps – Plan of Operations dated July 1998	**Page 5-6 (Associated Agreement):** In relation to land rehabilitation: • rehabilitated areas disturbed by its Operations in accordance with KCGM's rehabilitation practices for disturbed, but not salt affect, lands; • rehabilitate areas subject to storage or recovery of saline tailings to the most developed standard used by Kaltails for this type of landform. Where KCGM has indicated that land of this type may be used for dumping of waste rock (within a future period of not more than 5 years hence), Kaltails may be exempted from this rehabilitation requirement. This shall only apply if this affected landform is not impacting on other areas by erosion or other mechanisms; and • rehabilitate land outside its operational areas that have been affected by deposition of saline-water spray. This rehabilitation shall, where practicable, or to the judgement of KCGM be to reinstate existing vegetation or be to the standard already rehabilitated by KCGM.
Notice of Intent: Relocation of Dump 19 Nickel Tailings dated April 1997	**Page 6:"**The dump is expected to be covered by waste rock in 1998 and will be rehabilitated by KCGM in accordance with their existing approvals"
Letter re: Request for Approval to Strip and Stockpile Topsoil signed by J Innes, Superintendent – Fimiston Open Pits KCGM (Aug 1996)	"Liaison with CALM will result in the salvage of any standing timber. All remaining vegetation will be collected and stored with the topsoil. Topsoil collection will be to a depth of 40cm.The stockpile location indicated on the attached plan lies beyond planned dumping zones."
Letter: Request for	"The south eastern final face of the dump will be made available for progressive rehabilitation and the selective dumping of oxide waste will

REFERENCE	COMMITMENT
Modification of South Eastern Waste Dump Footprint signed by J Innes, Superintendent – Fimiston Open Pits KCGM (July 1996)	be utilised for this” “The appearance and drainage of the vat leach operations will be vastly improved”
Letter dated 3 February 1993 both titled 'Consultative Environmental Review - Request for Amendment' signed by A O'Neil Manager - Mining (KCGM)	Change to cross section surface of waste dumps to align with new OLS after changes to airport runway as following on from letter dated 18 November 1992. 
Letter dated 18 November 1992 titled ‘Consultative Environmental Review –	Change to height of waste dumps to align with new OLS after changes to airport runway. No additional closure commitments.

REFERENCE	COMMITMENT
Request for Amendment' signed by A O'Neil Manager - Mining (KCGM)	
Consultative Environmental Review Mine and Waste Dumps - Fimiston - August 1990	**Page 4:** "KCGM will implement a progressive rehabilitation programme as outlined in section 4.3 as agreed with the EPA in consultation with the Department of Mines." **Page 17:** "This eastern creek line drains directly to Hannans Lake. The creek line has been recognised… as a natural constraint to the eastern extension of the Golden Mile waste dumps, and the planned waste dumps will not encroach upon this watercourse." **Page 35:** "The waste dumps have been located to ensure that the natural eastern drainage channel is not blocked or modified. With the development of the waste dumps and associated infrastructure, an artificial drainage system will be required to ensure that run-off from major rainfall events will not cause flooding in and around the dump area. The design of the dumps and associated drainage system will aim to maximise water harvesting and *in situ* recharge. Runoff from major storm event will be handled by a constructed drainage system. The system will incorporate sediment retention sumps with the aim of minimising the transport of sediment off-site." **Page 42:** "…[rehabilitation] objectives have been established: • Within the limit of practical landform constraints evaluate possible end land use options; • Minimise off-site environmental impacts; • Establish a soil profile which is appropriate for the proposed end land use; • Establish a stable landform which as far as possible is sympathetic to the regional landscape; • Consider incorporating micro-topographical modifications within the waste dumps design to aid in increasing the diversity and complexity of the vegetation and improving the potential for providing a greater range of habitats; • Design and establish a favourable on-site and off-site hydrology. • Ensure that an appropriate access system is maintained following the mining period. **Page 43:** "…the waste zone area [is restricted] to within approximately two kilometre arc east of the Fimiston plant…a maximum height restriction for the dumps has been imposed by the aviation safety requirements associated with the existing airport… These constraints restrict the final landform options to the development of large "mesa" or "table top" structures… Therefore the final landform of the waste dump… offers opportunities as a lookout, communication tower, or water reservoir site. Access will be maintained so that such end land use options are maintained. Across the major proportion of the dumps the initial goal will be revegetation, with the primary purpose of surface stabilisation. As far as practically possible, microtopographic modification will be incorporated into the final design…provision for dumping of sub-grade ore within 1000 metres of the Fimiston Plant has been made. Beyond that distance waste will be progressively dumped and the outer surfaces rehabilitated…" **Page 45:** "…waste dump management is to provide an end product which is stable, erosion free, aesthetically pleasing and has minimal

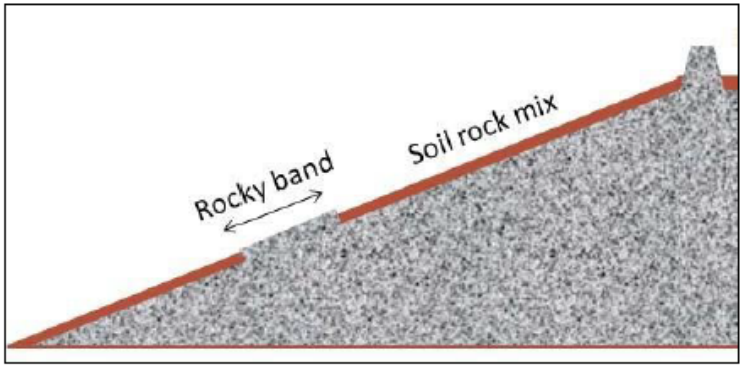
REFERENCE	COMMITMENT
	site environmental impact." **Page 47:** "although the risk of [ARD] is considered to be low, KCGM will undertake an investigation of the geochemical characteristics of the waste. The factors to be investigated will include the total sulphur content and the form of sulphur present, the capacity of the fresh waste to neutralise acid, the solubility of the constituents in the waste under a range of pH conditions and the total elemental composition…If problems are predicted from the investigations, KCGM will incorporate containment measures within the waste dump design, appropriate to ensure the integrity of the surrounding environment." "At present the design concepts for the waste dumps have been based on 20º interberm slopes to ensure that the total volume of waste can be accommodated... KCGM has assumed a long terms commitment to reduce slopes below 20º wherever practicable" **Page 48:** "A programme of investigation will be implemented to identify the most practical and effective use of materials available. This will involve an evaluation of topsoil availability, material handling/earthmoving sequences and methods and soil profile construction techniques utilising waste materials. Topsoils will be routinely stripped, used immediately as a cover on prepared slopes or stockpiled for future use. **Page 50:** "Revegetation of existing disturbed areas within the mining zone and buffer zone to be undertaken on an opportunistic basis" "Landscaping around the Fimiston Plant …. will involve the planting of a tree belt around the plant site" **Page 51 - 53:** "Batter to designed angle and develop berms at 10 metre vertical intervals for 20º slopes (Figure 15). The berms provide access and act as contour drains (Figure 16). Berm width should be four to five metres wide, sufficient to accommodate earthmoving equipment during topsoil spreading… berms will have surveyed slope of 0.5 per cent along their length and lead to vertical rock lined drains. Figure 16 shows a schematic cross section of berms."  FIGURE 15 EXAMPLES OF WASTE DUMP CONSTRUCTION TECHNIQUE. SOURCE: DOM 1988b  FIGURE 16 TYPICAL BERM CONSTRUCTION DETAIL SOURCE: S.A.M. 1987 "Vertical waterways should be constructed using competent rock capable of resisting erosion. The spacing… should be such that catchment areas do not exceed two hectares… distance between vertical drains should not normally exceed 300 metres apart. At the base of the vertical waterways, rockfilled, energy absorbing sediment traps of approximately 10 m diameter should be constructed. The sediment

REFERENCE	COMMITMENT
	trap will flow out in a toe drain taking water off-site in major storm events. Figure 17 provides design details for these structures.”  “After battering of the slopes, approximately 50 cm of oxide waste material should be spread over the fresh rock” “Topsoil material should then be spread to a depth of 20 cm” “If available, light vegetation stripped prior to topsoil removal, bush litter, and road sweepings from Kalgoorlie-Boulder could be incorporated into the topsoil spreading programme” “Fertiliser - 400kg/ha of Agras Cu-Mo-Zn broadcast before deep ripping”

REFERENCE	COMMITMENT
	“Deep ripping to a minimum of 0.75 m should be carried out on the contour. The ripping should be carried out at intervals of <2 m. Ripping should aim to key the topsoil, oxide waste and rock materials together. The final surface should have a rough texture and incorporate stony material.” “Seeding - 8 - 10 kg/ha of seed should be spread after the ripping programme. Seeding should be carried out before April each year. If fresh topsoil is available the rate of seed application could be reduced to 5 - 8 kg/ha.”
"Saline Water System Modification" (NOI 5028), signed by Dr Jim Bawden, Manager - Safety and Environment, KCGM "Correspondence titled Saline Water System Modification", dated 24 June 2005 and signed by Jim Bawden, Manager - Safety and Environment, KCGM and retained on Department of Industry and Resources File No. E2561/200306.	Document reviewed. No additional closure commitments relevant to the Trafalgar WRD.
Mining Proposal titled: "Effluent Water Supply (NOI 5246)" dated 17 February 2006 and signed by Dr Jim Bawden and letter titled "Effluent Water Supply" dated 12 May 2006 and signed by Dr Jim Bawden, KCGM and retained on Department of Industry and Resources File No. E2561/200308	Documents reviewed. No additional closure commitments relevant to the Trafalgar WRD.
"Low Impact Mining -	Document reviewed. No additional closure commitments relevant to the Trafalgar WRD.

REFERENCE	COMMITMENT
Notice of Intent" dated 3 April 2002, signed by Mr Cranston Edwards and retained on Department of Mineral and Petroleum Resources File No. 4297/01.	
"Amendment to Low Impact Mining - Notice of Intent" dated 9 February 2004 and retained on Department of Industry and Resources File no. 4297/01.	Document unable to be reviewed. Unlikely to be any additional closure commitments relevant to the Trafalgar WRD.
Letters dated 7 July 1998 and 1 September 1998 signed by Resident Manager- Mr Phil Evers.	Documents unable to be reviewed. Unlikely to be any additional closure commitments relevant to the Trafalgar WRD.
"Application for Oxide Waste Dumping on Mining Lease 26/405" dated 30 December 1993 and retained on Department of Minerals and Energy File No.2212/93;	Document unable to be reviewed.
Access road to new Super Pit Lookout - M26/316" dated 19 March 2003 signed by Mr Neil Rankine - Land Administrator (NOI 4241) and retained on Department of Industry and Resources File No.	Document unable to be reviewed.

REFERENCE	COMMITMENT
2561/03	
Installation of Security Fence and Track dated 20 February 2003 (NOI 4203) signed by Mr Neil Rankine - Land Administrator and retained on Department of Mineral and Petroleum Resources File No. 5100/02	Document unable to be reviewed.
"Notice of Intent, Lakewood Project" dated 18 May 1988 and contained on Mines Department File Number 541/88.	Document unable to be reviewed. Unlikely to be any additional closure commitments relevant to the Trafalgar WRD.
(Reg ID 56533) "Mining Proposal Addendum - Addendum to Letter of Variation to Consultative Environmental Review Mine and Waste Dumps - Partial Realignment of the Environmental Noise Bund and Loopline Railway Access - ID 5240" dated 7 October 2015 signed by Steve Price - General Manager (Acting) and retained on Department of Mines and Petroleum File No. EARS-MP-56533 as Doc ID 3850247	**Page 25:** "Where possible rehabilitation material identified within the Project footprint will be stripped to a nominal depth of 300 mm after the removal of vegetation and both will be stockpiled for future rehabilitation purposes." "Topsoil will be stored in stockpiles approximately 2 m high to retain seed viability. The surface of the stockpiles will be left in a "rough" condition to reduce the risk of erosion, increase drainage and promote revegetation." **Page 27:** "Construction of the Project will ensure that approximately an additional 7 ha will be encapsulated, minimising potential dust generation. The remaining available area adjacent to the Project area will be rehabilitated in accordance with the KCGM Mine Closure Plan 2015." **Page 31:** "The Loopline Tourist Railway is likely to be an ongoing tourist attraction for Kalgoorlie-Boulder consistent with the mining heritage of the Goldfields Region." "Rehabilitation of the outer faces (batters) of the ramp will be in accordance with KCGM's Waste Rock Dump Strategy, including the Visual Amenity Concept and preferred KCGM Waste Rock Dump Batter Design, as documented in the KCGM Mine Closure Plan 2015. The outer faces of the Loopline ramp will have the following features: • Final slope angle of 20 degrees; • Robust rocky crest window; • Sheeted with approximately 200mm of topsoil; • A high percentage of rock mixed into the batter surface, by means of ripping;

REFERENCE	COMMITMENT
	• Incorporation of a 'rocky band' to manage erosion on the outer batter (Figure 10); • Seeding with an appropriate mix of provenance species for revegetation; and • Incorporation of design constraints required by the rail engineering design.  **Figure 10: KCGM Waste Rock Dump Batter Design**
(MP Reg ID 59160) "Eastern Waste Dump Extension Mining Proposal" dated 15 April 2016 signed by Ian Butler - General Manager, KCGM and retained on Department of Mines and Petroleum File No. EARS-MP-59160 as Doc ID 4188183;	**Page 23:** "The location of the creekline has been taken into account during the planning stages of the Project. The Eastern WRD expansion footprint is adjacent to the creek line, but is not expected to have any impact on surface water flow through this area. The rehabilitation and closure design will take into account the likelihood of peak storm events creating elevated flows through this area." "Surface drainage management during the construction, operation and closure of the waste landforms will ensure management of surface drainage. Any surface diversions will direct water towards existing and natural drainage paths where possible. The WRD will not obstruct flow in anyway." **Page 25:** KCGM has refined the WRD closure design, which is used for all new waste dumps being designed and constructed. Greater emphasis is now being placed on erosional stability rather than biophysical appearance and designs are based on better scientific understanding as well as site specific performance monitoring results. Design strategies include: • If possible, outer slope angles of less than 18º; • Water retention on waste dump upper surfaces and mid-slope berms by means of wider, backsloping berms and construction of competent crest bunds; • A rocky soil mix on outer surfaces as protection against raindrop erosion; • Rocky bands to manage erosion;

REFERENCE	COMMITMENT
	• Encapsulation of any dispersive oxide material; • Reduced thickness of rehabilitation materials application; • If required, toe sediment retention bunds as a further precautionary measure; and • Investigation into the most effective techniques to achieve rehabilitation targets, such as achieving an appropriate percentage of rock surface coverage on rehabilitated slopes. **Page 29:** "KCGM is using the Visual Amenity Concept (Figure 7) at Fimiston as a guidance tool to ensure the best rehabilitation outcomes with limited resources in terms of rehabilitation materials. This concept ensures that rehabilitation materials are placed in the most effective location, based on their visibility to the public. The Visual Amenity Concept seeks to define prioritisation of rehabilitation material usage. The concept involves using the best materials on waste dump slopes facing the City of Kalgoorlie-Boulder. The concept acknowledges that rehabilitation materials are a finite resource and their usage needs to be optimised, with prioritisation of best rehabilitation materials from west to east. If available, lower quality materials would be used on the eastern "back slopes" and areas not visible or less visible to the public including the Eastern WRD Extension."

REFERENCE	COMMITMENT

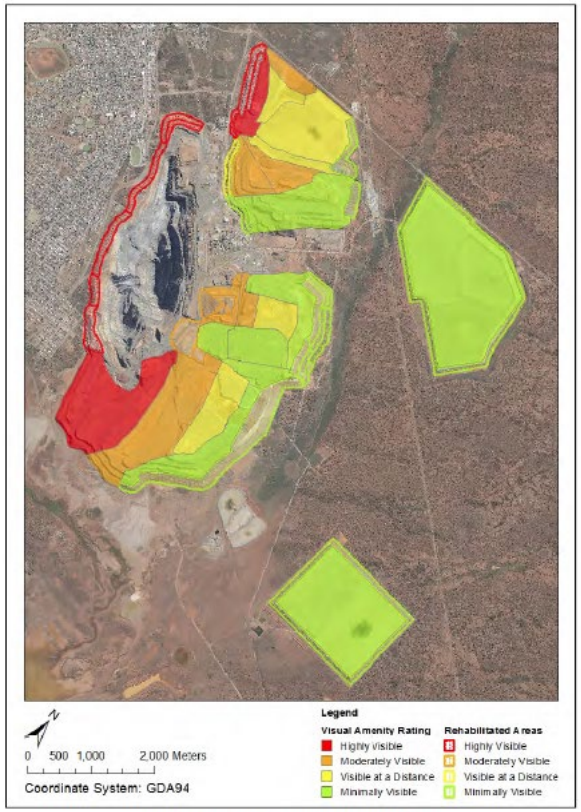
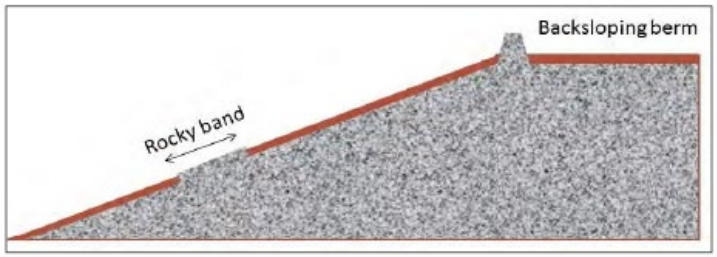


Figure 7: Visual Amenity Rehabilitation Concept

Page 30 & 31: "There are some areas which will not receive topsoil, due to the limited availability of materials…The soils will be stockpiled within the WRD footprint, prior to use on areas available for rehabilitation. Areas where there are remnant tailings dam footprints or other contamination exists, will not be included in the soil removal program."

Page 32: "In 2014, the new design was successfully trialled on the Northern WRD, with the intention to implement this design on other progressive rehabilitation areas. This will consist of:

- Reshaping outer slopes to a linear slope;

REFERENCE	COMMITMENT
	• Constructing back sloping benches, with a robust crest bund constructed of competent rock; • If available, placement of rehabilitation materials on the outer slopes, blended with the upper hard rock to ensure a rocky mix on the outer surface; • The use of rocky bands, of varying thickness, to manage erosion; • Ripping the surface to ensure there is sufficient rock cover on the outer surface; • Seeding with native species of local provenance, for revegetation; and • If required, construction of shallow sediment retention basins/ bunding along the foot of the waste dumps to control surface water and sediment (KCGM, 2015).  Figure 8: KCGM Generic Closure Waste Dump Design This general WRD design will be used for the Eastern WRD Extension. The rehabilitation design will be integrated into the Trafalgar WRD design. The type and placement of rehabilitation materials, such as topsoil, will be determined by the site wide Visual Amenity concept." **Page33:** "Rehabilitation Activities, as provided in the 2015 MCP are provided in Table 4. Additional information is available, including Scheduling, is contained in 2015 MCP, Section 9.9. KCGM has a progressive rehabilitation program in place for the Fimiston WRDs.

REFERENCE	COMMITMENT

Table 6: Rehabilitation Activities for Fimiston WRDs

Domain	Feature	Approach
Waste Rock Dumps	Trafalgar, Oroya, Northern, North Eastern, Environmental Noise Bund	Implement the Visual Amenity Concept; Encapsulation of historic TSFs and TSF footprints that are within the waste dump footprint; Conduct progressive rehabilitation on available areas. *For new rehabilitation/progressive rehabilitation:* Profile outer batters of landform to reduce long term erosion and promote stability; Construction of robust crest bunds; Where appropriate, profile upper surface for water control; Cover outer surface with appropriate growth medium if available; and Rip on the contour to ensure correct rock cover on surface, and seed with native species of local provenance. *For existing rehabilitation:* Specifications in alignment with original approvals.

”

REFERENCE	COMMITMENT
(MP Reg ID 59160) Letter - "Additional Information to support the Submission of Mining Proposal for the Eastern Waste Rock Dump Extension" dated 4 May 2016 signed by Janine Cameron, Senior Environmental Co-ordinator and retained on Department of Mines and Petroleum File No. EARS-MP-59160 as Doc ID 4224321	Query 3: Section 6.3.2 indicates that the Eastern WRD Extension will be constructed to the same design as the Trafalgar WRD as per Table 4. The WRD construction design details outlined in Table 4 are variable and inconsistent with the waste landform rehabilitation design stated in section 9.2 (e.g. berms of 15-20m for rehabilitation compared to a constructed bench design of "Variable: 5m – 90m"). DMP requests further information/clarification on how the construction design for the Eastern WRD Extension stated in Table 4 will achieve the rehabilitation landform design outlined in Section 9.2. Response 3: The Eastern WRD Extension rehabilitated design will consist of 20m high lifts, and 15m wide benches. This design is consistent with the existing design on the Eastern slopes of the Trafalgar WRD, which has 20m high lifts. The lowest lift height may vary slightly due to variations in the level of the underlying land surface. The construction design has allowed sufficient step back to ensure that the rehabilitation bench width of 15m can be achieved. Rehabilitation slope angles will be 17 degrees.

Query 4: Section 7.4 states that viable rehabilitation materials within the footprint will be removed and stockpiled for rehabilitation activities. DMP has observed that the Eastern WRD Extension will result in the construction of a waste dump over areas of existing rehabilitation of the Trafalgar WRD. DMP requests further information on whether KCGM intend to recover the rehabilitation materials (in particular topsoil) from the areas of existing rehabilitation which will be impacted by the Eastern WRD Extension and the process by which any rehabilitation resources recovery will be completed.

Response 4: The existing rehabilitated slopes will not be stripped of rehabilitation materials, because the materials have been identified as sodic oxides, which have very little regrow and are unsuitable for placement on slopes. The covering of these slopes with the WRD extension will be of overall benefit.

Query 5: Section 9.2 outlines the rehabilitation design features proposed for the Eastern WRD Extension. DMP requests specific rehabilitation design details for the Eastern WRD Extension be provided, including:

a. Construction details on what KCGM considers to be a robust crest bund.

b. Specific details on the placement of rocky bands such as location on slope (and basis for location), width and depth of bands.

c. Confirmation that ripping of the surface material will be undertaken along the contour.

Response 5:

5a. KCGM constructs crest bunds on 20m lifts on new WRDs to the nominal height of 0.75m, using competent hard rock. In addition the benches are backsloping. To derive the physical parameters of the berms, WEPP modelling was conducted to ensure appropriate berm water holding capacity, using local climate data (including a 1:100 year event) and accounting for long term sediment accumulation from upper slopes.

5b. KCGM has the advantage of large volumes of competent waste rock to construct WRDs. As a result there are no material stability issues with the waste that KCGM's WRDs are constructed with. However the topsoil or other growth media materials available at KCGM are prone to erosion. As a result much of the modelling and design work done has been focused on management of erosion of these resources. Extensive design work conducted in 2013/4 to develop the generic KCGM WRD design, including determination of erodibility properties of KCGM's available rehabilitation materials by means of field and laboratory studies. These erosion parameters were used to calibrate Siberia and WEPP modelling to develop the optimum WRD design. In addition the design was checked using the WAVES model to ensure that there would be sufficient soil moisture for plant growth.

REFERENCE	COMMITMENT
	The outcome was a fairly conservative WRD design, which has been successfully trialed on the Northern WRD. The performance of the design has been verified by use of a rainfall simulator and field measurements by specialist soil scientists. For 20m lifts, rocky bands are placed at intervals appropriate for the rehabilitation materials on the slope. On the Northern WRD, rocky bands where placed approximately 50m downslope of the crest, as an erosion management strategy. This was determined during extensive design work conducted in 2013/4 during the development of the generic KCGM WRD design. The position of the rocky band on the Eastern WRD Extension will vary according to the key erosion parameters of the allocated rehabilitation materials used on the slope. Rocky band width is expected to vary between 5 to 20m vertical height on the Eastern WRD Extension, to align with the existing rehabilitation on the adjacent Trafalgar WRD and to manage erosion on the Eastern WRD Extension. Due to the scarcity of rehabilitation materials at KCGM, the Visual Amenity concept will govern the allocation of placement of rehabilitation materials on WRDs at KCGM. If available, materials appropriate for the Visual Amenity category will be allocated to the Eastern WRD Extension. The Visual Amenity concept was recently approved in the 2015 KCGM Mine Closure Plan (November 2015). With this approval in place, KCGM are currently developing a greater level of planning detail for the scheduling of rehabilitation materials to Visual Amenity categories. This will include more detailed interrogation of existing data for growth media stockpiles to optimize placement of materials. Mining engineers and soil specialists are being used for this work. This work will then provide KCGM with the knowledge to determine whether the location of erosion management features such as rocky bands can be generic or should be more specific to the growth media stockpile. 5c. Cross slope ripping will be conducted on slopes, with the objective being to ensure that there is sufficient rock cover on the surface to minimise erosion. The percentage rock cover on slopes is a key erosion control parameter in the KCGM WRD Design, with a 1:2 ratio being desirable. Cross slope ripping has been trialed on the Northern WRD, and has been shown to be an effective means of implementing the design intent.
Environmental Noise Bund	
Mining Proposal Resubmission Fimiston Gold Mine Operations	**Page 39:** "The prescriptions for the rehabilitation of these two facilities may be refined based on the outcomes of the detailed design and optimisation process, which is being applied to the whole site." **Page 66:** "To limit the impacts of vegetation clearing throughout the life of the project KCGM commits to keeping clearing to the minimum

REFERENCE	COMMITMENT
Extension (Stage 3) - Golden Pike Cutback and Northern Waste Landform (REG ID: 24671) dated 3 December 2009 signed by Russell Cole, General Manager	extent necessary and preventing disturbance to the surrounding vegetation by: • Using existing roads and access tracks where possible; • Surveying and pegging areas required to be cleared; • Clearing during low wind conditions to minimise generation of dust; • Watering with non-saline water, if necessary, during clearing to minimise generation of dust; • Delaying clearing until the area is needed; and • Stockpiling all vegetation cleared for use in rehabilitation (to create faunal niches, act as a seed bank and reduce erosion)." **Page 69:** "…topsoil harvested from the Northern Waste Landform being preferentially used in areas which are given a higher priority ranking throughout the site." "If the topsoil is to be used elsewhere on site it will be not be moved until it can be applied directly to the area being rehabilitated." **Page 71:** "The topsoil harvested will be paddock dumped around the toe of the southern end of the environmental noise bund in stockpiles of no greater than 2m high and seeded if stored for more than one year. The topsoil will be used for rehabilitation of the environmental noise bund if required." **Page 79 - Table 18:** "Rehabilitation of waste landforms and disturbed areas as soon as practicable." "Outslopes to be constructed to design identified by Siberia modelling (using KCGM specific erosion parameters) to minimise erosion." "Cover materials placed in accordance with Outback Ecology Services recommendations based on materials characterisation and inventory." "Outslopes designed and constructed to minimise erosion and gullying and promote stability." "Waste landforms seeded with local provenance species of the goldfields region." "Progress of rehabilitation monitored to identify if further work is required." **Page 92:** "Post mining land uses for the project are expected to be a combination of: Rehabilitated landforms for conservation, recreation and pastoral purposes (Northern Waste Landform, Fimiston I Tailings Storage Facility); Tourist attractions consistent with the mining heritage of the Kalgoorlie-Boulder region (Super Pit Lookout); and Zones with restricted access for safety reasons (Fimiston Open Pit). **Page 93:** "Due to the requirement to reduce the slope of the existing noise bund to 20º during rehabilitation…" **Page 97:** "The existing noise bund will not require long-term (post-closure) maintenance. Any gullying or erosion which may develop on the noise bund will be repaired during the operating and post-closure monitoring periods." **Page 100:**

<table>
<tr><th>REFERENCE</th><th>COMMITMENT</th></tr>
<tr><td></td><td>
Table 23 Rehabilitation Completion Criteria
<table>
<tr><th>Area</th><th>Completion Criteria</th></tr>
<tr><td rowspan="3">Waste Landforms</td><td>Slopes shaped to outslope design determined to minimise erosion.</td></tr>
<tr><td>Slopes surface deep ripped on the contour.</td></tr>
<tr><td>Top surface contoured for water management and deep ripped on the contour.</td></tr>
<tr><td></td><td>Seeded with local provenance species of the goldfields region in areas designated for revegetation.</td></tr>
<tr><td>Topsoil Stockpile Areas</td><td>Deep ripped on the contour and seeded with local provenance species of the goldfields region.</td></tr>
</table>
</td></tr>
<tr><td>Correspondence titled: "Kalgoorlie Gold Mines Pty Ltd - Golden Pike Mining Proposal" signed by Russell Cole, General Manager - KCGM dated 7 January 2010 and retained on Department of Mines and Petroleum File No. E0159/201001</td><td>Document reviewed. No additional closure commitments relevant to the Environmental Noise Bund.</td></tr>
<tr><td>Partial Realignment of the Environmental Noise Bund and Loopline Railway Access (MP 5240), dated 7 February 2006 with a covering letter signed by Cobb Johnstone, General Manager KCGM</td><td>Cover Letter (Dated 6th February 2006): “At this stage KCGM intends to rehabilitate the environmental noise bund as outlined in the NOI document… KCGM is committed to monitoring the performance of our rehabilitation and where required undertaking remedial works.”
“As previously mentioned KCGM is keen to work with the DoIR to develop the Rehabilitation Management Plan with the aim to having an agreed document by June 2006.”
Page iv Table 1: “KCGM will rehabilitate and make safe areas involved in this operation… Rainfall will be managed by preparing rehabilitation sites so as to encourage water harvesting and infiltration.”
Page 17: “Prior to construction, topsoil and organic material will be cleared from the site and stockpiled. This material will be used during the rehabilitation of the bund… Oxide material is also available from this Croesus Waste Dump and will be used as required for rehabilitation.”
Page 18: “Coinciding with this rail construction, rehabilitation of the Environmental Noise Bund slopes can commence north of the Super Pit Lookout pad.”</td></tr>
</table>

REFERENCE	COMMITMENT
	Page 20 & 21: "Prior to construction, topsoil and organic material will be cleared from the site and stockpiled. This material will be used during rehabilitation of the Environmental Noise Bund." **Page 24:** "Should the Golden Pike Cutback be cancelled, during or after Phase B but before Phase C, then the reclamation of the existing Noise Bund would cease and the exposed face would be rehabilitated." **Page 25:** "Every effort will be made to ensure land clearing is minimised and topsoil material stockpiled for use in rehabilitation… In rehabilitation areas potable water will be used." **Page 25 & 26:** "The Environmental Noise Bund will primarily be constructed with waste rock material from the existing Environmental Noise Bund, or sourced from Croesus Waste Dump adjacent to the project area. The final construction phase may use waste sourced from the Fimiston Open Pit. No potential acid generating material will be placed within the Environmental Noise Bund." **Page 29:** "Waste rock will be sourced from the Croesus Waste Dump to construct the first phase of the bund and oxide material is also available from waste dump and will be used as required for rehabilitation. The material for the second and third phases will be sourced from the northern end of the existing Environmental Noise Bund, rather than from the Croesus Waste Dump. The fourth phase will be constructed using waste rock from the Fimiston Open Pit operations." "The water management strategies will include, (but not be limited to): The slopes battered and angled to 20^0 Ripping to a nominal depth of 1m. Winged tynes will create deep rip lines along the contour to enhance soil mounding and permeability. Contour ripping also helps to control runoff and maintain moisture. Rock armouring of embankments. Deep ripping will also intermix growth medium with rocks to provide stability for vegetative growth and minimise any erosion and run-off that may occur during heavy rainfall. A berm will be installed where possible to "break" the slope when the bund is more than 15m in vertical height. These will be backsloping to control run off and promote infiltration. Installation of bunds on flat areas and on berms (perpendicular to the contour to compartmentalise the berm) to promote water storage and infiltration (if required)." "While the integrity of topsoil is best retained through immediate respreading this is not always possible given construction and progressive rehabilitation schedules." **Page 30:** "Available topsoil (or any other suitable growth media) will be reclaimed in accordance with the following practices: • Topsoil will be removed from areas to an appropriate depth of 300 millimetres (depth may vary and all suitable growth material will be removed as appropriate); • Potable water will be utilise for dust suppression during topsoil removal to prevent potential salt contamination; • Topsoil stockpiles will be limited to two metres high and located close proximity to minimise re-handling or storage impacts on

REFERENCE	COMMITMENT
	microflora; • Removed vegetation may be mulched and placed upon stockpiles to assist with stabilisation, control erosion and reduce potential dust emissions This material will be used as soon as practicable during rehabilitation of the Environmental Noise Bund. Oxide will be sourced from the Croesus Waste Rock Dump and used with any available topsoil stockpiled during the initial land clearing. The battered surface will be covered with approximately 150mm of subsoil and topsoil materials (30-40% topsoil 60-70% oxide) in order to provide a growth medium for revegetation." "A native seed mix will be spread… 10kg/ha and may be supplemented by the addition of fertilizer" Tree seedlings will also be hand planted in target areas where water ponding is likely.. flat areas at the base of slopes, areas of change in slope angle, contour banks and crest and toe drains. KCGM will also consider reticulation to these trees to assist with their establishment…used for a short time only… progressively reduced to limit the reliance on reticulated water supply." **Page 31:** "Visual inspections of landforms are carried out as part of the monitoring regime to ensure that they are maintained in original form and structure and that no rills or flaws are occurring. If identified, remedial works are carried out as soon as practicable." "The Environmental Noise Bund will also be a highly visible area that will be a visual display of mine-site rehabilitation. A Closure Strategy is currently being developed which will provide the basis for the development of detailed Closure Plans for KCGM's operations. Closure Plans including post-mining landuse will be developed in consultation with key stakeholders including regulatory authorities and community."
Letter of Variation to CER Mine and Waste Dumps - Fimiston August 1990 Southern Extension of the Environmental Noise Bund and Waste Rock Dump - February 2004	**Page ii:** "The lower (14º) slope of the project will support transitional Eucalypt/Acacia open woodland and the upper (20º) slope Acacia shrubland. The lower canopies will include a variety of annual and perennial shrubs and grass species." **Page vi:** "KCGM will rehabilitate and make safe areas involved in this operation… Rainfall will be managed by preparing rehabilitation sites so as to encourage water harvesting and infiltration." **Page 15: "**Both oxide and fresh waste rock from Fimiston Open Pit will be used in the construction of the environmental noise bund with topsoil material sources from various topsoil stockpiles on the Fimiston site. The environmental noise bund will be developed in stages to allow rehabilitation of the western face to be done simultaneously with construction." **Page 18:** "In rehabilitation areas potable water will be used…a native seed mix will be spread over the rehabilitation areas by hand… 10kg/ha and supplemented by 100kg/ha of Agras copper zinc moly fertiliser… Trees will also be hand planted and target areas will be those where water ponding is likely." **Page 21:** The flat areas at the toe of this landform will be revegetated to a Eucalypt/Chenopod open woodland, typical of the Kalgoorlie region… To achieve this the lower slopes of the hill will have a final face angle of 14º and the upper parts of the project landform will have a final angle of about 20º. Tree will also be hand planted…target areas where water ponding is likely…the bases of slopes, flat areas, areas of change in slope angle, contour banks and crest and toe drains…

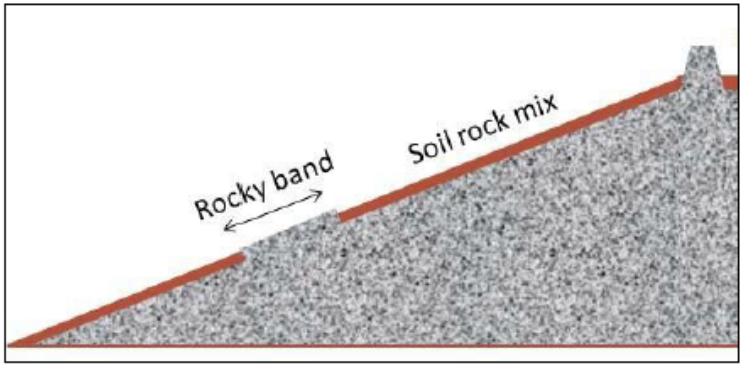
REFERENCE	COMMITMENT
	To minimise erosion on the outer faces of the noise bund a number of water management strategies will be implemented. the lower lift of the noise bund will be battered to a slope of about 14°. This slope-angle will minimise erosion effects particularly after vegetative cover has been established. the upper lift will be battered to 20º to mimic the topography of greenstone hills that are found in the region. a series of contour drains will be established on both lifts. These will be surveyed to minimise operator error during the construction phase. These structures will reduce erosion and act as a means to harvest and hold water as run-on areas, which will substantially benefit vegetative growth. To further manage water in these structure, a series of bunds will be installed perpendicular to the contour to compartmentalise the structure. a berm will be installed between all changes of slope and a significant crest drain and toe drain will be established to minimise the creation of sheet water flows. all ripping on site will be undertaken to a nominal depth of 1m. Winged ripping tynes will further enhance soil mounding, to control runoff and maintain moisture along the contour. **Page 22 *Post Mining Landuse*:** "The slopes of the project area will support Eucalypt/Acacia open woodland and Acacia shrubland. The lower canopies will include a variety of annual and perennial shrubs and grass species. Community groups and tour operators may be able to use the area as an elevated viewpoint for mining and rehabilitation in the area."
Minor Southward Extension of Fimiston Open Pit Noise Bund - M26/405 dated 19 March 2003 signed by Mr Neil Rankine - Land Administrator (NOI 4240) *This applies to the 'Chaffers Oxide section of the Southern Noise Bund*	**Page 1:** "The bund extension will be constructed with similar materials and dimensions as the existing bund. The western slope will be sheeted with topsoil, ripped and seeded. Any salvageable topsoil at this site will be stockpiled and utilised in the sheeting process." **Page 26:** "The vegetation surrounding the project area has been rehabilitated by KCGM to semi-mature (eight-year-old) Eucalypt Open Woodland. The slopes of the project area will support Eucalypt/Acacia open woodland and Acacia shrubland. The lower canopies will include a variety of annual and perennial shrubs and grass species."
Access road to new Super Pit Lookout - M26/316" dated 19 March 2003 signed by Mr Neil Rankine - Land Administrator (NOI 4241) and retained on Department of Industry and Resources File No.	Document unable to be reviewed.

REFERENCE	COMMITMENT
2561/03	
Installation of Security Fence and Track dated 20 February 2003 (NOI 4203) signed by Mr Neil Rankine - Land Administrator and retained on Department of Mineral and Petroleum Resources File No. 5100/02	Document unable to be reviewed.
"Letter of Intent" dated 7 May 1992 and retained on Department of Minerals and Energy File No. 2001/93	*This Notice of Intent refers to the 'Western Environmental Barrier' or southern section of the Environmental Noise Bund* "The barrier will be covered with freshly stockpiled uncontaminated topsoil at a depth of 20cm. The top soil will then be seeded with a mixture of over 40 local native species and fertilised. Native tree seedlings will be planted on irrigation at the western base of the barrier"
Letter of Variation to Consultative Environmental Review Mine and Waste Dumps – Fimiston August 1990 Croesus Rehabilitation Project (April 2000)	**Page i: "**The backfilling of the Croesus Open Pit therefore facilitating early mine site rehabilitation and improving long-term public safety;" "An opportunity to rehabilitate with fresh topsoil material that is presently being mined from the "Office" cutback area" "The project is intended to supplement the proposed backfilling of the Croesus Pit (Letter of Notification provided to DME and DEP January 2000). The project will involve the construction of an earthen noise bund and subsequent infilling behind the bund with waste material sourced from present pit operations in a phased approach." **Page ii:** "WRD battering and topsoil/oxide surface capping will proceed concurrently with placement of waste rock to permit immediate revegetation." **Page iv Table 1:** "KCGM will rehabilitate and make safe areas involved in this operation - Rainfall will be managed by preparing rehabilitation sites so as to encourage water harvesting and infiltration" **Page 2:**"Site rehabilitation for this new project will commence after the Croesus open pit has been backfilled with waste rock from current pit mining operations (Letter of Notification submitted to DME and DEP, January 2000). To promote the development of a more curved and natural appearing landform, which will sustain natural vegetation, additional waste rock will be dump stacked to cover the mill site and the flanks of the existing WRD." **Page 14:** "External face of the noise bund [first lift] will be battered to 14° to minimise erosion. Ripping and seeding will be done with a D9 or D11 size dozer with triple wing tynes to enhance water harvesting on the outer face and to further minimise erosion. Seed species to be used are listed in Table 2."

REFERENCE	COMMITMENT
	Page 16: "Second lift of Noise bund battered to 20°and revegetated as per the lower lift." **Page 17:** "Slope angles of the final rock pile will vary from bottom to top to better mimic natural hills in the area. The southern flank of the pile will be left at the angle of repose, as this area may be covered with waste rock during a second round of pit backfilling after open pit resources to the south are depleted." **Page 25 & 26:** "To minimise erosion on the outer faces of the noise bund a number of water management strategies will be implemented. These include: • the lower lift of the noise bund will be battered to a slope of about 14°. This slope-angle will minimise erosion effects particularly after vegetative cover has been established; • the upper lift will be battered to 20° to mimic the topography of greenstone hills that are found in the region; • a series of contour drains will be established on both lifts. These will be surveyed to minimise operator error during the construction phase. These structures will reduce erosion and act as a means to harvest and hold water as run-on areas, which will substantially benefit vegetative growth. To further manage water in these structures a series of bunds will be installed perpendicular to the contour to compartmentalise the landform; • A berm will be installed between all changes of slope and a significant crest drain and toe drain will be established to minimise the creation of sheet water flows; and • All ripping on site will be undertaken to a nominal depth of one metre. Winged ripping tynes will further enhance soil mounding, to control runoff and maintaining moisture along the contour"
Letters dated 7 July 1998 and 1 September 1998 signed by Resident Manager- Mr Phil Evers.	**Page 2: "**Once the tailings have been removed from the Mt Trafalgar area, the surface will be lightly ripped. The long term land-use for this area is either waste rock dumping or resource recovery; The exposed soil surface in the Croesus area will be rehabilitated to KCGM standards as outlined in the KCGM "Procedure for the rehabilitation of site from where non-saline tailings have been removed (June 1998). This procedure includes the replacement of topsoil from stockpiles and seeding at a rate of 8kg/ha. The long-term land use for this area includes incorporation into a possible Croesus pit expansion; Exposed soil surfaces in the Old Croesus area will be deep ripped on the contour in preparation for waste rock dumping by KCGM."
Letter from KCGM dated 19 August 1992 and signed by B Smith and retained on Department of Minerals and Energy File No. 2174/92.	Document unable to be reviewed.
"Permission to Alter	Document unable to be reviewed.

REFERENCE	COMMITMENT
Approved KCGM Environmental Bund" dated 1 September 1992 and retained on Department of Mineral and Petroleum Resources File No. 2174/92	
"Retreatment of Croesus, Mt Trafalgar and Old Croesus Tailings Dumps - Notice of Intent" dated 3 July 1998	**Page 14:** “Battering of the north western face of the Croesus waste dump from angle of repose to a safe angle to be determined”
"Retreatment of Croesus and Mt Trafalgar Tailings dumps - Plan of Operations" dated July 1998	Document unable to be reviewed.
"Application for Oxide Waste Dumping on Mining Lease 26/405" dated 30 December 1993 and retained on Department of Minerals and Energy File No.2212/93; *M26/405*	Document unable to be reviewed.
"Movement of 50,000 BCM's of Tailings Material" facsimile dated31 October 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on	Document unable to be reviewed, unlikely to contain any closure commitments for Environmental Noise Bund.

REFERENCE	COMMITMENT
Department of Minerals and Energy File No. 2083/96;	
"Movement of 50,000 BCM's of Tailings Material" facsimile dated 4 November 1996, signed by Mr Mitch Cook- Production Superintendent, Kaltails Project and retained on Department of Minerals and Energy File No. 2083/96.	Document unable to be reviewed, unlikely to contain any closure commitments for Environmental Noise Bund.
"Notice of Intent - Low Impact Mining Operation - Removal of Calcine Tailings on M26/405 (NOI 4719)" dated 29 June 2004 and signed by Cobb Johnston and retained on Department of Industry and Resources File No. 5168/02.	Document reviewed – no closure commitments relevant to the Environmental Noise Bund
"Amendment to Low Impact Mining - Notice of Intent" dated 9 February 2004 and retained on Department of Industry and Resources File No. 4297/01.	Document reviewed – no closure commitments relevant to the Environmental Noise Bund
(Reg ID 56533) "Mining Proposal Addendum - Addendum to Letter of	**Page 25:** "Where possible rehabilitation material identified within the Project footprint will be stripped to a nominal depth of 300 mm after the removal of vegetation and both will be stockpiled for future rehabilitation purposes."

REFERENCE	COMMITMENT
Variation to Consultative Environmental Review Mine and Waste Dumps - Partial Realignment of the Environmental Noise Bund and Loopline Railway Access - ID 5240" dated 7 October 2015 signed by Steve Price - General Manager (Acting) and retained on Department of Mines and Petroleum File No. EARS-MP-56533 as Doc ID 3850247 *This document applied to the Southern Noise Bund where it will impacted by the Loopline Railway.*	"Topsoil will be stored in stockpiles approximately 2 m high to retain seed viability. The surface of the stockpiles will be left in a "rough" condition to reduce the risk of erosion, increase drainage and promote revegetation." **Page 27:** "Construction of the Project will ensure that approximately an additional 7 ha will be encapsulated, minimising potential dust generation. The remaining available area adjacent to the Project area will be rehabilitated in accordance with the KCGM Mine Closure Plan 2015." **Page 31:** "The Loopline Tourist Railway is likely to be an ongoing tourist attraction for Kalgoorlie-Boulder consistent with the mining heritage of the Goldfields Region." "Rehabilitation of the outer faces (batters) of the ramp will be in accordance with KCGM's Waste Rock Dump Strategy, including the Visual Amenity Concept and preferred KCGM Waste Rock Dump Batter Design, as documented in the KCGM Mine Closure Plan 2015. The outer faces of the Loopline ramp will have the following features: • Final slope angle of 20 degrees; • Robust rocky crest window; • Sheeted with approximately 200mm of topsoil; • A high percentage of rock mixed into the batter surface, by means of ripping; • Incorporation of a 'rocky band' to manage erosion on the outer batter (Figure 10); • Seeding with an appropriate mix of provenance species for revegetation; and • Incorporation of design constraints required by the rail engineering design.  **Figure 10: KCGM Waste Rock Dump Batter Design**

REFERENCE	COMMITMENT
(MP Reg ID 67627) "Mining Proposal Western Wall Remediation" dated 9 May 2017 signed by Ian Butler and retained on Department of Mines and Petroleum File No. EARS-MP-67627 as Doc ID 4992171	**Page 22:** “The Wall Stability Monitoring and Management Plan implemented for the Golden Pike Cutback included the installation of a network of survey pillars adjacent to the pit crest, noise bund and Bypass Road as well as accessible positions within the Golden Pike Cutback area. This provided a monitoring baseline for the western wall of the Fimiston Open Pit and will continue to provide monitoring for the Life of Mine and post-closure timeframes.” “Guidelines developed by the DMP (DOIR, 1997) require that upon abandonment, a bund or fence will be established around the mine workings to minimise inadvertent public access. The bund should be constructed outside the area designated as being susceptible to wall collapse, known as the ‘zone of instability’. In the absence of any geotechnical investigations, the guidelines establish generic criteria for the location of the bund based on experience with abandoned pits in Western Australia. The DMP guidelines provide a comprehensive list of issues to be addressed in determining the location of the abandonment bund. These issues were addressed by BFP Consultants Pty Ltd (2005) when calculating the required location for an abandonment bund for the Golden Pike Cutback in relation to the zone of instability. As a result, the abandonment bund position recommended by BFP was closer to the pit edge than the position of the Environmental Noise Bund, on the basis that the fresh rock slopes are not at risk of overall failure and that location of the abandonment bund on the projection of 25º from the base of the weathered zone was suitable. The study concluded that the proposed location would meet the requirements of the DMP’s guidelines and it was therefore determined that the Environmental Noise Bund would double as the mine abandonment bund for closure purposes. The proposed remedial cutback will not change the current zone of instability, as the remedial cutback will not change the current position of the fresh rock slopes. Therefore, the Environmental Noise Bund will remain as a suitable mine abandonment bund as detailed in KCGM’s approved Mine Closure Plan (2015).”
(MP Reg ID 70100) "Fimiston Open Pit, Morrison and Brownhill Projects" dated 4 October 2017 signed by Jarrod Riley and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-70100 as Doc ID 5305904	**Page 14:** "KCGM has made a commitment to leave a tourism lookout in place post closure (final location to be determined)."

1.3 Legal Obligations Register: Fimiston Plant and Other Mining Infrastructure

1.3.1 Tenement Conditions

TENEMENT (CONDITION NUMBER)	REQUIREMENT
M26/46 (16) M26/86 (20 & 22) M26/131 (39) M26/294 (19) M26/359 (16 & 18) M26/383 (14)	At the completion of operations all buildings and structures being removed from site or demolished and buried to the satisfaction of the Director, Environmental Division, DOIR; or At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.
M26/46 (15) M26/86 (19) M26/131 (38) M26/294 (18) M26/359 (27) M26/383 (13)	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses; or All topsoil being removed ahead of all mining operations from sites such as pipelines and new access roads, being stockpiled for later respreading or immediately respread as rehabilitation progresses.
M26/46 (18 & 28) M26/131 (41 & 49) M26/294 (21) M26/359 (18 & 30) M26/383 (15 & 46)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Director, Environmental Division, DOIR; or On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
M26/46 (10)	All waste stockpile areas and roads constructed in the course of mining being left level and rehabilitated to the satisfaction of the District Mining Engineer.
M26/46 (22) M26/131 (47) M26/359 (21)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to the surrounding vegetation and topsoil stockpiles.

TENEMENT (CONDITION NUMBER)	REQUIREMENT
M26/383 (44)	
M26/46 (27) M26/131 (48) M26/359 (29) M26/383 (45)	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability.

1.4 Legal Obligations Register: Fimiston Tailings Storage Facilities

1.4.1 Tenement Conditions

TSF	TENEMENT (CONDITION NUMBER)	REQUIREMENT
All	Various	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: - 2018
Fimiston I	M26/383 (13)	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.
Fimiston I	M26/383 (23)	The walls of the tailings dam being constructed from or having a substantial outer covering of competent waste rock which will prevent long term erosion and when completed the outslopes being contoured such that the maximum angle to the horizontal is 20 degrees.
Fimiston I	M26/383 (24)	The outslopes of the tailings dam being progressively covered with topsoil and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources or his nominee.
Fimiston I	M26/383 (25)	At the completion of operations and when the tailings have dried sufficiently, the surface of the tailings dam being covered with 0.5 metres of waste rock, covered with topsoil and revegetated with local native grasses, shrubs and trees.
Fimiston I	M26/383 (36)	At decommissioning of the tailings dam and prior to rehabilitation, the lessee submitting a review by an engineering/geotechnical specialist of: • the status of the structure; • its contained tailings; • the results of environmental monitoring; • any ongoing remedial works required. to the Director, Environment Division DOIR for his assessment and written approval.
Fimiston II	M26/308 (14) G26/44 - 59 (12)	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses; or

TSF	TENEMENT (CONDITION NUMBER)	REQUIREMENT
	G26/60 (13) G26/61 (12) G26/62 (12) G26/64 (9) G26/68 (8) G26/70 - 78 (12) G26/82 - 86 (11) M26/451 (11)	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.
Fimiston II	M26/308 (21)	The lessee submitting to Director, Environment Division ("the Director") a Mine Closure Plan (MCP) by 30 April 2010 of an acceptable standard and consistent with the ANZMEC/MCA guidelines "Strategic Framework on Mine Closure" 2000, including closure and rehabilitation cost estimates; and a Rehabilitation Management Plan (RMP) by 31 January 2008 of an acceptable standard with auditable time lines of progressive rehabilitation, detailing landform design, waste characterisation and vegetation/rehabilitation outcomes. The lessee submitting to the Director further details as required by him within specified timelines detailing any outstanding aspects of the MCP and/or RMP identified by the Director.
Fimiston II	M26/308 (17) G26/44 – 59 (15) G26/60 (16) G26/61 (15) G26/62 (15) G26/68 (10) G26/70 - 78 (15)	At the completion of operations, or progressively where possible all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer;
Fimiston II	M26/308 (25) G26/44 (24) G26/60 (31) G26/61 (24)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self-sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.

TSF	TENEMENT (CONDITION NUMBER)	REQUIREMENT
	G26/62 (24) G26/68 (19) G26/70 - 78 (24) G26/82 - 86 (22)	
Fimiston II	M26/308 (23) G26/44 - 59 (22) G26/60 (29) G26/61 (22) G26/62 (22) G26/64 (64) G26/68 (17) G26/70 - 78 (22) G26/82 - 86 (20) M26/451 (20)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.
Fimiston II	M26/308 (24) G26/44 (23) G26/60 (30) G26/61 (23) G26/62 (23) G26/64 (21) G26/68 (18) G26/70 - 78 (23) G26/82 - 86 (21)	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence and zone of pit instability, to the satisfaction of the Executive Director, Environment Division, DMP.

TSF	TENEMENT (CONDITION NUMBER)	REQUIREMENT
	M26/451 (21)	
Fimiston II	M26/308 (32) G26/44 - 59 (31) G26/60 (38) G26/61 (31) G26/62 (18) G26/64 (30) G26/68 (26) G26/70 - 78 (30) G26/82 - 86 (29) M26/451 (29)	At the time of close-out of the tailings storage facility and prior to rehabilitation, a further review by a geotechnical/engineering specialist will be required to be submitted to the State Mining Engineer. This report shall be review the status of the structure and its contained tailings examine and address the implications of the physical and chemical characteristics of the materials and present and address the results of all environmental monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements shall also be addressed.
Kaltails	G26/165 (3) G26/166 (4)	The lessee complying with commitments and statements contained in the Public Environmental Report - Tailings Treatment (Kalgoorlie) Agreement - issued pursuant to Section 45 of the Environmental Protection Act.
Kaltails	G26/165 (8) G26/166 (11)	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer.
Kaltails	G26/165 (10) G26/166 (13)	At the completion of operations or progressively where possible all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer; or On the completion of operations or progressively where possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self-sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
Kaltails	G26/165 (13)	No interference with the transmission line or the installations in connection therewith, and the rights of ingress to and egress from the facility being at all times preserved to the owners thereof.
Kaltails	G26/166 (6) G26/165 (19)	At the time of decommissioning of the tailings facility and prior to rehabilitation, a further review by a geotechnical/engineering specialist will be required to be submitted to the State Mining Engineer. This report should review the status of the structure and

TSF	TENEMENT (CONDITION NUMBER)	REQUIREMENT
		its contained tailings, examine and address the implications of the physical and chemical characteristics of the materials and present and address the results of all environmental monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements should be addressed.
Kaltails	G26/165 (7) G26/166 (10)	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses' or All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.
Kaltails	G26/165 (22) G26/166 (24)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.
Kaltails	G26/165 (23) G26/166 (24)	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability.

1.4.2 Commitments in Approval Documents – Fimiston I TSF

TSF	DOCUMENT	COMMITMENT
All	(Reg ID 35227) "Mine Closure Plan 2012: Resubmission December 2012" dated 21 December 2012 signed by Ian Butler - General Manager (Acting) and retained on Department of Mines and Petroleum File No. EARS-MCP-35227 on Doc ID 2170786 and Doc ID 3425137;	See MCP document for details – significant commitments outlined within.
All	(Reg ID 54418) "Kalgoorlie Consolidated Gold Mines, Mine Closure Plan March 2015" dated 30 March 2015 signed by Ian Butler - General Manager and retained on Department of Mines and Petroleum File No. EARS-MCP-54418 as Doc ID 3504973;	See MCP document for details – significant commitments outlined within.

<table>
<tr><th>TSF</th><th>DOCUMENT</th><th>COMMITMENT</th></tr>
<tr><td>All</td><td>(MP Reg ID 75568) "Mining Proposal - Fimiston Tailings Storage Facilities Closure Implementation Project" dated 6 August 2018 signed by Cecile Thaxter, General Manager, and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-75568 as Doc ID 5951348</td><td>
Table 8: Closure and rehabilitation design criteria for Fimiston TSFs
<table>
<tr><th>Factor</th><th>Closure and Rehabilitation Design Criteria</th></tr>
<tr><td colspan="2">TSF Top Surface</td></tr>
<tr><td>Top Surface Geometry (Per Paddock/Cell)</td><td>Interior drainage with an engineered perimeter bund designed to provide internal containment for the design storm. If not in place due to the existing beach slope, the outermost 75 m of the top surface perimeter area will be graded to drain away from the outer slopes to promote rainfall runoff flowing away from the perimeter.</td></tr>
<tr><td>Top Surface Cover and Thickness</td><td>0.5 m thick benign waste rock or oxide waste placed as a single loose lift over tailings.</td></tr>
<tr><td>Perimeter Bund</td><td>Minimum crest width of 1.5 m with slopes 1V:3H. Minimum height to be designed to provided stable containment for the design storm (24-hour PMP) plus 0.3 m freeboard. Bunds to be constructed with low permeability soils (e.g. tailings) and protected from erosion with rock armour.</td></tr>
<tr><td>Perimeter Bund Construction</td><td>Low permeability soils placed in perimeter bunds to be placed in maximum 0.3 m lifts and compacted to a minimum dry density of 95% of the maximum dry density, as determined by AS1289.5.4.1, at a moisture content of ±2% of the optimum moisture content. This is consistent with construction of wall raises. The cover material to be placed over the compacted perimeter bund.</td></tr>
<tr><td colspan="2">Embankment Slopes</td></tr>
<tr><td>Embankment Slope Profile</td><td>Regrade where required to a nominal 1V:3H continuous slope if currently steeper than 1V:3H, or a continuous slope to meet cut to fill requirements. To be assessed individually for each TSF flank.</td></tr>
<tr><td>Embankment Slope Closure and Rehabilitation Cover</td><td>0.5 m thick cover of benign waste rock placed over compacted tailings. Growth media placement in alignment with KCGM Visual Amenity Concept, with placement of 150 to 200 mm of rehabilitation materials ripped into the waste rock. Rocky bands to be placed based on material properties and TSF flank specific assessment.</td></tr>
<tr><td>Toe Sediment Retention Bund</td><td>Conversion of the seepage recovery drain and bund to sediment retention structure. Minimum crest width 2 m, height 2 m and outer bund slopes 1V:4H.</td></tr>
</table>
</td></tr>
</table>

TSF	DOCUMENT	COMMITMENT

Factor	Closure and Rehabilitation Design Criteria
Hydrology	
Rehabilitation and Closure Strategy	Contain precipitation from the design containment storm event on the top surface.
Design Storm for Containment	24-hour probable maximum precipitation (PMP) event for upper surface.
Design Storm for Conveyance (downchute and stilling basin)	Capable of managing the 500-year annual recurrence interval (ARI) event.

Page 39:

Embankments

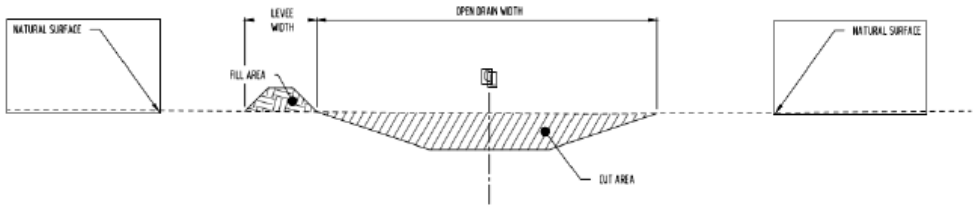
In line with the outcomes of the modelling completed by Landloch (2018a and 2018b), the external slopes above the existing rehabilitated benches will be regraded to form a continuous linear slope, where possible, as this is deemed to be the best option from an erosion management perspective. Rock armouring will be placed on the external embankments to minimise the potential for water erosion, and to minimise wind erosion (i.e. dust generation) (Golder, 2018b).

The thickness of the rock armouring required is anticipated to be in the order of 0.5 m. In accordance with the visual amenity concept it is likely that some areas of the Fimiston TSFs will not receive any additional rehabilitation materials, due to insufficient resources (refer to Section 6.1.1.2). Some slopes will have outer surface designs similar to the erosion resistant design used for the Fimiston WRDs, with rocky bands placed horizontally at key locations to manage water erosion. The location of these areas is guided by the visual amenity concept, the geometry of the TSF flank and the properties of the

rehabilitation materials used. On all Fimiston TSFs, rehabilitation of the lower flanks of the TSFs has already been completed. Due to the substantial step in bench above the rehabilitated flanks, stormwater from this bench drain will be diverted to ground level by an engineered downchute, consistent with existing downdrains on the Fimiston TSFs. Further stormwater management systems such as simple diversion trenches will guide this stormwater water to suitable entry points in the catchment. A TSF Closure Stormwater Integration Study (Golder, 2018) was undertaken to ensure that this stormwater, which comprises 1.8% of the total catchment area, to ensure that there was no unfavourable impact on any downstream infrastructure such as roads or the rail line.

The external slopes above these benches will be rehabilitated to form a linear slope, as this is deemed to be the best option from an erosion management perspective.

TSF	DOCUMENT	COMMITMENT
		Top Surface Post operations, a period of two to three years will be allowed to ensure the tailings is sufficiently dried out to allow safe access to the tailings beaches which form on the upper surface prior to commencement of rehabilitation earthworks. The tailings surface will be rock armoured with 0.5 m of benign material (i.e. rock or oxide waste) sourced from the Fimiston WRDs, which will protect the surface against water or wind erosion on the tailings surface. A competent engineered and rock armoured perimeter crest bund will be built around the upper crest of the TSFs. Engineering assessment of the upper surface of the TSF has confirmed the design capacity of 12 hour PMP (Probable Maximum Precipitation, 723.5 mm), without the crest bund. Therefore the crest bund will add additional capacity and ensure no overtopping to the external slopes. Temporary ponding of incident rainfall will occur on top of the TSF. However, due to high potential evaporation and low rainfall in the area, it is expected this will be a short-term occurrence and as a result of de-saturation of the underlying tailings pile, will not result in any long term hydraulic connection between ponding on the TSF surface and the groundwater system below the facility. Some infiltration into the tailings from surface will occur, and in the long-term, ongoing seepage rates in the range 2 to 5 L/s have been modelled to occur from each paddock into the underlying groundwater system for a period post closure. The modelling indicates that the groundwater elevation will not be influenced by this minor seepage. Infrastructure The blanket toe drains around the perimeter of TSF impoundments will remain in place and will continue to recover seepage water, which will be pumped to the Fimiston Open Pit once the Fimiston Plant is no longer operational. All tailings pipelines and pump stations will be flushed prior to decommissioning of systems and tailings lines and pumps will be removed. In the post closure period, the TSF areas are likely to be designated as zones of restricted access for safety reasons as well as to protect established vegetation. The TSFs are surrounded by a 4-strand barbed wire fence. Where appropriate, and required by approvals, and rehabilitation materials are available, revegetation will be encouraged. **Page 52:** "A conceptual design for a typical cross section of the drain and associated levee/bund is provided in Figure 22. All materials for this drain and bund will be sourced in situ. This drain is likely to be retained as a post closure feature, to ensure surface water is diverted away from the toe of the TSF and associated infrastructure,

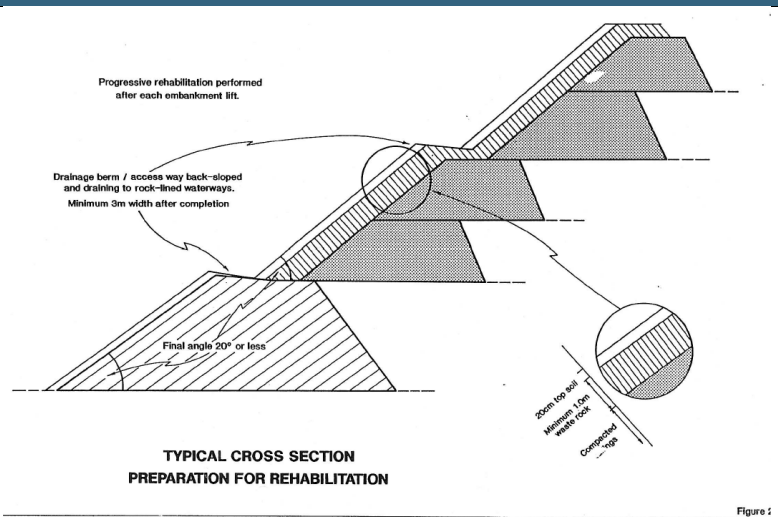
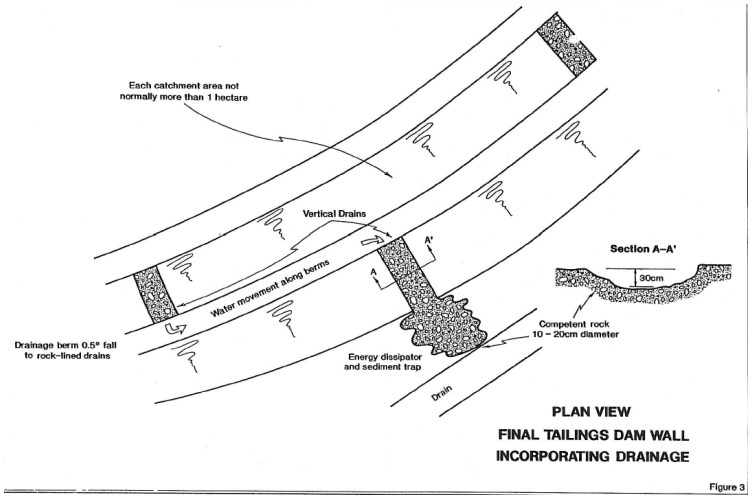
TSF	DOCUMENT	COMMITMENT
		and therefore minimising risk of scouring and recharge to the underlying groundwater mound.  **Figure 22: Conceptual Stormwater Drain Cross Section (with Levee)**
Fimiston I	KCGM Mining Proposal Resubmission Fimiston Gold Mine Operations Extension (Stage 3 – Golden Pike Cutback and Northern Waste Landform (REG ID: 24671) dated 3 December 2009	**Page 2:** "The design of the proposed Northern Waste Landform also includes: Capping of the Fimiston I TSF…" **Page 54:** "The dumping schedule will also take into account capping of the Fimiston I and Old Croesus TSFs." **Page 55:** "The design of the Northern Waste Landform includes the capping of … Fimiston I TSFs with waste rock. The Fimiston I and Old Croesus TSFs will be capped with approximately 5m of waste rock. The TSFs will be capped using the mining fleet as part of construction of the Northern Waste Landform. The waste rock will be applied at approximately 5m to allow for the bearing pressure of the 793s on the TSF surface. Capping the surface of the Fimiston I TSF will be undertaken when the waste dumping and tailings deposition schedules permit. Capping of the TSF will commence when tailings deposition has been completed and the tailings have consolidated and dried sufficiently to support machinery and allow rehabilitation to be completed… If the Fimiston I TSF is not decommissioned until after mining ceases it will be capped after it has dried sufficiently to be trafficable. Appropriate waste rock will be stockpiled for capping of the Fimiston I TSF in this situation." **Page 79:** Rehabilitation of waste landforms and disturbed areas as soon as practicable. **Page 92:** Closure criteria for the project will be developed during consultation with regulatory and community stakeholders and incorporated in the Closure and Reclamation Plan. **Page 93:** "Post mining land uses for the project are expected to be a combination of: Rehabilitated landforms for conservation, recreation and pastoral purposes (Northern Waste Landform, Fimiston

TSF	DOCUMENT	COMMITMENT
		l Tailings Storage Facility)" **Page 99:** "KCGM is committed to fully encapsulate the Fimiston Tailings Storage Facilities with waste rock after completion of tailings deposition. Rehabilitation is undertaken to ensure that the TSF is safe and stable and any potential erosion is minimised. Rehabilitation of the lower slopes of the Fimiston I TSF has commenced and is ongoing. Further rehabilitation work on the north facing slopes will be integrated with the construction of the Northern Waste Landform. Capping the surface of the Fimiston I TSF has been incorporated into the design of the Northern Waste Rock Landform. Capping of the TSF will be undertaken when the tailings have desiccated sufficiently to allow access to the surface by the mining fleet. After being capped with approximately 5 m of waste rock, the surface of the Fimiston I TSF will be rehabilitated with the Northern Waste Rock Landform if the tailings deposition schedule allows." **Page 100:** Closure Objectives (Table 23 Rehabilitation Completion Criteria for Fimiston I TSF) Completion criteria: Decant and underdrainage system sealed. All scrap, pipelines and infrastructure removed from the TSF surface. TSF surface capped with 5 m of coarse rock if closed during mining operations. Top surface contoured for water management and deep ripped on the contour. Seeded with local provenance species of the goldfields region on the outslopes.
Fimiston I	Correspondence titled: "Kalgoorlie Gold Mines Pty Ltd - Golden Pike Mining Proposal" signed by Russell Cole, General Manager - KCGM dated 7 January 2010 *Letter reviewed dated 6 January 2010*	…KCGM commits to undertaking rehabilitation of the Northern waste rock landform in accordance with the prescriptions detailed in the PER, and associated documentation (eg; Rehabilitation Management Plans) and in accordance with relevant tenement conditions. KCGM understands that should alternative rehabilitation techniques wish to be introduced in the future, appropriate stakeholder consultation will need to occur."
Fimiston I	Correspondence titled Addendum to the Notice of Intent for the Increase of the Fimiston 1 TSF signed by Russell Cole, Acting General Manager - KCGM dated 12 May 2004 and retained on Department of Industry and Resources	"…KCGM confirms our commitment to fully encapsulate the 40m high Fimiston I tailings storage facility with waste rock after completion of tailings deposition."

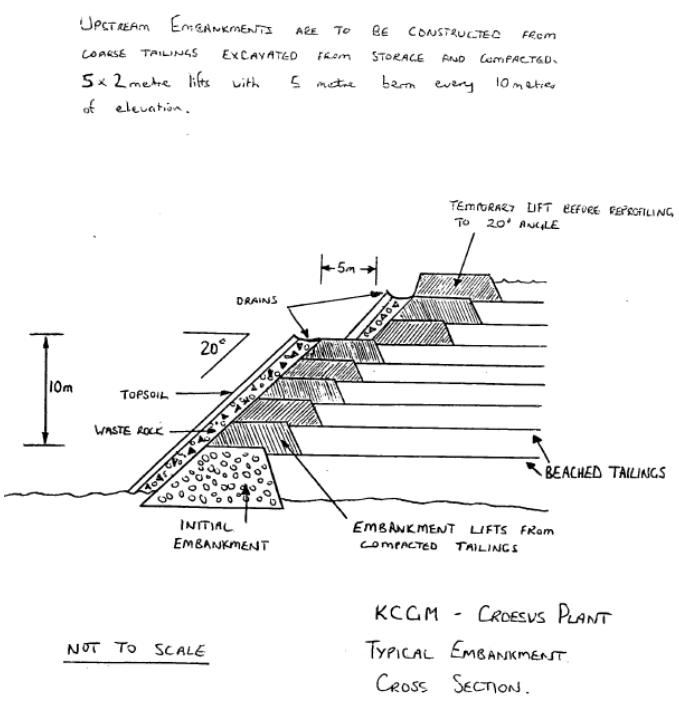
TSF	DOCUMENT	COMMITMENT
	File No. E2561/200301.	
Fimiston I	Minor Changes to Waste Rock Dump Footprint Fimiston 1 and Topsoil Stripping Fimiston 1 - North East Waste Rock Dump - M26/383, G26/79 and G26/15 (NOI 3681) dated 20 December 2001 signed by Mr Jim Bawden, Manager - Community Safety and Environment and 15 March 2001 signed by Mr Neil Rankine, Land Administrator, Kalgoorlie Consolidated Gold Mines and retained on Department of Minerals and Energy File No. 4355/00 *Letter reviewed dated 20 December 2000*	"An ideal opportunity exists for us to make a minor extension to the approved waste rock dump footprint to cover this landfill [old abandoned municipal landfill] and also to use some of the topsoil in immediate rehabilitation of the site. Further the rock armouring of this site will provide a more secure rehabilitation face in this south east corner of the Fimiston I tailings storage facility."
Fimiston I	"Request for Amendment - Fimiston Waste Dump Boundaries" dated 5 March 1996, signed by Mr A King - Manager Mining, KCGM;	Document unable to be reviewed.
Fimiston I	"Notice of Intention to Clear Land on M26/383 for Powerline Maintenance and Access Road" dated 13 June 1996, signed by Mr Brett Anderson - KCMG Land Administration Officer.	Document unable to be reviewed – unlikely to contain any closure commitments relating to Fimiston I TSF.
Fimiston I	Addendum to Notice of Intent for Increasing the Capacity of the Fimiston 1 Tailings Storage Facility at KCGM, Kalgoorlie, Western Australia (NOI 4432), prepared by Golder Associates dated April 2003.	**Page ii:** "The proposals put forward in this addendum provide for staged construction of the integrated Fimiston I TSF to a maximum final height of 40 m, 10 m higher than that currently approved under the terms of the original Works Approval. The strategy for closure at the end of the operating life of the TSF is to completely encapsulate the storage with waste rock. This will be achieved by extending the waste dump located on the southern side of the TSF over the top of the storage" **Page 29:** "The overall slopes formed by the outer wall lifts are generally at a batter angle of 17º to 20º, in

TSF	DOCUMENT	COMMITMENT
		compliance with conditions of the Notice of Intent and future raises will have external slopes of 14º. The decommissioning proposals anticipate that the waste rock dump located on the southern and south eastern side of the Fimiston TSF will ultimately be extended over the top of the TSF, effectively encapsulating the facility. Rehabilitation procedures for decommissioning of waste dumps and tailings storages are detailed in the Environmental Guidelines prepared by the KCGM Environmental Section. The surface area will be regraded to drain surface runoff towards the edge of the embankments where they have the least height and will flow to ground level via a series of stepped and rock lined drains. Decant pipes will be backfilled, the return water pond levelled and revegetated. All exposed surfaces such as drains will be trimmed wherever slopes exceed 2 vertical to 1 horizontal. Decommissioning of the decant drainage system will follow the end of tailings disposal, as will filling of the return water pond with mine waste material.”
Fimiston I	"Addendum to Rationalisation Fimiston I and Croesus Tailings Storages" dated 8 August 1995 and retained on Department of Minerals and Energy File No. 2009/96.	**Page 4:** “… that a final height of 30 m to be adopted for the Croesus and Fimiston I tailings storages.”
Fimiston I	Rationalisation Fimiston I and Croesus Tailings Dams Kalgoorlie Consolidated Gold Mines, Kalgoorlie WA" dated April 1993 and retained on Department of Minerals and Energy File No. 2058/93.	**Page iii:** Decants taken out of service will be sealed with concrete plugs **Page 4:** The overall slope are generally between 17 and 20 degrees to comply with environmental guidelines but some steeper slopes exist. Slopes between 17 and 20 degrees will either be achieved over time or the existing slopes will be buttressed by waste dumps. **Page 17:** The rehabilitation procedures are detailed in the Environmental Guidelines, Tailings Dams: Preparation for Revegetation, prepared by the Environmental Section, KCGM, May 1991.
Fimiston I	Letter of Intent - Fimiston Stage 1 Tailings Dam Seepage Control Trench", dated 7 February 1994 and signed by Peter Rowe, received at the Kalgoorlie Inspectorate on 14 February 1994 and retained on Department of Minerals and Energy File No. 2212/93	“Excavated material will be windrowed on either side of the trench with the windrow adjacent to Bulong Road being battered to 20° and seeded.”
Fimiston I	Environmental Guidelines, Tailings Dams - Preparation for Revegetation,	**Page 2:** “1. Areas that become available for rehabilitation should be defined well in advance so as to allow incorporation

TSF	DOCUMENT	COMMITMENT
	Kalgoorlie Consolidated Gold Mines Environmental Section" May 1991, and retained on Department of Minerals and Energy File No.2058/93.	into the rehabilitation planning and budgeting process. 4. To minimise earthworks associated with rehabilitation the starter embankment and subsequent lifts should be constructed with the outer slope at 20º to horizontal. If this is not part of the initial design, the embankment will need to be reformed to 20º or less. 5. When tailings form the embankment, they will need to be sheeted with a 1m layer of waste rock. Figure 2 illustrates a typical cross section of a completed tailings dam wall. The waste material should normally consist of a high percentage of larger sized rock fractions, in order to minimise the potential for capillary rise of salt from the underlying tailings. 6. To achieve satisfactory long-term drainage of the dam walls, each berm should be constructed with a surveyed grade of 0.5% fall along its length leading to rock-lined water ways. Figure 3 illustrates the typical drainage pattern which needs to be developed. 7. Vertical drains are to be spaced in a manner which ensures that each catchment does not exceed 1 hectare in size (the spacing between drains will be dependent upon the length of the slope and the height of each lift). 8. Topsoil approximately 20cm n depth should be spread over the waste roc sheeting of the dam walls. 9. The surface of the tailings dam walls should then be ripped or scarified on the contour to a maximum depth of 0.5m at a spacing of 1.5m or less 9. All earthworks associated with the preparation of sites or rehabilitation need to be completed by the end of March each year to allow for autumn seeding for revegetation. 10. …the application of seed and fertiliser to site. **Figure 2:**

TSF	DOCUMENT	COMMITMENT
		 **Figure 3:** 

TSF	DOCUMENT	COMMITMENT
Fimiston I	Draft NOI for an extension to the tailings storage at North Kalgurli Mine (May 1991) Australian Groundwater Consultants	**Page 7:** "...the tailings storage will be progressively rehabilitated to minimise dust and erosion. The exposed slopes will be covered with at least 1 m of suitable waste rock and regraded to a slope of 3:1 after each berm has been formed. The outer slopes of the existing storage will also be covered with waste rock …Trials to test the effectiveness of revegetation will be carried out on the exposed slopes. Revegetation trials will concentrate initially on the northern and westerly aspects of both the new and existing tailings storages because these aspects face residential areas. The topsoil removed from the foundation areas will be spread over the waste rock, then salt resistant species will be sewn the following autumn....The Department of Conservation and Land Management will be consulted about the fertilising and sowing techniques and the species to be used in the trials. The top surface of both the existing and new storages will be covered with waste rock or nickel slag during decommissioning. It may be possible to revegetate the top surface, however the practicability of establishing effective long term cover will depend upon the success of revegetation trials. …downstream slopes of the embankments will be progressively covered with stable waste rock… All rehabilitation work in progress will be completed if production is suspended." **Page 14:** "Revegetation of the embankments and possibly the top surface will be carried out if the trials conducted during the life of the project show that such vegetation can be self sustaining."
Fimiston I	Notice of Intent for an extension to the tailings storage at North Kalgurli Mine dated September 1987, letter dated 3 May 1991 and retained on Mines Department File No. 1198/91.	"iii) … Construction of the walls will be carried out so that the final profile shall be no greater than 20 degrees from the horizontal. Profiles on dam lifts may exceed 20 degrees on a temporary basis while awaiting re-profiling before rehabilitation begins." iv) Rehabilitation will consist of sheeting of the dam wall with 1 metre of mine waste rock, followed by 20cm of topsoil. Planting of suitable vegetation shall be carried out at the appropriate time under the supervision of the KCGM environmental department. v) As rehabilitation of the dam will progress during normal operations, 5 metre wide berms will be placed every 10 metres of vertical height to aid drainage and to reduce channelling during heavy rain. vi) When rehabilitation is being carried out above the level of the berm, a temporary drain will be place at the top of the waste rock to prevent damage to the revegetated areas."

TSF	DOCUMENT	COMMITMENT
		
Fimiston I	Letter from North Kalgurli Mines Limited dated 11 April 1988 and filed at pages 162 and 163 of Mines File 17221/83, in particular points 2(a), (b) and 2(c).	Document unable to be reviewed.
Fimiston I	Notice of Intent, Fimiston Project - Phase II, Proposed Ore Processing Plant Expansion, dated September 1990 and retained on Mines File 920/89	Document reviewed - No closure commitments relevant to Fimiston I TSF.

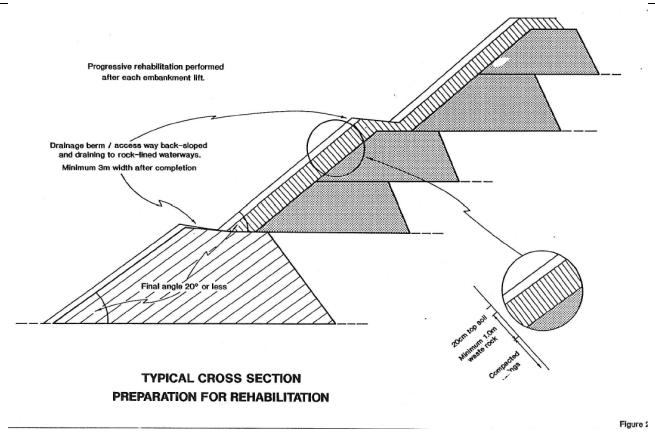
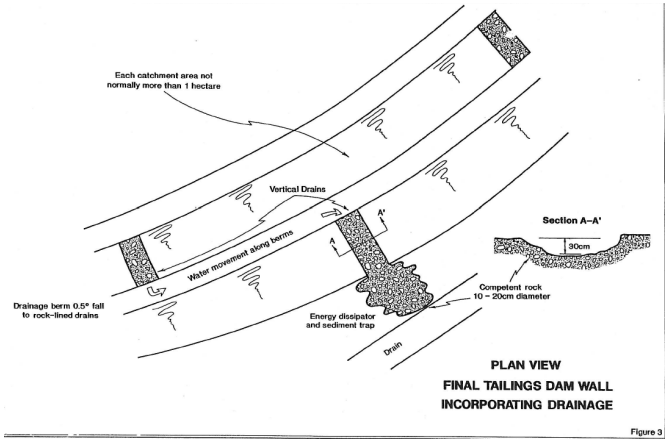
TSF	DOCUMENT	COMMITMENT
	Document reviewed dated June 1989	
Fimiston I	Mt Percy Mine Tailings Storage Extension Works Approval Documentation dated November 1988, from Australian Groundwater Consultants.	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	Fimiston to Mt Percy Process Water Transfer Pipeline Drainage and Spillage Containment dated 6 August 1991, the associated letter dated 13 August 1991 and both retained on Mines Department File No. 87/88.	Document reviewed – Unlikely to contain closure commitments relevant to Fimiston I TSF.
Fimiston I	"Notice of Intent - Sitewide Water Supply Rationalisation" dated September 1991 and retained on Mines Department File No. 1273/91;	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	"Addendum to Notice of Intent - Sitewater Water Supply Rationalisation" dated 16 March 1992 and retained on Mines Department File No. 2001/92	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	"Consultative Environmental Review Mine and Waste Dumps- Fimiston" Kalgoorlie Consolidated Gold Mines Pty Ltd dated August 1990 and retained on Department of Minerals and Energy File No. 1198/91;	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	Notice of Intent - Fimiston Expansion 1994/95" dated 11 August 1994 and "Letter of Intent - Tenement Mining Lease 26/383" dated 25 August 1994	Document reviewed - No closure commitments relevant to Fimiston I TSF.

TSF	DOCUMENT	COMMITMENT
	and retained on Department of Minerals and Energy File No. 2068/94.	
Fimiston I	"Notice of Intent - Mt Charlotte to Fimiston Overland Conveyor" dated 2 December 1994 and retained on Department of Minerals and Energy File No. 2010/95.	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	Letters dated 18 November 1992 and 3 February 1993 both titled "Consultative Environment Review- Request for Amendment" signed by A O'Neil Manager- Mining (KCGM) and retained on Department of Minerals and Energy File No. 2058/93.	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	"Retreatment of Croesus, Mt Trafalgar and Old Croesus Tailings Dumps - Notice of Intent" dated 3 July 1998;	Document reviewed - No closure commitments relevant to Fimiston I TSF.
Fimiston I	"Retreatment of Croesus and Mt Trafalgar Tailings dumps - Plan of Operations" dated July 1998;	Document reviewed - no closure commitments relating to Fimiston I TSF.
Fimiston I	Letters dated 7 July 1998 and 1 September 1998 signed by Resident Manager - Mr Phil Evers.	Documents unable to be reviewed.
Fimiston I	"Addendum to Notice of Intent for Increasing the Capacity of the Fimiston 1 Tailings Storage Facility at KCGM, Kalgoorlie, Western Australia (NOI 4432)", prepared by Golder Associates dated April 2003 and retained on Department of Industry and Resources File No. E2561/200301.	**Page 29:** The overall slopes formed by the outer wall lifts are generally at a batter angle of 17° to 20°, in compliance with conditions of the Notice of Intent and future raises will have external slopes of 14°. The decommissioning proposals anticipate that the waste rock dump located on the southern and south eastern side of the Fimiston TSF will ultimately be extended over the top of the TSF, effectively encapsulating the facility. **Page 29:** Rehabilitation procedures for decommissioning of waste dumps and tailings storages are detailed in the Environmental Guidelines prepared by the KCGM Environmental Section. Introduction of vegetation to the upper surface of the encapsulated facility should be in line with the KCGM guidelines and should reflect commitments at the time of decommissioning.

TSF	DOCUMENT	COMMITMENT
Fimiston I	(Reg ID 67695) "Fimiston I Tailings Storage Facility Increase in Maximum Embankments Height (to 60m)" dated 9 May 2017 signed by Ian Butler - General Manager and retained on Department of Mines, Industry Regulations and Safety File No. EARS-MP-67695 as Doc ID 5005603	**Page 30:** “Pumping is expected to be required after closure of the TSF. The duration and rate of pumping will be a function of the residual seepage rates from the TSF, and the final closure criteria for groundwater levels." **Page 53:** "The upper tailings surface will be capped with ~0.5 m of suitable cover material sourced form the Fimiston Waste Rock Dumps." "The final external slopes of the TSF will be finished at an angle similar to the existing slopes. A waste rock cover will be placed on the external embankments to minimise the potential for erosion of the tailings. Additional rock armouring will be placed at the TSF crest and on the min-level benches where the potential for erosion is greater." **Page 45:** "The post closure land use for the TSFs will be 'modified natural ecosystems'. Where ecosystems have established and are stable, passive land use options that are compatible with the requirement to protect vegetation would be preferred."

1.4.3 Commitments in Approval Documents – Fimiston II TSF

TSF	Document	Commitment
Fimiston II	Environmental Guidelines, Tailings Dams - Preparation for Revegetation, Kalgoorlie Consolidated Gold Mines Environmental Section" May 1991, and retained on Department of Minerals and Energy File No.2058/93.	**Page 2:** "1. Areas that become available for rehabilitation should be defined well in advance so as to allow incorporation into the rehabilitation planning and budgeting process. 4. To minimise earthworks associated with rehabilitation the starter embankment and subsequent lifts should be constructed with the outer slope at 20º to horizontal. If this is not part of the initial design, the embankment will need to be reformed to 20º or less. 5. When tailings form the embankment, they will need to be sheeted with a 1m layer of waste rock. Figure 2 illustrates a typical cross section of a completed tailings dam wall. The waste material should normally consist of a high percentage of larger sized rock fractions, in order to minimise the potential for capillary rise of salt from the underlying tailings. 6. To achieve satisfactory long-term drainage of the dam walls, each berm should be constructed with a surveyed grade of 0.5% fall along its length leading to rock-lined water ways. Figure 3 illustrates the typical drainage pattern which needs to be developed. 7. Vertical drains are to be spaced in a manner which ensures that each catchment does not exceed 1 hectare in size (the spacing between drains will be dependent upon the length f the slope and the height of each lift). 8. Topsoil approximately 20cm depth should be spread over the waste roc sheeting of the dam walls. 9. The surface of the tailings dam walls should then be ripped or scarified on the contour to a maximum depth of 0.5m at a spacing of 1.5m or less 9. All earthworks associated with the preparation of sites or rehabilitation need to be completed by the end of March each year to allow for autumn seeding for revegetation. 10. …the application of seed and fertiliser to site. **Figure 2:**

		 **Figure 3:** 
Fimiston II	Letter of commitment titled "re: Addendum to the Mining Proposal for the Increase in Height of the Fimiston II TSF" (MP 5711) dated 16 January 2006, signed by Russell Cole, General Manager KCGM and retained on Department of Industry and Resources	"…KCGM confirms our commitment to fully encapsulate the Fimiston II tailings storage facility with waste rock after completion of tailings deposition."

	File No. E2561/200312 *Letter reviewed dated 16 January 2007*	
Fimiston II	Addendum to Notice of Intent: Proposed Increase in the Storage Capacity of the Fimiston II Tailings Storage Facility at KCGM Volume I and Volume II (MP 5711) dated September 2005 Golder Associates	**Page iii:** At the end of operating life of the TSF, the outer embankments of the TSF will be sheeted with a layer of waste rock. A cover of topsoil will be graded into the coarse waste rock outer sheeting layer to provide a medium for plant growth. Run-off from the outer batter slopes will be intercepted and directed into armoured channels (drop structures) constructed at strategic locations along the lengths of each embankment. Benches will be engineered with a gradient into the batter slope and graded towards the run-off structures. Intermediate run-off channels will be constructed at intervals along the outer slope to take the excess flow during heavy rainfall. **Page iv:** "Following cessation of deposition into the Fimiston II TSF, the decommissioning of the facility will be carried out in accordance with KCGM's decommissioning commitments developed for the overall project." **Page 23:** At closure, the embankment slopes will be sheeted with selected waste rock to provide erosion protection. **Page 24:** "It is expected that the decommissioning of gravity outfall pipelines will require excavating and exposing the pipelines where they exit beneath the TSF perimeter embankment, installing an inflatable packer in the pipeline at a location near the upstream toe of the embankment, fitting a blank end section to the end of the pipe with a valved grout nozzle welded into the end plate near the crown of the pipe and pumping the section full of cement grout. Once the grout has set, the remaining pipeline can be backfilled with a cement/slurry mix....The abandoned decant tower would be allowed to fill with tailings as the beach level rises." **Page 39:** The longer term objective (to manage seepage) is to maintain the post-closure groundwater level at a depth of 6 m or greater without the need for active management. **Page 49: "**On cessation of operations, a cover of selected material will be placed over the upper surface to inhibit dust generation from the TSF." "Rehabilitation procedures for decommissioning of waste dumps and tailings storages are detailed in the Environmental Procedures prepared by the KCGM Safety and Environmental Department. Introduction of vegetation to the upper surface of the encapsulated facility would be in line with KCGM guidelines and would reflect commitments current at the time of decommissioning." "KCGM has commenced progressive rehabilitation on the Fimiston II TSF and will continue as areas of the TSF become available…" "The plant seed selection for rehabilitation will be based on the results of natural ecosystem research, which is carried out by KCGM in the region. The aim of seeding will be to establish plant community that will be viable in the long-term." "The post-mining land use will be determined through the development of KCGM's Mine Closure Plan. The mine Closure Plan will be developed in conjunction with the community and regulatory authorities will prior to the

		expected closure of the KCGM operation. Proposals for post-mining land use will be in accordance with the existing framework of the KCGM Environmental Policy for the Fimiston operations." **Page 55:** Closure of the TSF will be undertaken in accordance with KCGM's site wide Closure Plan, which is in the process of being developed.
Fimiston II	"Poolwall Trial at Fimiston II Tailings Storage" and dated 2 December 1996 and retained on Department of Minerals and Energy File No. 2001/97	Document unable to be reviewed.
Fimiston II	Poolwall Operations at the Fimiston II Tailings Storage" dated 19 August 1997 and signed by Mr John Holdsworth- Manager Mineral Processing Kalgoorlie Consolidated Gold Mines and retained on Department of Minerals and Energy, File No. 2053/97.	Document unable to be reviewed.
Fimiston II	Addendum to Notice of Intent - Modification of Wall Geometry - Fimiston II, Paddocks "A" and "B" - dated 8 August 1995	"This letter proposes changes to the NOI conditions so that the outer wall geometry is consistent with other KCGM storages, namely: • 20º outer slopes between berms • 4m wide berm every 10m vertically • Maximum height 30m"
Fimiston II	"Decant 3 Overflow Pond", signed by Chief Engineer P Higgins, dated 6 May 1999 and retained on Department of Minerals and Energy File No. 2053/99.	Document unable to be reviewed.
Fimiston II	"Notice of Intent- Fimiston II Tailings Storage Extension" dated October 1994 and retained on Department of Minerals and Energy File No. 2249/94	**Page 21:** The rehabilitation procedures are detailed in the Environmental Guidelines, Tailings Dams: Preparation for Revegetation (prepared by the Environmental Section of KCGM and dated May 1991).
Fimiston II	"Notice of Intent- Fimiston Project Phase II - New Tailings Storage" dated March 1991 and retained on	**Page 10:** The site will be cleared of scrub and tree sized vegetation and topsoil will be stripped to a depth of at least 0.1 metres. Topsoil stockpiles will be in the corner of Bulong Road and the railway line where it will not pose an obstruction for ongoing works.

	Department of Minerals and Energy File No. 1140//91 Gutteridge Haskins & Davey	Topsoil reserves in excess of the needs for tailings dam rehabilitation requirements may be utilised for other KCGM rehabilitation work. Stability and seepage for the (tailings dam) embankments will be analysed by standard geotechnical techniques. In addition the final overall outer face will meet DOM requirements. This embankment is fully engineered and supervised which can therefore have locally steeper slopes than those indicated in the DOM guidelines for non engineered embankments. **Page 13: "**For the ultimate tailings storage, the remaining upslope drainage will be intercepted by peripheral drains which lead the run off around the storage and back to the existing culverts beneath the rail line" **Page 17: "**The overall design is such as to minimise erosion and to control dust. The exposed slopes…will be progressively rehabilitated with each lift of the dam wall. Topsoil will be spread on the external slopes of waste rock and seed and fertilizer will be added. After completion of the storage the exposed surface will be allowed to dry and consolidate for a period of 6 - 12 months to enable construction traffic to pass over the surface crust. The surface will then be covered with waste rock and topsoil will be spread over the surface. Seed and fertiliser will then be applied." The surface area will be regraded to drain surface runoff towards the edge of the embankments where they have the least height and will flow to ground level via a series of stepped and rock lined drains. Decant pipes will be backfilled, the return water pond levelled and revegetated. All exposed surfaces such as drains will be trimmed wherever slopes exceed 2 vertical to 1 horizontal. Decommissioning of the decant drainage system will follow the end of tailings disposal, as will filling of the return water pond with mine waste material"
Fimiston II	(Reg ID: 56261) "Fimiston II Tailings Storage Facility Height Increase – Mining Proposal " dated 7 September 2015 signed by Ian Butler -- General Manager (Acting), and retained on Department of Mines and Petroleum file no. EARS-MP-56261 as Doc ID 3796089.	**Page xii:** "Seepage recovery will continue until completion criteria are met, which is expected to be about 10 years after closure." "KCGM will continue seepage recovery until completion criteria are met." **Page xv:** "Seepage recovery will continue until completion criteria are met which is expected to be approximately ten years after closure of the TSF." "Revegetation will be undertaken in accordance with the Mine Closure Plan" **Page 18:** "Pumping is expected to be required after closure of the TSF. The duration and rate of pumping will be a function of the residual seepage rates from the TSF, and the final closure criteria for groundwater levels which are determined and incorporated into future versions of the MCP..." **Page 22:** "The primary objective of the FSGMP is to prevent impact to vegetation as a consequence of rising groundwater levels due to seepage from the Fimiston TSFs. The secondary objective is to manage the groundwater levels at post-closure. The Eastern Borefield will require active management after cessation of TSF operation. Groundwater levels are expected to stabilise over time, and naturally deepen toward estimated

		historical groundwater levels for the area in the long term." **Page 27:** "KCGM has undertaken a program to characterise materials potentially available for rehabilitation at Fimiston including analysis of topsoil and oxide material stockpiles. Results from the materials characterisation program will be used to determine rehabilitation prescriptions for disturbed areas… Rehabilitation will include shaping of the outer embankments to reduce long term erosion and promote stability and covering the outer slopes with waste rock for erosion protection. Where appropriate topsoil or cover material is available, revegetation will be encouraged." **Page 29:** "…the measures applied to control dust from the TSFs include: • Progressive rehabilitation to minimise exposed areas…" **Page 31:** "The TSF will be designed and rehabilitated to ensure it remains safe and stable in the long term, with the re-establishment of a modified natural ecosystem through seeding with native species." "Following closure it is proposed that the Fimiston II TSF will remain as an elevated landform which has been rehabilitated and revegetated. KCGM propose to stabilise the tailings surface with a 0.5 m of waste rock capping, which will protect the surface against erosion by acting as an energy dissipater and forming a barrier between the tailings and the elements. A rock armoured perimeter bund will be constructed around the upper tailings surface. This design choice will result in temporary ponding of incidental rainfall on top of the TSF. However, due to high potential evaporation and low rainfall in the area, it is expected this will be a short term occurrence and will not result in any long term hydraulic connection to the groundwater. The top surface of the TSF will be able to accommodate a 12-hour PMP without overtopping." **Page 32:** "Post operations, a period of two to three years will be allowed to ensure the tailings is sufficiently dried to allow safe access to the tailings beaches. The tailings surface will be capped with competent waste rock sourced from the Fimiston Waste Rock Dumps (WRDs) which will protect the surface against water or wind erosion. Temporary ponding of incident rainfall on top of the TSF is not expected to be an issue, due to high potential evaporation and low rainfall in the Region, and will not result in any long term hydraulic connection with the groundwater system. A waste rock cover will be placed on the external embankments to minimise the potential for erosion of the tailings walls. Post closure, the TSF areas will be zones of restricted access for safety reasons, as well as to protect established vegetation. The TSFs are surrounded by a four-strand barbed wire fence. The TSFs will be rehabilitated to ensure they are safe and stable. Where appropriate rehabilitation materials or cover material are available, revegetation will be encouraged. All Fimiston TSFs are likely to remain active until late in mine life, due to operational capacity requirements." "Groundwater management will continue post closure until agreed groundwater criteria are met. The outer slopes of the raised TSF will be constructed at 1V:4H. A waste rock cover of nominally 1m will be placed on the new external embankments to minimise the potential for erosion of the tailings used to construct

		the upstream lifts. Rainfall runoff on the outer slopes will be collected along a graded bench and directed towards drop structures. Post closure, the runoff will be released to the surrounding environment.” “The standard decommissioning and rehabilitation approach that will be utilised during closure of the TSFs is presented in Table 11.

Table 11: Standard Decommissioning and Rehabilitation Approach for TSFs

Domain	Feature	Approach
Tailings Storage Facilities	Fimiston I, Fimiston II, Kaltails,	• Remove piping, decant pumps and other infrastructure; • Allow sufficient drying time (approx. 2-3 years); • Profile outer embankments of landform to reduce long term erosion and promote stability; • Cover outer slopes and surfaces with appropriate waste rock for erosion protection; • Upper surface of TSF to be reshaped for water retention and capped with appropriate material for dust management; • Construction of robust crest bunds; • Rip on the contour and seed with native species of local provenance if identified for revegetation; • Maintain fencing to restrict access to landform until relinquishment (or no longer required); • Continue seepage and groundwater dewatering until monitoring confirms that active management is no longer required; and • Backfill all seepage trenches and ponds when no longer required.
	Tailings Delivery and Decant Water Return Lines (including bunds)	• For above ground pipelines, flush and remove, and sell or recycle where possible, unless specified otherwise by appropriate approvals; • For buried pipelines, flush and leave buried unless they pose a future risk; and • Reinstate areas along pipelines and re-vegetate as appropriate.

1.4.4 Commitments in Approval Documents – Kaltails TSF

TSF	Document	Commitment
Kaltails	Kalgoorlie Tailings Retreatment Project Public Environmental Report January 1988 *This document applies to the tailings dam as constructed and operated prior to KCGM transfer of ownership and recommissioning.*	**Page vi:** "…tailings will be deposited into a new tailings storage, at a new site, which will be designs, constructed and managed to facilitate long term stability and rehabilitation of the completed storage." **Page x:** "Revegetation trials will be conducted on the final slopes of the new tailings storage, with a view t restoring the storage to a stable and ecologically acceptable condition." "The new tailings storage will be progressively rehabilitated to minimise the potential for future dust generation after project closure." **Page xi:** "Topsoil will be removed from the tailings storage site and stockpiled for subsequent replacement on the final embankments to encourage revegetation. Revegetation trials will be conducted during the course of the project, and attempts will be made to progressively revegetate the final slopes of the tailings storage after cover with waste rock and landscaping to produce stable aesthetic landforms. At completion, the top surface of the tailings storage will be ripped, covered with a stable blanket, and windrowed to facilitate eventual natural revegetation in time." **Page xii:** "Progressively flatten the outer embankments and cover with at east 1 m of waste rock or equivalent to create a final slope of 1:4, or flatter. Cover with a layer of topsoil and mulch, and conduct revegetation trials. In the event that revegetation on the outer embankments is unsuccessful, armour with further waste rock or equivalent, as erosion protection. Rehabilitate the top surface upon decommissioning by cross-ripping and covering with nickel slag or equivalent to minimise dust and enhance leaching. The surface will then be either revegetated or armoured, depending on the results of revegetation trials." **Page xiii:** "The rehabilitation programme will be completed and the project sites will be cleared of debris when the project closes." **Page 36:** "It is proposed that a major diversion channel be excavated along the northern and eastern sides of the tailings storage to intercept the flow… channel would be continues down the eastern side of the lease in a southerly direction to the southern boundary of the lease area. The diverted water would be discharged to the flow downslope toward Hannan Lake. The northern diversion would be taken across to the western lease boundary. At the north-eastern corner of the storage, flood protection including rock armouring will be provided to ensure that the embankment is stable against erosion." **Page 38:** "Soil disturbed by the pipe laying operation (blade trench method) will be replaced and raked to encourage shrub growth and the corridor left in a tidy condition. A minimum width maintenance access track will remain alongside the line." **Page 40:** "At its highest point, the storage will be approximately 26 m (vertical) above pre-existing ground level

		and have a maximum batter angle of 1:4 – 1:5 and maximum slope lengths of 30 m. The top surface of the storage will be a low slope of approximately 1:150, draining inwards, to the positions used for the central decants during operation." "The rehabilitation method involves the creation of structurally stable final batters, covering these with at least 1 m of suitable waste rock followed by a layer of topsoil into which machine mulched vegetation has been incorporated." "…revegetation will incorporate the direct seeding or planting of native species, probably in combination with application of phosophatic fertilizer at rates of up to 200 kg/ha. In the event that no species with a sufficiently high salt resistance can be found, then the surfaces will be armoured with waste rock to control dust and erosion." "Due to the method of tailings emplacement, rehabilitation of the top surface of the storage will not be possible until the competition of the project. The rehabilitation strategy proposed for this surface …centrally grading 1:150 low slopes formed on the top of the storage will be retained. This will preclude runoff form the top of the storage flowing over and down the side batters." **Page 41:** "the treatment plant, monitor stations and all ancillary infrastructures will be either mothballed and placed under care and maintenance, or removed…. The top surface of the storage will be covered in a layer of slag of similar appropriate material to achieve dust abatement and promote leaching of salts. The decision to proceed with revegetation of the top of the storage will depend upon the period of closure and will be made in consultation with the relevant authorities." **Page 48:** "the duration of potential dust generation from the tailings storage batters will be minimized under the progressive rehabilitation strategy…whereby waste rock and topsoil are to be spread over tailings and revegetated progressively as the embankments are raised." "The rehabilitation proposals for final decommissioning of the new storage will ensure that the site is a potential minor source of going dust in the future, because the following features – - Low slope angles on the embankments - Vegetation cover on the embankments - stabilization cover and eventually vegetation, on top of the tailings storage - surrounding protective zone of trees" **Page 51:** "Progressive rehabilitation will commence with the rehabilitation and revegetation of the primary embankment and the first and second lifts. As sufficient areas then become available for rehabilitation, the final cover will be drawn from the soil/mulch stockpile (s). "Rehabilitation Philosophy The philosophy underlying the methods for rehabilitation described in this document has been developed from

		several principles, as follows – • Final landforms should be stable against the forces of wind and water erosion and be structurally sound • Final landforms should be non-toxic to surrounding fauna, flora and other down stream land users such as pastoralists • Aesthetically, final landforms should conform with the surrounding natural landforms (where the opportunity exists to achieve this)…" **Page 54:** "The rehabilitation of the mined tailings areas will be progressive and involves preparing and stabilizing the surface prior to leaving the surface for at least two years while leaching of salts can take place. It is intended that the surface will be cross-ripped following the reestablishment of surface conditions, interrupted by the deposition of tailings dumps. The surface will be covered with a layer of nickel slag, or alternative and appropriate material, and left to open-leach." **Page 54 & 55:** The plant site and associated areas of disturbance will be cleared of all buildups, plant and debris, and fully restored at the completion of the project… all above ground installations and lines will be removed… Below ground installations, such as the water supply line, will remain as it is uneconomic to reclaim, and removal would involve considerable additional disturbance to an area rehabilitated less than ten years previously (following installation)… Sumps associated with the water supply and slurry lines will be cleaned of residue and the sumps infilled with the material stockpiled adjacent to them during excavation. Where necessary, restoration will assisted by the addition of native seed and fertilizer."
Kaltails	Kaltails TSF Recommissioning - Preliminary Works General Purpose Leases 26/165 and 26/166 (Reg ID 28054) dated 27 August 2010	**Page 10:** Historic Commitment: Rehabilitation was undertaken on the embankments of the TSF. A two layer cover that was designed to achieve the twin objectives of long term stability and revegetation was applied to the TSF embankments. A 0.3m layer of non-acid forming waste rock from the Fimiston Open Pit was placed to protect the embankments and provide a capillary break. A 0.1 to 0.2m layer of topsoil was mixed into rock and placed over the capillary break layer to provide a growth medium. **Page 27:** The incident rain falling on the perimeter embankments will be managed through constructing graded zones, allowing surface runoff to shed towards engineered drop structures and existing penstocks. The penstocks will be removed at closure after the operational phase of the TSF. **Page 82:** The objectives developed for the closure of the Kaltails TSF are: • Creation of a safe and stable landform in the long term; • Minimisation of surface erosion and tunnelling of the tailings; • Minimisation of dust generation; and • Minimisation of long term seepage. **Page 83:** Surface capping - 0.5m of well graded rockfill

		New external embankments - • 1m of waste rock with additional rock armouring on the TSF crest and the access road on the centre of the bench. • Final slopes constructed to an overall grade of approximately 14°. Surface water management (top surface) - No overtopping of the top surface (designed to retain a 12hour PMP) Surface water management (embankments) – • Graded berms and engineered drop structures • Existing penstocks removed after operational phase Seepage control - Continued operation of seepage interception system in accordance with Kaltails TSF Seepage and Groundwater Management Plan until target groundwater levels maintained. **Page 84:**Post mining land uses at Kaltails are likely to be a combination of: • Rehabilitated landforms for conservation purposes; and • Zones with restricted access for safety reasons. The key objective of rehabilitation at KCGM is to ensure that decommissioned sites are left in a safe and stable condition, after taking into account beneficial uses of the site and the surrounding land. **Page 85:** During development of the closure design for the Kaltails TSF is has been identified that there is no topsoil available for rehabilitation, establishment of vegetation on the TSF will be encouraged but will not be the main objective of rehabilitation at the site. The Kaltails rehabilitation objective is to ensure that the TSF is safe and stable and any potential erosion and dust generation is minimised. Rehabilitation of the Kaltails TSF will comprise of: • Covering of new perimeter embankments with 1m of suitable waste rock; • Installation of engineered drop structures and drains on existing and new embankments and berms; • Removal of the decant structures; • Capping of the top surface of the TSF with 0.5m of suitable waste rock; • Decommissioning of production and monitoring bores when no longer required; • Infilling of toes drains and seepage interception trenches when no longer required; • Decommissioning and removal of support infrastructure when no longer required; and • Investigation and, if required, clean up of potentially contaminated sites. After placement of the waste rock cover the surface will be subject to an appropriate surface treatment to control surface water and seeded with an appropriate seed mix to encourage plant growth as much as possible.

Kaltails	"Recommissioning of the Kaltails Tailings Storage Facility" (Reg ID 28110) dated 24 August 2010 signed by Russell Cole and retained on Department of Mines and Petroleum File No. E2561/200319;	**Page ix:** "The key objective of rehabilitation at KCGM is to ensure that decommissioned sites are left in a safe and stable condition, after taking into account potential beneficial uses of the site and the surrounding land. As there is no topsoil or other suitable growth media available for rehabilitation, establishment of vegetation on the TSF will be encouraged. However, the primary objective of rehabilitation at the site will be long term stability. Based on the existing commitments, observation of the existing TSF and regulatory guidelines, objectives have been developed for closure of the Kaltails TSF. These are: • Creation of a safe and stable landform in the long term; • Minimisation of surface erosion and tunnelling of the tailings; • Minimisation of dust generation; and • Minimisation of long term seepage. These objectives form the basis of the preliminary closure design and are aimed at minimising the long term impact of the facility on the environment… The main advantages of the selected closure design are: • A lower potential for tailings erosion by surface water runoff; • A reduced potential for dust development; and • A lower rate of erosion of the tailings and embankment materials therefore decreasing the potential for structural instability. During preparation of the KCGM Closure and Reclamation Plan, completion criteria will be developed for this project in consultation with relevant regulatory authorities and community stakeholders. The closure design will continue to be refined as the completion criteria are developed and become more specific closer to the time of closure of the site." **Page 63:** The construction of drop structures and access ramps will result in removal of the vegetation. The ramps and drop structures will be constructed of rock to minimise erosion which will affect revegetation of these areas. During construction of drop structures and access ramps, the surrounding rehabilitated areas of the embankments will be disturbed as little as possible. If required, repair work will be conducted on a case-by-case basis with the most appropriate solution for the problem encountered. Investigation of the most appropriate repair method will take into account minimising the impact on the existing rehabilitation and maximising revegetation success where this does not compromise the stability of the landform. Generation of sedimentation will be minimised by: • Applying 0.5m of well graded rockfill on the top surface of the TSF to manage erosion by wind and water action;

		• Applying 1m of waste rock on the new external embankments of the TSF to manage erosion and tunneling of the underlying tailings material by wind and water action; • Applying additional rock armoring on the TSF crest and access road to manage erosion at these areas of higher erosion potential; • Constructing final embankments to an overall grade of approximately 14°. Constructing the TSF with shallow external slopes helps to reduce the velocity of surface water runoff and hence the erosive potential on the outer embankments; • Designing the top surface of the TSF to retain a 12 hour Probable Maximum Precipitation (PMP) event to prevent overtopping, which can contribute to excessive erosion of the external embankments; and • Constructing graded berms and engineered drop structures on the external embankments of the TSF to manage surface water to prevent erosion of the underlying tailings by uncontrolled water movement. **Page 67:** After closure runoff from the external embankments will be discharged to the surrounding environment. **Page 68:** After closure, potential contamination of surface runoff from the external embankments of the Kaltails TSF will be managed by minimising contact between incident rainfall and the tailings material. For the external embankments this will be achieved by the placement of 1m of rock amour. The movement of surface water will also be controlled via graded berms and engineered drop structures to reduce erosion of the embankments of the TSF which could result in exposure of tailings material. **Page 82: "**Golder Associates were engaged to develop a preliminary closure design for the Kaltails TSF. The preliminary closure design presented in this report was selected by Newmont, Barrick and KCGM personnel based on the design meeting the requirements of the existing commitments and closure objectives developed for the facility. More detailed information on the closure design is included in Appendix 1. Objectives for the closure of the Kaltails TSF have been developed based on: • Existing commitments made by KCGM in the Conceptual Mine Closure Strategy (2007); • Proposed commitments made by KCGM in the Kaltails Seepage and Groundwater Management Plan (2009); • Existing commitments made by Newmont in the 2002 Mine Closure Plan Update Report (2002); • Observations and investigations of the existing TSF; and • DMP Guidelines on the Safe Design and Operating Standards for Tailings Storages (DoIR, 1999). The objectives developed for the closure of the Kaltails TSF are: • Creation of a safe and stable landform in the long term; • Minimisation of surface erosion and tunnelling of the tailings; • Minimisation of dust generation; and • Minimisation of long term seepage.

These objectives form the basis of the preliminary closure design outlined in this report and are aimed at minimising the long term impact of the facility on the environment. The closure design has also been developed such that the concepts for closure of the ultimate facility are valid for early closure of the facility. The preliminary closure design selected for the Kaltails TSF is summarised in Table 20.

Table 20 Kaltails closure design

Aspect	Closure Design	Basis for Design
Surface capping	• 0.5m of well graded rockfill	• Minimisation of dust generation, seepage and erosion of tailings
New external embankments	• 1m of waste rock with additional rock armouring on the TSF crest and the access road on the centre of the bench • Final slopes constructed to an overall grade of approximately 14°.	• Minimisation of dust generation, erosion and tunnelling of tailings. • Stabilisation of embankment walls
Surface water management (top surface)	• No overtopping of the top surface (designed to retain a 12 hour PMP)	• Prevention of overtopping and potential resulting failure of external embankments
Surface water management (embankments)	• Graded berms and engineered drop structures • Existing penstocks removed after operational phase	• Minimisation of erosion
Seepage control	• Continued operation of seepage interception system in accordance with Kaltails TSF Seepage and Groundwater Management Plan until target groundwater levels maintained	• Prevention of adverse impact on vegetation

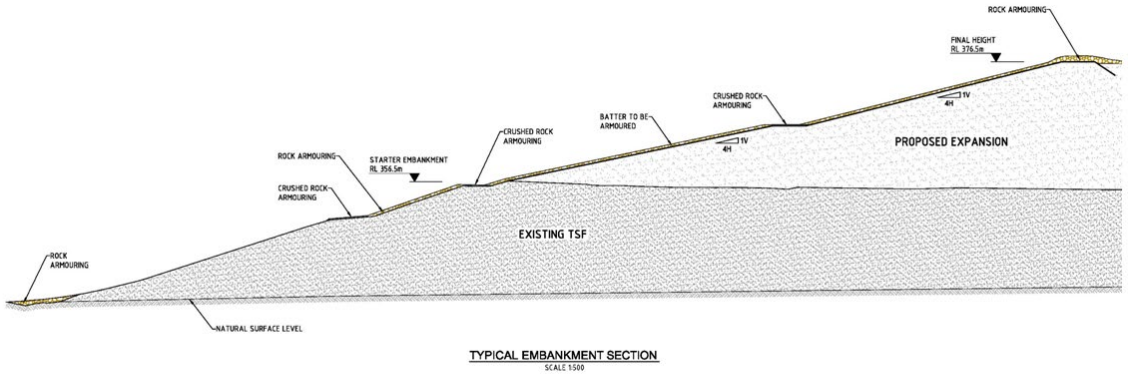
Page 83: The temporary ponding of water on the TSF surface will be managed by choosing the gradation of the rockfill to promote evaporation in order to minimise seepage infiltration.

Page 84: “Final post mining land use will be determined through consultation with relevant stakeholders during the ongoing development and revision of the KCGM Closure and Reclamation Plan.

Post mining land uses at Kaltails are likely to be a combination of:

- Rehabilitated landforms for conservation purposes; and
- Zones with restricted access for safety reasons.”

Page 85: “Rehabilitation of the Kaltails TSF will comprise of:

		• Covering of new perimeter embankments with 1m of suitable waste rock; • Installation of engineered drop structures and drains on existing and new embankments and berms; • Removal of the decant structures; • Capping of the top surface of the TSF with 0.5m of suitable waste rock; • Decommissioning of production and monitoring bores when no longer required; • Infilling of toes drains and seepage interception trenches when no longer required; • Decommissioning and removal of support infrastructure when no longer required; and • Investigation and, if required, clean up of potentially contaminated sites. A typical section of the external embankment after rehabilitation is illustrated in Figure 26. After placement of the waste rock cover the surface will be subject to an appropriate surface treatment to control surface water and seeded with an appropriate seed mix to encourage plant growth as much as possible. KCGM will also undertake required maintenance and repairs on the existing perimeter embankments.  **Figure 26 Proposed external embankment after rehabilitation**
Kaltails	Section 45C Application Clearing for Kaltails Tailings Storage Facility (Ministerial Statement 782), June 2010	**Page 16:** Generation of sedimentation will be minimised by: • applying 1m of waste rock on the new external embankments of the TSF to manage erosion and tunnelling of the underlying tailings material by wind and water action; • applying additional rock armouring on the TSF crest and access road to manage erosion at these areas of higher erosion potential; • constructing final embankments with shallow external slopes (to an overall grade of approximately 14°) to assist in reducing the velocity of surface water runoff and hence the erosive potential on the outer

		embankments; • designing the top surface of the TSF to retain a 12 hour Probably Maximum Precipitation (PMP) event to prevent overtopping, which can contribute to excessive erosion of the external embankments; and • constructing graded berms and engineered drop structures on the external embankments of the TSF to manage surface water to prevent erosion of the underlying tailings by uncontrolled water movement. Minimisation of erosion and sedimentation of the Kaltails TSF post-closure will be achieved by capping and rock armouring of the TSF and design of post-closure drainage controls **Page 27:** "After the removal of any vegetation (which will be stockpiled), the topsoil will be stripped to a nominal depth of 300 mm. Potable water will be used for dust suppression during topsoil removal to minimise dust generation and resulting loss of topsoil At the Kaltails TSF, any topsoil salvaged and spoil material will be stored in stockpiles no greater than 2m high. The topsoil and spoil material will be stockpiled along the western edge of the trench to protect it from potential seepage from the TSF. The surface of constructed stockpiles will be left in a "rough" condition to reduce the risk of erosion, increase drainage and promote vegetation. If the topsoil is to be stockpiled for more than one year it will be seeded to: • keep the seed bank viable; • discourage opportunistic weed growth; and • minimise loss of topsoil through dust generation." **Page 29:** "The objectives developed for the closure of the Kaltails TSF are: • creation of a safe and stable landform in the long term; • minimisation of surface erosion and tunnelling of tailings; • minimisation of dust generation; and • minimisation of long term seepage" **Table 3:** Surface capping: 0.5m of well graded rock New external embankments: 1 m of waste rock with additional rock armouring on the TSF crest and access road on the centre of the bench. Final slopes constructed to an overall grade of approximately 14°. Surface water management (top surface): No overtopping of the top surface (designed to retain a 12 hour PMP). Surface water management (embankments): Graded berms and engineered drop structures. Existing penstocks removed after operational phase. Seepage control: Continued operation of seepage interception system in accordance with Kaltails TSF Seepage and Groundwater Management Plan until target groundwater levels maintained.

Kaltails	Letter from Soil and Rock" dated February 9, 1998 and correspondence from DEP dated May 1, 1998	Documents unable to be reviewed.
Kaltails	Kaltails Retreatment Plant - New Storage Paddocks 7, 8 and 9. Raising existing Paddocks 1 to 6 Notice of Intent Application	**Page 2:** “Rehabilitation of the structures is presently being researched and is being reviewed during the life of the project. Research projects are being developed with appropriate research organisations and will be under the direction of… Normandy Kaltails Pty Ltd.” “All investigation boreholes, groundwater and sterilisation holes drilled in the area of the existing tailings storage will be backfilled and sealed.”
Kaltails	Letter dated 7 July 1998 and 1 September 1998 signed by Resident Manager - Mr Phil Evers	Documents unable to be reviewed.
Kaltails	Retreatment of Croesus and Mt Trafalgar Tailings Dumps - Plan of Operations dated July 1988	Documents unable to be reviewed –unlikely to contain any closure commitments relevant to Kaltails TSF.
Kaltails	Retreatment of Croesus, Mt Trafalgar and Old Croesus Tailings Dumps - Notice of Intent dated 3 July 1998	Documents reviewed – no closure commitments relevant to Kaltails TSF.
Kaltails	(MP Reg ID 38617) "Addendum to Mining Proposal (Resubmission): Recommissioning of the Kaltails Tailings Storage Facility (Reg ID 28110) - Minor Infrastructure Works - J00102 - G26/138-144, G26/165, G26/166- 18 February 2013" dated 18 February 2013 signed by Michelle Berryman and retained on Department of Mines and Petroleum File No. EARS-MP-38617;	**Page 21:** “The key objective of rehabilitation at KCGM is to ensure that decommissioned sites are left in a safe and stable condition after taking into account potential beneficial uses of the site and the surrounding land. At closure the need for a perimeter fence line will be assessed, in association with the relevant stakeholders. The fence will either be retained to prevent ingress to the tailings dam and rehabilitated areas, or be removed. Tracks will be ripped and seeded.”
Kaltails	(Reg ID 43910) "Addendum to Mining Proposal (Resubmission): Recommissioning of the Kaltails Tailings Storage Facility (Reg ID 28110)- Minor Infrastructure Works"	**Page 21:** “The key objective of rehabilitation at KCGM is to ensure that decommissioned sites are left in a safe and stable condition after taking into account potential beneficial uses of the site and the surrounding land. At closure the need for a perimeter fence line will be assessed, in association with the relevant stakeholders. The fence will either be retained to prevent ingress to the tailings dam and rehabilitated areas, or be removed. Tracks will be ripped and seeded.”

	dated 5 November 2013 signed by Michelle Berryman - Environment and Social Responsibility Manager and retained on Department of Mines and Petroleum File No. EARS-MP-43910. (Doc ID 2600680);	
Kaltails	(Reg ID 43910) Letter titled "Addendum to Mining Proposal Reg ID 28110" dated 10 December 2013 signed by Michelle Rowell - Land and Tenement Officer and retained on Department of Mines and Petroleum File No. EARS-MP-43910, (Doc ID 2661521);	"Topsoil Management Track clearing will involve pushing topsoil to the side in a small windrow. At closure the topsoil will be pushed over the track and rehabilitated as required (ripping and if necessary seeded). Decommissioning/Removal of Infrastructure All infrastructure associated with the Kaltails Tailings Storage Facility (TSF) will be removed as part of the decommissioning of the TSF at closure. The groundwater production bores and associated infrastructure will only be decommissioned and removed when the groundwater has reached an acceptable steady state. Ripping and Seeding The location of the proposed (previously approved) production bores is adjacent to the TSF. This area is expected to be modified during final rehabilitation earthworks associated with the TSF and will be rehabilitated in alignment with the decommissioning plan. Rehabilitation of the TSF and associated infrastructure will be addressed in the KCGM Mine Closure Plan. KCGM has an internal requirement for new projects to be incorporated into the next version of the Plan to be submitted in March 2015."
Kaltails	(Reg ID 43910) Email titled "Re: Reg ID 43910 - MP - Further Information Required - Addendum to Mining Proposal Reg ID 28110" dated 18 December 2013 signed by Michelle Rowell - Land and Tenement Officer and retained on Department of Mines and Petroleum File No. EARS-MP-43910, (Doc ID 2674449)	No additional closure commitments relating to Kaltails TSF.
Kaltails	(MP Reg ID 77004) "KCGM Mining Proposal - Kaltails TSF Height Increase" dated 9 November 2018 signed by Cecile Thaxter, and retained on Department of Mines, Industry	**Page 24:** "The conceptual closure design for the TSFs allows for placement of a ~0.5 m thick layer of benign waste rock or oxide waste placed as a single loose lift over the tailings to control wind erosion. It is anticipated that the beach formed through operations will be retained and that rainfall will be allowed to collect on the TSF surface and evaporate."

	Regulation and Safety File No. EARS-MP-77004 as Doc ID 6145908	"The slopes above the previously rehabilitated zones (benches) will be regraded and rehabilitated to form a continuous slope, as this is deemed to be the best option from an erosion management perspective. A rock cover will be placed on the external embankments to minimise the potential for water erosion of the tailings used, and to minimise wind erosion (i.e. dust generation). Allowance has been made for 0.5 m thickness of rock over the tailings."

1.5 Legal Obligations Register: Mineral Processing, Water and Rehabilitation

1.5.1 Tenement Conditions

DOMAIN	TENEMENT (CONDITION NUMBER)	REQUIREMENT
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	M26/462 (10) M26/724 (11) M26/748 (14) M26/800 (10) G26/159 (7) G26/15 (14)	All topsoil and vegetation being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	M26/462 (11) M26/724 (12) M26/748 (15) M26/800 (11) G26/159 (8) G26/15 (15) G26/160 (9)	All rubbish and scrap is to be progressively disposed of in a suitable manner.
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	M26/462 (12) M26/724 (13) M26/748 (16) M26/800 (12) L26/82 (20) G26/159 (9) G26/15 (16)	The Lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.

DOMAIN	TENEMENT (CONDITION NUMBER)	REQUIREMENT
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	M26/462 (13) M26/724 (14) M26/748 (17) M26/800 (13) L26/82 (21) G26/159 (10) G26/15 (17)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	M26/462 (14) M26/724 (16) M26/748 (19) M26/800 (15) G26/159 (11) G26/15 (18)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMIRS.
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	M26/462 (16) M26/724 (18) G26/159 (13)	All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, DMIRS
Rehabilitation Material Stockpiles	M26/46	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to the surrounding vegetation and topsoil stockpiles.

Commitments in Approval Documents

DOMAIN	REFERENCE	COMMITMENT
Water Abstraction and Containment, Haul, Access Roads and Service Corridors (Power lines)	(MP Reg ID 70616) "KCGM Fimiston Open Pit - 33kV Power Line Infrastructure Mining Proposal" dated 3 November 2017 signed by Cecile Thaxter and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-70616 as Doc ID 5368061	Document reviewed - no closure commitments.
Kaltails Supply Borefield	(MP Reg ID 74575) "Kaltails Supply Borefield MAR Project" dated 15 June 2018 signed by Cecile Thaxter and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-74575 as Doc ID 5819785	Document reviewed - no closure commitments.
Haul, Access Roads and Service Corridors (Power lines)	(MP Reg ID 79967) “KCGM Mining Proposal Addendum - Minor Project Modifications - REG ID 18614 and 69903 - Rev a - J00102” dated 10 May 2019 signed by Cecile Thaxter, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MP-79967 as Doc ID 6525206	Document reviewed - no closure commitments.

1.6 Legal Obligations Register: Mt Charlotte

1.6.1 Tenement Conditions

LANDFORMS APPLICABLE	TENEMENT (CONDITION)	REQUIREMENT
Mining Infrastructure	M 26/353 (20)	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.
Mining Infrastructure	M 26/353 (21)	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.
Mining Infrastructure	M 26/353 (22)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Director, Environment Division, Department of Industry and Resources.
Glory Hole Pit	M 26/353 (24)	Upon cessation of any open pit mining operations all pits being securely fenced, the walls battered and ground near the periphery of such pits being rehabilitated to the satisfaction of the State Mining Engineer.
Mining Infrastructure Glory Hole Pit	M 26/353 (25)	Upon completion of waste dumps the material being either:- • backfilled into the excavated pits; or • contained with trees and natural scrub being planted over the entire surface of each such dump to the satisfaction of the Director, Environment Division, Department of Industry and Resources
Mt Charlotte	M 26/353 (26)	The relocation and re-instatement of the dust abatement fence as discussed between the lessees and Shire of Boulder and adequate dust control measures being utilised at all times.
	M 26/353 (27)	The lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.
	M 26/353 (34)	The lessee submitting to Director, Environment Division ("the Director") a Mine Closure Plan (MCP) by 30 April 2010 of an acceptable standard and consistent with the ANZMEC.MCA guidelines "Strategic Framework on Mine Closure" 2000, including closure and rehabilitation cost estimates; and a Rehabilitation Management Plan (RMP) by 31 January 2008 of an acceptable standard, with auditable time lines of progressive rehabilitation, detailing landform design, waste characterisation and vegetation/rehabilitation outcomes. The lessee submitting to the Director further details as required by him within specified timelines detailing any outstanding aspects of the MCP and/or RMP identified by the Director
	M 26/353 (35)	"A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be

LANDFORMS APPLICABLE	TENEMENT (CONDITION)	REQUIREMENT
		prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website" • 2012.
	M 26/353 (36)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.
	M 26/353 (37)	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence and zone of pit instability, to the satisfaction of the Executive Director, Environment Division, DMP.
	M 26/353 (38)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
	M 26/353 (39)	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: - 2018

1.6.2 Commitments in Approval Documents – Mt Charlotte

REFERENCE DOCUMENT	COMMITMENT
"Mining and Environmental Management Plan - Mining Lease Application M26/353 - Mount Charlotte" dated October 1992, retained on Department of Minerals and Energy File No. 2174/92;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
"Consultative Environmental Review, Mine and Waste Dumps - Fimiston (Draft)" dated August 1990, retained on Department of Minerals and Energy File No. 1198/91;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
"Notice of Intent - Statewide Water Supply Rationalisation" dated September 1991 and retained on Department of Minerals and Energy File No. 1273/91;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
"Addendum to Notice of Intent - Statewide Water Supply Rationalisation" dated 16 March 1992 and retained on Department of Minerals and Energy File No. 2001/92;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
"Kalgoorlie Consolidated Gold Mines Pty Ltd, Mining and Environmental Management Plan - Mt Percy Operations" dated December 1991 and retained on Department of Minerals and Energy File No. 258/89;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
"Notice of Intent - Mt Charlotte to	**Page 28:** "…it is intended that on decommissioning of the overland conveyor all machinery will be removed for sale or scrap.

REFERENCE DOCUMENT	COMMITMENT
Fimiston Overland Conveyor" dated 2 December 1994 and retained on Department of Minerals and Energy File No. 2010/95;	Remaining debris will be removed and buried beneath one of the regional waste dumps, and concrete footings and the security fence removed. The whole affected area would be left clean and tidy… When all unwanted materials have been removed, any topsoil available would be spread and the area ripped. It would then be seeded with native plant species. Methods and species used will be in accordance with common practice at that time."
"Mt Charlotte Decline Notice of Intent Amendment" dated 6 December 1996 signed by Mr A King - Manager - Mining and retained on Department of Minerals and Energy File No. 1258/90;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
" Request for Approval to Install a New Primary Ventilation Rise and Fan at the Mt Charlotte Operations" dated 16 October 1996 and signed by Mr B Mitchell - Registered Underground Manager, Mt Charlotte and retained on Department of Minerals and Energy File No. 1258/90;	Document Reviewed – No closure commitments relevant to Mt Charlotte.
" Request for Approval to Install a New Primary Ventilation Rise and Fan at the Mt Charlotte Operations Addendum to Letter" dated 16 October 1996, dated 17 October 1996 and signed by Mr B Mitchell - Registered Underground Manager, Mt Charlotte and retained on Department of Minerals and Energy File No. 1258/90;	"The remaining 60 meter x 25 metre laydown area may require some ripping and seeding for revegetation purposes plus contouring for long term run-off drainage. The ripping, revegetation and/or contouring would be carried out after excavation of the rise to meet normal KCGM environmental or statutory requirements.
Letter re: "Conveying of Waste Rock to Mt Charlotte for Glory Hole Backfill" dated 2 March 2000 and signed by General Manager, Mr	Document Reviewed – No closure commitments relevant to Mt Charlotte.

REFERENCE DOCUMENT	COMMITMENT
John Shipp (NOI 3305);	
Letter re: "Site improvements at Mt Charlotte" dated 2 March 2000 and signed by General Manager, Mr John Shipp (NOI 3305);	Document Reviewed – No closure commitments relevant to Mt Charlotte.
"Mt Charlotte Dewatering Pipeline - Alternative Route" prepared by Graeme Smith, Land Administrator, KCGM, dated 12 May 2005 (NOI 5004) and retained on Department of Industry and Resources File No.E2561/200305	Document unable to be reviewed – unlikely to contain any closure commitments relevant to Mt Charlotte Glory Hole Pit
(MP Reg ID 53099) "KCGM Hidden Secret Project EPA Section 38 Referral and DMP Mining Proposal dated 5 November 2014 signed by Ian Butler and retained on Department of Mines and Petroleum File No. EARS-MP-53099 as Doc ID 3245608;	**Page 23:** "The Hidden Secret project has no surface expression beyond the existing Mt Charlotte infrastructure. The closure of the existing infrastructure is dealt with in detail in the MCP. It is not anticipated that any additional backfill of voids will be required for closure, as the Hidden Secret voids will be backfilled as part of operational activities." "As the Project area is well below ground surface and there will be no change to surface land use as a result of the proposed Project." "The Hidden Secret Project will be incorporated as part of the Mt Charlotte Underground Mine component of the MCP."
(MP Reg ID 85706) "KCGM Mining Proposal - Mt Charlotte Underground Exploration" dated 28 February 2020 signed by Ahmed Faisal - Registered Manager, and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-85706 as Doc ID 7219847	Document Reviewed – No closure commitments relevant to Mt Charlotte.

1.7 Legal Obligations Register: Gidji Operations

1.7.1 Tenement Conditions

CONDITION	REQUIREMENT
Various	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: - 2018
G 24/24(9), G24/26(21), G24/27(19), G24/28(20), G24/29(23), G24/30(11), G24/31(11), G24/32(11), G24/33(10)	At least six months prior to decommissioning of the tailings storage facility and prior to rehabilitation, a further review report by a geotechnical or engineering specialist will be submitted to the DMP. This report should review the status of the structure and its contained tailings, examine and address the implications of the physical and chemical characteristics of the materials, and present and review the results of all environmental monitoring. The rehabilitation works proposed and any on-going remedial requirements should also be addressed.
G24/25(8)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer.
G24/24 (22) G24/30(24), G24/31(24), G24/32(24)	All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, DMP
G24/24(14), G24/25 (5) , G24/26(14),	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses

CONDITION	REQUIREMENT
G24/27(7), G24/28(8), G24/29(11), G24/30(16), G24/31(16), G24/32(16), G24/33(15)	
G24/24(16), G24/25(7), G24/26(16) G24/27(10), G24/28(10), G24/29(14), G24/30(18), G24/31(18), G24/32(18), G24/33(17)	All rubbish and scrap is to be progressively disposed of in a suitable manner, to the satisfaction of an Environmental Officer, DMP
G24/24(19), G24/25(21), G24/26(19), G24/27(13), G24/28(14), G24/29(17), G24/30(21), G24/31(21), G24/32(21) G24/33(20)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self-sustaining, functional ecosystems comprising suitable, local provenance species or an alternative agreed outcome to the satisfaction of Executive Director, Environment Division, DMP.

CONDITION	REQUIREMENT
G24/24 (18) G24/25 (20) G24/27 (12) G24/28 (13) G24/29 (16) G24/30(20) G24/31(18), G24/32(20) G24/33(19)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles, to the satisfaction of an Environmental Officer, DMP.
G24/24 (15) G24/25 (6), G24/26(15), G24/27(8), G24/28(9), G24/29(12), G24/30(17), G24/31(17), G24/32(16) G24/33(16)	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of an Environmental Officer, DMP.
G24/40 (2)	Unless the written approval of the Environmental Officer, Department of Mines, Industry Regulation and Safety is first obtained, the use of drilling rigs, scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.
G24/40 (5)	The rights of ingress to and egress from Miscellaneous Licences 26/191 and 26/192 being at all times preserved to the licensees and no interference with the purpose or installations connected to the licences.
G24/40 (8)	No interference with the Australian Telecommunications Commission microwave repeater station ray-line.

Commitments in Approval Documents

REFERENCE DOCUMENT	COMMITMENT
Ministerial Statement 028	"Rehabilitation: The proponent plans to rehabilitate the tailings disposal area by revegetation to produce an artificial landform in keeping with its surroundings, and supporting similar vegetation. Rehabilitation of the project site after decommissioning would include revegetation of roads and tracks, hardstand areas, and other compacted and cleared ground."
Ministerial Statement 077	**General Conditions:** At least six months prior to decommissioning of the Gidji site, the proponent shall prepare a decommissioning and rehabilitation plan to the satisfaction of the Environmental Protection Authority on the advice of the Minister for Mines, for the site and its environs. The implementation of this plan shall be the responsibility of the proponent and the work shall be carried out to the satisfaction of the Environmental Protection Authority on the advice of the Minister for Mines." **Proponent Conditions** "Rehabilitation The proponent undertakes to rehabilitate the satellite roaster site after decommissioning. The tailings disposal area, roads and tracks, hardstand areas, and other compacted and cleared ground will be rehabilitated."
Ministerial Statement 1032 *Note: This MS supersedes 0028 and 0077.*	**Page 3:** "5 Rehabilitation and Closure 5-1 The proponent shall ensure that the Gidji Gold Processing Plant is decommissioned and rehabilitated in an ecologically sustainable manner, through the implementation of the Mine Closure Plan required by condition 5- 2. 5-2 The proponent shall implement the Kalgoorlie Consolidated Gold Mines – Mine Closure Plan (dated March 2015). 5-3 The proponent shall review and revise the Mine Closure Plan required by condition 5-2, on the advice of the Department of Mines and Petroleum and to the satisfaction of the CEO, in accordance with the Guidelines for Preparing Mine Closure Plans, (Department of Mines and Petroleum/Environmental Protection Authority, May 2015) and any updates, at intervals not exceeding three years, or as otherwise specified by the CEO. 5-4 The proponent shall implement the latest revision of the Mine Closure Plan, which the CEO has confirmed by notice in writing, satisfies the requirements of condition 5-3."
Fimiston Project – Phase II Notice of Intent Expanded Roasting Facilities (not imposed as tenement condition)	**Page 51:** "Rehabilitation would be undertaken in two areas: • Rehabilitation of the tailings disposal area, and • Rehabilitation of the project site after decommissioning **Page 52:** "Proponents Commitments

REFERENCE DOCUMENT	COMMITMENT
	The proponent undertakes to rehabilitate the satellite roaster site after decommissioning Management Strategies The tailings disposal area, roads and tracks, hardstand areas and other compacted and cleared ground will be rehabilitated”
Gidji Roaster Operations - Geotechnical Investigation and Monitoring Bore Installation General Purpose Leases 24/24, 24/30, 24/31, 24/32 and 24/33" (Reg ID 28982) dated 16 December 2010 signed by Michelle Berryman - Senior Environmental Coordinator and retained on Department of Mines and Petroleum File No. E0012/200402	Document review – no closure commitments relevant to Gidji Operations.
"Mining Proposal Gidji Tailings Storage Facility Extension" (Reg ID 29230) dated 16 December 2010 signed by Russell Cole - General Manager and retained on Department of Mines and Petroleum File No. EARS-MP-29230;	**Page xiv:** “Final landform design for the TSF landform post closure will be a water shedding design with a constructed low-permeability cover. This design will reduce the potential infiltration of water following rainfall. The final top surface will have a uniform shallow gradient towards collection structures designed to reduce runoff flow velocities on the upper surface of the TSF. The surface water will then be shed from the top surface of the TSF via engineered outlet structures. Stilling basins at the base of the outlet structures will collect runoff to reduce potential erosion and collect sediment. The top surface of the TSF will have a constructed low permeability cover with overlying capillary break constructed of competent roc. The capillary break will prevent the upward migration of salts and reduce the generation of dust from the surface of the TSF. The outer slopes of the TSF will be regraded to a concave profile and gradient of approximately 14 degrees to reduce the risk of potential erosion. The slopes will also have a constructed low permeability cover with overlying capillary break constructed of competent rock. Overlying the capillary break will be a rock/oxide blend layer to reduce the risk of erosion and maintain a water holding capacity. The batter will be finished with topsoil and ripped to aid in the establishment of vegetation. Due to the known limited topsoil resources available for the rehabilitation of the KCGM operations there is a potential that following stakeholder consultation and the development of a rehabilitation optimisation strategy the available topsoil resource may be utilised on higher priority landforms. The development of the rehabilitation optimisation strategy will be included with the next submission of the KCGM Mine Closure and Reclamation Plan. **Page 54:** “Final post mining land use will be determined through consultation with relevant stakeholders during the ongoing development and revision of the KCGM Closure and Reclamation Plan. Post mining land uses at the Gidji TSF are likely to be a

REFERENCE DOCUMENT	COMMITMENT
	combination of rehabilitated landforms for conservation purposes; and zones with restricted access for safety and environmental protection. **Table 17 Page 55:**

Table 17: Gidji TSF Preliminary Closure Concept

Aspect	Closure Concept	Basis for Design
Surface trimming	• Grade and shape upper surface of tailings to allow construction of the low permeability cover.	• Facilitate capping placement and shape to shed runoff towards engineered structures.
Surface capping	• Water shedding, low permeability cover, overlying capillary break constructed of competent rock.	• These materials will form a capillary break, low permeability layer and provide erosion protection and armouring, respectively.
External embankments	• Regrade outer slopes to a concave profile, nominally average slope of approximately 1V:4H (14°). • Low permeability layer overlain by a capillary break and rock/oxide blend, finished with topsoil.	• Concave slope profile to control runoff velocities. • Stabilise outer slope and minimize erosion; provide water holding capacity and growth medium.
Surface water management (top surface)	• Low permeability, graded surface runoff collection system leading towards the engineered outlet structures.	• Control of runoff from incident rainfall to runoff collection structures.
Surface water management (embankments)	• Engineered outlet structures.	• Manage water from the graded surface runoff collection structures to a suitable stilling basin at the base of the embankment to achieve minimal erosion.
Surface water management (embankment toe)	• Engineered stilling basins.	• Energy dissipation and management of any possible sediments. • Maintenance of concave slope geometry.

Table 18 Page 56:

REFERENCE DOCUMENT	COMMITMENT

Table 18: Closure Objectives for KCGM's Operations

Aspect	Objectives
Community and other stakeholders	KCGM's stakeholders will be consulted and able to participate in processes relating to decommissioning, closure and post closure planning, implementation and outcomes.
Public safety and access	All final landforms will be safe and structurally stable.
	Shafts and vertical openings will be made safe.
	Public access to open pits, and other areas that may be high risk, will be prevented as far as is practicable.
Infrastructure and heritage features	Features of heritage value will be retained where practicable.
	Mine related infrastructure that is not required to be maintained, will be dismantled and decommissioned.
	Contaminated sites will be managed in accordance with the *Contaminated Sites Act 2003*.
Mine wastes	Mine wastes will be managed to minimise impacts on rehabilitation outcomes and the receiving environment.
Landforms	Surface drainage patterns will be established that are consistent with the regional drainage function.
	Surface stability of landforms will be adequate to retain the integrity of the landform design.
Ecosystem function	Vegetation will be established on designated areas where suitable soil materials are available.
	In areas where suitable soil materials are not available for revegetation, surface stability will be the primary focus with plant establishment encouraged.
	Vegetation communities in areas designated for revegetation will be made up of species from the Goldfields region.
	In areas designated for revegetation, the rehabilitated ecosystems will achieve benchmarks for ecosystem function that will be consistent with Goldfields ecosystems, and will be defined through investigations and rehabilitation experience.
	Areas designated for revegetation will provide appropriate habitat for fauna.

Page 57: "The Gidji TSF Decommissioning Plans will include specific information relating to the rehabilitation and closure of the TSF. Information to be included in the plans includes:

REFERENCE DOCUMENT	COMMITMENT
	• intent of the plan (identification and reduction of risks associated with decommissioning and closure of each TSF); • description of process for development of TSF Decommissioning Plan; • summary of relevant literature; • summary of relevant commitments and conditions; • risk assessment and summary of relevant issues; • description of closure design for TSF (where known) or plan for when closure design will be developed; • summary of required rehabilitation materials and storage locations (if known); and • schedule of decommissioning and rehabilitation activities. The Gidji TSF and previously reported contaminated sites of the Gidji operation will be appropriately investigated, remediated and audited in accordance with regulatory requirements. The success of the rehabilitation works conducted will be recorded, tracked and monitored against the established closure criteria."
"KCGM Response to Gidji TSF Extension - DMP Geotechnical Review Request for Further Information" dated 20 January 2011 sent via email Michelle Berryman - Senior Environmental Coordinator and retained on Department of Mines and Petroleum File No. EARS-MP-29230;	"KCGM has developed a preliminary closure design for the Gidji TSF, which will be updated in next submission of the KCGM Closure and Reclamation Management Plan. Specific completion criteria will be developed for the Gidji TSFs in consultation with relevant regulatory authorities and community stakeholders. The closure design will continue to be refined as the completion criteria are developed and become more specific closer to the actual time of site closure. The current closure design includes reshaping the upper surface of both the Gidji I and Gidji II TSFs to form a shedding structure with shallow gradients towards a constructed surface runoff collection system. A low permeability cover will be constructed over the reshaped upper tailings surfaces followed by a layer of waste rock. The surface runoff collection system will be constructed to facilitate the flow of runoff towards constructed outlet structures removing the potential for surface runoff to impact the slope stability. The outer slopes will be shaped to form a concave profile with an overall average slope profile of approximately 14^0. The outer slope will be constructed with a low permeability layer, covered with a graded rock layer (capillary break), overlain by blended waste rock and oxide. This constructed layer will provide erosion control and promote growth of natural vegetation. The use of topsoil as a rehabilitation resource may be used on higher priority landforms within the KCGM operations. The primary functions of the water shedding design and low permeability cover will be to prevent rainwater infiltrating through to the tailings, reduce the potential for erosion of material off the upper surface and outer slopes and suppress dust generation… …KCGM plans to setup a series of cover trials to establish the most suitable final cover design for the Gidji TSF. The trials will consist of two options: • Incorporating the tailings within the cover design, and • Excluding the tailings from the cover design. • The use of tailings within the cover design is preliminary for its physical properties as a re-compacted low permeability material which will reduce potential infiltration.

<table>
<tr><th>REFERENCE DOCUMENT</th><th>COMMITMENT</th></tr>
<tr><td></td><td>Both cover designs options will include a majority rock/oxide blend to a minimum thickness of 0.5m. This material layer will acts as an armouring layer with water holding capacity to promote the generation of regrowth that will limit erosion. Underlying this layer will be a capillary break consisting of 0.3 m of graded rock. As indicated above, these combined layers will act as “armouring” to reduce impacts of erosion and sediment transport.”</td></tr>
<tr><td>(Reg ID 47394) "Gidji Emissions Reduction Project: Mining Proposal/Works Approval" dated 21 March 2014 signed by Michelle Berryman - Environment and Social Responsibility Manager and retained on Department of Mines and Petroleum File No. EARS-MP-47394 as Doc ID 2826819;</td><td>
<table>
<tr><th colspan="3">Table 1: Potential Impacts, Management and Commitments</th></tr>
<tr><th>Existing Environment</th><th>Potential Impacts of Proposal</th><th>Commitments</th></tr>
<tr><td colspan="3">Closure</td></tr>
<tr><td>Storage of sulphide tailings has the potential for acid and metalliferous drainage (AMD).

Material from the Gidji I TSF will be used to construct the outer embankments of the Gidji II TSF.

A Closure Plan for the Gidji TSFs was submitted to DMP as part of the Mining Proposal for the Gidji II TSF.

The final design for the TSF landform post closure will be a water-shedding design with a constructed low-permeability cover. This design will reduce the potential infiltration of water following rainfall.</td><td>Tailings from the Gidji ERP will contain increased sulphides but also contain ankerites, which have the capacity to buffer against acid formation.</td><td>All tailings from the Gidji ERP will be deposited to the lined Gidji II TSF.

The cover design of the Gidji TSF will be finalised as part of the Mine Closure Plan submitted every 3 years.</td></tr>
</table>
Page 7: “The risk from the PAF tailings deposited into Gidji II TSF will be minimised by the liner and overliner drainage system and by using the downstream method of construction using material from the Gidji I TSF to raise the perimeter embankments. The liner and outer embankments will effectively encapsulate the full UFG tailings into the centre of the TSF. At closure the facility will have a final water shedding design and low permeability cover, which will limit the potential infiltration of water following rainfall. These closure criteria incorporated into the final design will reduce the potential seepage from the TSF and reduce the risks posed to the groundwater environment post closure.”
Page 23: “On closure the Gidji II TSF will be shaped and capped to minimise the risk of AMD. Recovery of historic seepage from the Gidji I TSF will continue until groundwater targets are achieved.”</td></tr>
</table>

REFERENCE DOCUMENT	COMMITMENT
(Reg ID 47394) Email titled "Mining Proposal Reg ID 47394 - Gidji Emissions Reduction Project - Further Information Required" dated 2 May 2014 signed by Michelle Berryman - Environment and Social Responsibility Manager and retained on Department of Mines and Petroleum File No. EARS-MP-47394 as Doc ID 2826819	"Rehabilitation of the Gidji TSF: As part of Mining Proposal Reg ID 29230 KCGM developed a preliminary closure design for the Gidji TSF. The current closure design includes reshaping the upper surface of both the Gidji I and Gidji II TSFs to form a shedding structure with shallow gradients towards a constructed surface runoff collection system. A low permeability cover will be constructed over the reshaped upper tailings surfaces followed by a layer of waste rock. The surface runoff collection system will be constructed to facilitate the flow of runoff towards constructed outlet structures removing the potential for surface runoff to impact the slope stability. The outer slopes will be shaped to form a concave profile with an overall average slope profile of approximately 140. The outer slope will be constructed with a low permeability layer, covered with a graded rock layer (capillary break), overlain by blended waste rock and oxide. This constructed layer will provide erosion control and promote growth of natural vegetation. The use of topsoil as a rehabilitation resource may be used on higher priority landforms within the KCGM operations. The primary functions of the water shedding design and low permeability cover will be to prevent rainwater infiltrating through to the tailings, reduce the potential for erosion of material off the upper surface and outer slopes and suppress dust generation. The main benefits of this preliminary closure design concept are summarised as follows: The water shedding profile and low permeability cover will reduce the potential for rainwater to infiltrate the tailings. The capping system will reduce the potential for dust generation off the top of the TSF. In addition, the potential for piping at the interface between the tailings and rock cover will be reduced through the placement of the graded rock layer. The establishment of a uniform shallow gradient towards the constructed surface collection structures will reduce runoff flow velocities on the upper surface of the Gidji II TSF and will be effective in controlling the potential for release of sediments from the TSF. The profiling and capping of the slopes, in addition to the constructed outlet structures with stilling basins, will reduced the potential for erosion on the outer slopes. For the Gidji Plant area i.e. UFG and other infrastructure: Decommissioning will occur once mineral processing operations cease, and involves the following: The decontamination of all plant and equipment. All tanks, pipes and sumps containing hydrocarbons or any other fluids to be flushed or emptied prior to removal to ensure no hydrocarbon/chemical residue remains. Compliance with CN Code Decommissioning Plan decontamination requirements. During the demolition process, the removal of all plant and equipment either for transfer to other sites, salvage (sale) yards or disposal. The identification and remediation of all identified contamination sites where these poses a risk to demolition team. The area will be rehabilitated appropriately, and ripped and seeded. …I confirm that the activities will be incorporated into the 2015 KCGM Mine Closure Plan."

REFERENCE DOCUMENT	COMMITMENT
"Letter of Intent Gidji Roaster Tailing Storage Seepage" (undated) received by the Kalgoorlie Inspectorate office on 28 October 1996 and signed by Mr J M Holdsworth - Acting Manager Mineral Processing - KCGM;.	Document unable to be reviewed.
Facsimile titled "Gidji Roaster Seepage Test Pits" dated & November 1996 and signed by Mr Trevor Tyson - Civil Engineer - KCGM;	Document unable to be reviewed.
"Letter of Intent Gidji Roaster Tailings Storage Facility Test Pits (Reg ID 28049)" dated 18 August 2010 signed by Bob Povey, EHS Manager, KCGM and retained on Department of Mines and Petroleum File No. E2561/200319;	Document reviewed – no closure commitments relevant to Gidji Operations.
(RegID 111498) Gidji II TSF Wall Raise 2022	Completion Criteria for rehabilitation require further refinement to ensure they are measurable, achievable and objective, consistent with the SMART principle

1.8 Legal Obligations Register: Mt Percy

1.8.1 Tenement Conditions

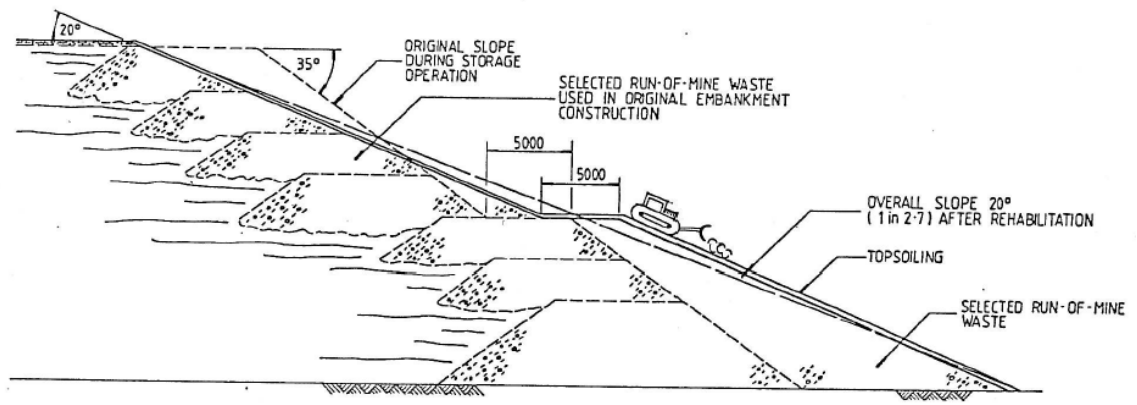
TENEMENT (CONDITION)	REQUIREMENT
Various	"A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website" 2015; or A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: 2018
M26/60 (2) M26/60 (19) M26/61 (12) M26/61 (31) M26/261(42)	All topsoil being removed ahead of mining operations and stockpiled for replacement in accordance with the directions of the District Mining Engineer.
M26/61 (13)	All holes, pits, trenches and other disturbances to the land made whilst mining which in the opinion of the State Mining Engineer are likely to endanger the safety of any person or animal being filled in or otherwise made safe to the satisfaction of the State Mining Engineer.
M26/60 (8) M26/61 (14)	Such further reasonable conditions as may from time to time be imposed by the Minister for Minerals and Energy for preventing, reducing or making good, injury to the surface of the land.
M26/60 (9) M26/61 (15)	Upon cessation of any open pit mining operations all pits being securely fenced, the walls battered and ground near the periphery of such pit being rehabilitated to the satisfaction of the District Mining Engineer.
M26/60 (10) M26/61 (16)	All ore stockpile areas and roads constructed in the course of mining being left level and rehabilitated with trees or natural scrub to the satisfaction of the State Mining Engineer.
M26/60 (11) M26/61 (17)	Upon completion of waste dumps the material being either: • Backfilled into the excavation pits; or • Contained with trees and natural scrub being planted over the entire surface of each such dump to the satisfaction of the State Mining Engineer.

TENEMENT (CONDITION)	REQUIREMENT
M26/60 (27)	The lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.
M26/60 (28) M26/61 (44) M26/261 (43)	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.
M26/60 (29) M26/60 (45) M26/261(44)	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability.
M26/60 (14) *Note: This only applies to remediated TSF at Mining Hall of Fame.*	Tailings dams being constructed in compliance with the guidelines laid down by the Goldfields Dust Abatement Committee and being revegetated at the conclusion of use.
M26/61 (25) M26/261 (21)	The walls of the tailings dam being constructed from or having a substantial outer covering of competent waste rock which will prevent long term erosion and when completed the outslopes being contoured such that the maximum angle to the horizontal is 20 degrees.
M26/61 (26) M26/261 (22)	The outslopes of the tailings dam being progressively covered with topsoil and revegetated with local native grasses, shrubs and trees to the satisfaction of the Regional Mining Engineer or his nominee.
M26/61 (27) M26/261 (23)	At the completion of operations and when the tailings have dried sufficiently, the surface of the tailings dam being covered with 0.5 metres of waste rock, covered with topsoil and revegetated with local native grasses, shrubs and trees.
M26/60 (20) M26/61 (28) M26/261 (24)	At the completion of operation all buildings and structures being removed from site or demolished and buried to the satisfaction of the Executive Director, Environment Division, DMP.
M26/61 (29) M26/261 (25)	All rubbish and scrap being progressively disposed of in a suitable manner.

TENEMENT (CONDITION)	REQUIREMENT
M26/60 (30) M26/261 (45)	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.
M26/60 (31)	Unless the written approval of the Environmental Officer, Department of Mines and Petroleum (DMP) is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.
M26/61 (35)	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer
M26/61 (40) M26/261 (37)	At decommissioning of the tailings dam, the lessee submitting a review by an engineering/ geotechnical specialist of: the status of the structure; its contained tailings the results of environmental monitoring any remedial works required to the State Mining Engineer for his assessment and written approval.
M26/261 (39)	Within one month of the completion of any tailings impounded embankment, a detailed construction report by an engineering / geotechnical specialist shall be submitted to the State Mining Engineer to certify that the construction satisfies the design intent. The report shall include the results of any roller compaction trials, the basis of any methods specification adopted, the results of all construction quality control and soil testing records, and shall also present as-built drawings for the embankment and pipework.
M26/60 (25)	The lessee submitting to Director, Environment Division ("the Director") a Mine Closure Plan (MCP) by 30 April 2010 of an acceptable standard and consistent with the ANZMEC/MCA guidelines "Strategic Framework on Mine Closure" 2000, including closure and rehabilitation cost estimates; and a Rehabilitation Management Plan (RMP) by 31 January 2008 of an acceptable standard, with auditable time lines of progressive rehabilitation, detailing landform design, waste characterisation and vegetation/rehabilitation outcomes. The lessee submitting to the Director further details as required by him within specified timelines detailing any outstanding aspects of the MCP and/or RMP identified by the Director

1.8.2 Commitments in Approval Documents

REFERENCE DOCUMENT	COMMITMENT
Mt Percy Mine Tailings Storage Extension Works Approval Documentation (November 1988)	**Page 1:** "Once mining operations close, the site will be decommissioned." "These (RC) drill holes will be sealed during construction along with all old workings" **Page 8:** "At close of operations, the downstream slope will be graded and filled using selected run of mine waste to a slope of 1 in 2.75 (20º), as shown in Figure 4.3. A 200mm layer of topsoil furrowed on the contour will complete rehabilitation. Runoff will be collected on intermediate benches and channelled to formal batter drains. **Page 19:** "Rehabilitation of the proposed tailings storage will be carried out at the end of the life of the storage. The storage embankments are to be constructed from selected run of mine waste, uncontaminated by cyanide solution and will have minimum crest widths of 8 m. It is therefore proposed that reprofiling of the downstream slopes will commence at the final crest level towards the down stream toe, ensuring that an adequate thickness of run-of-mine waste remains on the slopes overlying the deposited tailings. Additional waste rock will be brought in as required to complete the profiling and provide a minimum 500 mm thick cover over the top surface of the storage. A 5m wide bench will be constructed for each 10m vertical rise in the storage as illustrated in Figure 4.3. The maximum angle of slope between benches will not exceed 20 º on the completion of profiling. Topsoil will be spread on external slopes and furrowing will be carried out along the contours to optimise moisture retention and encourage revegetation. Benches will be sloping in towards the storage and have a nominal cross fall from corners to midpoint of the bench on each downstream face of the storage. … In order to inhibit erosion, it is proposed that the flow be channelled to a collector structure at the midpoint of each bench and fed into batter drains to carry run off beyond the toes of the slopes." **Page 20:** "All delivery, discharge and return water pipelines and pumping installations will be removed. The decant outfall pipeline and underdrainage outfall pipe will be blocked off. The decant tower and outfall pond will be backfilled with mine waste and the outfall ponds topsoiled." **Figure 4.3 pg 24:**

REFERENCE DOCUMENT	COMMITMENT
	
Notice of Intent, Tails Return Water Dam, Mt Percy Operations (October 1991)	**Page 3:** "The outer dimension of the dam will be 60 metres by 60 metres (approximately)". "The outer dam walls shall be constructed using the excavated soil from inside the dam augmented or replaced by imported soil should it prove necessary for compaction and stability requirements." **Page 4: "**At the time of decommissioning the following actions will be initiated: • Removal of water contents • Removal of suction and discharge piping • Removal of lining material • Either backfilling or approximate levelling of the site • Application of the previously removed topsoil • Re-establishment of local native flora"
Mt Percy Operations Mining and Environmental Management Plan dated December 1991	"Prior to mine closure KCGM will communicate with the Department of Mines to develop an appropriate mine closure programme which will include: • Evaluation of pit abandonment requirements (i.e. safety bund wall requirements)…" **Page 15:** "In summary, mining lease conditions relating to … early parts of the operation have been "non prescriptive" and generally required attainment of rehabilitation standards "to the satisfaction of the District Mining Engineer", or with respect to the old tailings dam, construction and revegetation within the Guidelines of the Goldfields Dust Abatement Committee." On 13 December 1990 … (tenements were amalgamated) to form M26/261 … a new condition was introduced requiring the

REFERENCE DOCUMENT	COMMITMENT
	lessee to prepare and submit a "plan of ongoing mining operations and measures to safeguard the environment to the State Mining Engineer for his assessment and approval." **Page 16:** "The dust suppression strategies at Mt Percy consist of … rehabilitation of waste dumps and disturbed surfaces" **Page 18: "**Waste rock from the mining operation is either dumped on the already existing waste dumps, used for construction of tailings dam walls or will be progressively used to backfill the Sir John Pit and a section of the Mystery Pit." **Page 18:** "Waste rock from the mining operations …will be progressively used to backfill the Sir John Pit and a section of the Mystery Pit." **Page 21: "**Rehabilitation Objectives: Within the limit of practical landform constraints evaluate possible end land use options. Minimise off site environmental impacts. Establish a soil profile which is appropriate for the proposed end land use. Establish a stable landform which as far as possible is sympathetic to the regional landscape. Consider incorporating micro-topographical modifications within the waste dump design to aid in increasing the diversity and complexity of the vegetation and improving the potential for providing a greater range of habitats. Design and establish a favourable on-site and off-site hydrology. Ensure that an appropriate access system is maintained following the mining period." **Page 21-22:** "At Mt Percy, topsoil reserves are limited and insufficient material is available for rehabilitation of all the disturbed surfaces associated with the project." **Page 23:** Old Tailings Dam "Two rehabilitation options considered for the tailings dam wall included: • Rock armouring with competent waste material, mined directly from the pit, with the aim of developing a stabilised outerslope, and • Creating 20º slopes around the tailings dam by combination of battering the existing wall and infilling with waste rock, followed by the construction of drainage berms, topsoiling and seeding" The second option has been chosen as the strategy to be pursued to ensure consistency of rehabilitation standards with the adjoining tailings structure. The waste material used to provide the extra volume of material required to achieve the 20º outerslopes for the final tailings dam will be carted directly from the mining operation or mined from the waste dumps… Where necessary, drainage berms and vertical waterways will be incorporated into the final outer wall. Topsoil or a topsoil

REFERENCE DOCUMENT	COMMITMENT
	substitute will be spread at approximately 20 cm depth and the slope deep ripped with a maximum of 2 m distance between riplines. The final preparation technique and species selected for seeding will be dependent upon soil testing and experience gained on other rehabilitation sites presently being established in other parts of KCGM's operation." **Page 24:** "New Tailings Dam The Notice of Intent for this tailings dam provided a commitment to rehabilitate the final walls and top surface of the tailings dam. This will involve battering and/or filling the final outer slope of the tailings dam wall to achieve 20° or lower wall angles, installation of a drainage system, topsoiling and revegetation." **Page 25:** Waste Dumps: "Although no detailed earthworks designs have been developed for each slope…the generalised approach [to rehabilitation] will include: • battering or filling slopes to achieve 20° slopes or lower • drainage berms at 10 m vertical height intervals • vertical rock lined waterways linked, where necessary to a surface drainage system • the site will be topsoiled, deep ripped and revegetated" "Revegetation at Mt Percy will be monitored as part of the rehabilitation monitoring programme outlined in the Fimiston CER. Twice yearly photographic monitoring will be implemented." **Page 26 (Mine Closure):** "When mining activities are completed, all disturbed areas including unwanted roads will be rehabilitated by ripping and seeding." "Prior to mine closure KCGM will communicate with the Department of Mines to develop an appropriate mine closure programme which will include: An appropriate mine closure programme … will include: • evaluation of pit abandonment requirements (i.e. safety bund wall requirements) • rehabilitation monitoring and completion criteria requirements • ongoing environmental management requirements for the plant"
Recommissioning Status Report, Mt Percy No. 1 Tailings Dam (October 1993)	**Page 1:** "This dam will be designed to reach a height of 30 m and have a storage capacity of the order of 5 x 10^6 m^3" **Page 17:** "The rehabilitation procedures are detailed in the Environmental Guidelines, Tailings Dams: Preparation for Revegetation."
"Seepage Control - Mt Percy Tailings	Document unable to be reviewed.

REFERENCE DOCUMENT	COMMITMENT
Storage" dated 17 May 1995 and retained on Department of Minerals and Energy File No. 2136/94.	
"Altered Embankment Construction Technique for the Mt Percy No. 2 Tailings Storage" dated 16 May 1995 and retained on Department of Minerals and Energy File No.: 2154/95. *Letter reviewed dated 16th May 1995*	"It is proposed to use tailings to construct the outer embankment as opposed to the previous use of selected mine waste."
Mt Charlotte Dewatering Pipeline - Alternative Route" prepared by Graeme Smith, Land Administrator, KCGM, dated 12 May 2005 (NOI 5004) and retained on Department of Industry and Resources File No. E2561/200305	Document unable to be reviewed.
"Mt Charlotte Dewatering Pipeline - Realignment of Route" prepared by Graeme Smith, Land Administrator, KCGM, dated 14 September 2005 (NOI 5113) and retained on Department of Industry and Resources File No. E2561/200306.	Document unable to be reviewed.

1.9 Legal Obligations Register: Regional

1.9.1 Tenement Conditions

DOMAIN	TENEMENT	REQUIREMENT
Water Containment and Abstraction	L15/154, L15/155, L15/159, L24/105, L24/151, L26/100 - 102, L26/104, L26/107, L26/109, L26/114-118, L26/125 -127, L26/130 - 135, L26/140, L26/149 L26/151, L26/156, L26/159, L26/160, L26/161, L26/163, L26/172, L26/18, L26/180, L26/181, L26/182, L26/185, L26/186, L26/216-217, L26/254, L26/267, L26/282, L26/283, L26/284, L26/19, L26/63, L26/64, L26/77, L26/80, L26/81, L26/91, L26/96, L27/36	All topsoil that may be removed ahead of pipelaying operations to be stockpiled for replacement in accordance with the directions of the Inspector; or All topsoil that may be removed ahead of pipelaying operations to be stockpiled for replacement in accordance with the directions of the Environmental Officer, DMIRS.
Water Containment and Abstraction	L26/100 – 102, L26/104, L26/114-118, L26/130 – 135, L26/149, L26/77	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of an Environmental Officer, DMP.
Water Containment and Abstraction	L15/159, L24/105, L26/126, L26/156, L26/159, L26/160, L26/161, L26/163, L26/181, L26/186, L26/191, L26/216-217, L26/254, L26/267, L24/197, L26/91, L26/96, L27/36	“On the completion of the life of mining operations … (or the holder shall forthwith commence and within a reasonable time: • remove all installations constructions pursuant to this licence and • on such areas as cleared of natural growth by the holder or any of its agents, the holder shall plant trees and/or shrubs and/or any other plant as shall conform to the general pattern and type of growth in the area and as directed by the Inspector and properly maintain same until such time as the Department of Conservation and Land Management advises the Inspector that the whole of such regrowth is self supporting and Inspector so advises the holder of same. Unless the Warden or Minister for Mines or consents otherwise.”

DOMAIN	TENEMENT	REQUIREMENT
Water Containment and Abstraction	L15/154, L24/151, L26/100 - 102, L26/104, L26/109, L26/114-118, L26/125, L26/127, L26/130-135, L26/140, L26/149, L26/182, L26/172, L26/185, L26/192, L26/216-217, L26/77, L26/80, L26/81, L26/92, L27/38	On the completion of the life of mining, or progressively where possible … the holder shall: a) Remove all buildings, structures and installations constructed pursuant to this licence; b) Cover all wells and holes in the ground to such a degree of safety as shall be determined by the Inspector; and c) On such areas as cleared of natural growth by the holder or any of its agents, the holder shall plant trees and/or shrubs and/or another plant as shall conform to the general pattern and type of growth in the area and as directed by the Inspector and properly maintain same until such time as the Department of Conservation and Land Management advises the Inspector that the whole of such regrowth is self supporting and the Inspector so advises the holder of same. Unless the Warden or Minister for Mines orders or consents otherwise.
Water Containment and Abstraction	L26/63, L26/64, L26/18, L26/19	On the completion of the life of mining operations on the parent tenement hereto and upon any abandonment of mining operations on such parent tenements by the applicant/holder, it shall forthwith commence and within a reasonable time: • Remove all pipes and pipelines constructed pursuant to this Pipeline Licence or having been constructed prior to the grant of this Pipeline Licence and being the subject of this Pipeline Licence and • Cover all wells and holes in the ground to such a degree of safety as shall be determined by the Inspector and • On such areas as cleared of natural growth by the applicant/holder or any of its agents, it shall plant trees and/or shrubs and/or any other plant as shall conform to the general pattern and type of growth in the area and as directed by the Inspector and properly maintain same until such time as the Forests Department advises the Inspector that the whole of such regrowth is self supporting and the Inspector advises the applicant/holder. Unless the Warden of the Minister for Minerals and Energy orders or consents otherwise.
Water Containment and Abstraction	L26/180, L26/182, L26/91	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Director, Environment Division, Department of Industry and Resources.
Water Containment and Abstraction	L26/91 (23)	The lessee submitting to Director, Environment Division ("the Director") a Mine Closure Plan (MCP) by 30 April 2010 of an acceptable standard and consistent with the ANZMEC.MCA guidelines "Strategic Framework on Mine Closure" 2000, including closure and rehabilitation cost estimates; and a Rehabilitation Management Plan (RMP) by 31 January 2008 of an acceptable standard, with auditable time lines of progressive rehabilitation, detailing landform design, waste characterisation and vegetation/rehabilitation outcomes. The lessee submitting to the Director further details as required by him within specified timelines detailing any outstanding aspects of the MCP and/or RMP identified by the Director

DOMAIN	TENEMENT	REQUIREMENT
Water Containment and Abstraction	L26/107 (18)	All surface disturbances activities are proposed on the licence which are not associated with development or construction proposals, the prior written approval of the Environmental Officer, DMIRS, must be obtained before the use of drilling rigs, scrapers, graders, bulldozers, backhoes or other mechanised equipment for the proposed surface disturbance activities. Following approval, all topsoil being removed ahead of operations and separately stockpiled for replacement after backfilling and/or completion of operations.
Water Containment and Abstraction	L26/282 (3)	The rights of ingress to and egress from Miscellaneous Licence 26/77, 26/100, 26/101 & 26/102 being at all times preserved to the licensee and no interference with the purpose or installations connected to the licence.
Water Containment and Abstraction	L26/283 (13)	The rights of ingress to and egress from Miscellaneous Licence 26/77, 26/101, 26/107, 26/114, 26/115, 26/116 & 26/149 being at all times preserved to the licensee and no interference with the purpose or installations connected to the licence.
Water Containment and Abstraction	L26/284 (3)	The rights of ingress to and egress from Miscellaneous Licence 26/77, 26/117, 26/118, 26/130 being at all times preserved to the licensee and no interference with the purpose or installations connected to the licence.
Water Containment and Abstraction	L26/282, L26/283, L26/284	The area of the miscellaneous licence to be reduced as soon as practicable after construction, to a minimum for the safe maintenance and operation of the licence purposes.
Water Containment and Abstraction	L26/282, L26/283, L26/284	Wherever any part of a road intersects an existing fence, the holder shall where necessary construct a gate or livestock grid having such dimensions and be constructed of such materials and be of such standard as agreed with the pastoralist or as determined by the Environmental Officer, DMIRS.
Water Containment and Abstraction	L26/282, L26/283, L26/284	All disturbances to the surface of the land made as a result of exploration, including costeans, drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, DMIRS. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DMIRS.
Water Containment and Abstraction	L26/282, L26/283, L26/284	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the licence area prior to or at the termination of exploration program.
Water Containment and Abstraction	L26/282 (4)	No interference with the transmission line or the installations in connection therewith, and the rights of ingress to and egress from the facility being at all times preserved to the owners thereof.
Water Containment and Abstraction	L26/282 (5)	The prior written consent of the Minister responsible for the Mining Act 1978 being obtained before commencing any activities in respect to the licence purposes on 5GR 19214 Timber Reserve.

DOMAIN	TENEMENT	REQUIREMENT
Exploration	Various	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.
Exploration	Various	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DOIR.
Exploration	Various	All waste material, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration program.
Exploration	M26/120, M26/131	Except with the approval of the Council, all mining, excavations or drilling operations being backfilled and the ground reinstated and revegetated at the completion of operations to the satisfaction of the Council (Trafalgar Townsite Reserve & Kalgoorlie Townsite).
Exploration	M26/155, M26/150	Except with the approval of the City of Kalgoorlie-Boulder, all mining, excavations or drilling operations being backfilled and the ground reinstated and revegetated at the completion of operations to the satisfaction of the City of Kalgoorlie-Boulder
Exploration	Various	All holes, pits, trenches and other disturbances to the land made whilst mining which in the opinion of the State Mining Engineer are likely to endanger the safety of any person or animal being filled in or otherwise made safe to the satisfaction of the State Mining Engineer.
Access Roads and Service Corridors	M26/383, M26/46, M26/60, M26/61	All ore stockpile areas and roads constructed in the course of mining being left level and rehabilitated with trees and natural scrub to the satisfaction of the Director, Environment Division, DoIR.
Access Roads and Service Corridors	L26/180	The Licensee rehabilitating past and future spills and further disturbances such as supplementary tracks and hardstand areas. Prescriptions and techniques to be approved by the CALM Regional Manager.
Access Roads and Service Corridors	L26/91	Reinstatement of roads and natural surfaces to the satisfaction of the City of Kalgoorlie-Boulder (Parklands Reserve 35661, 35662 and the Brown Hill suburban area to the Kalgoorlie townsite).

1.9.2 Commitments in Approval Documents

REFERENCE DOCUMENT	TENEMENT	COMMITMENT
Fimiston, Mt Percy and Mt Charlotte Pipelines		
"Notice of Intent – Site water Water Supply Rationalization" dated September 1991 and retained on Department of Minerals and Energy file No 1273/91;		"Above ground pipelines decommissioned … will be recovered and associated access tracks if no longer required will be ripped. Where necessary, restoration will be assisted by the addition of native seed and fertilisers. Buried pipelines will remain *in situ* as their recovery would involve considerable unnecessary disturbance."
"Fimiston to Mt Percy Process Water Transfer Pipeline Drainage and Spillage Containment' dated 6 August 1991, the associated letter dated 13 August 1991 and both retained on Mines Department File No: 87/88.	L26/91	Document unable to be reviewed.
"Mt Charlotte Dewatering Pipeline - Alternative Route" prepared by Graeme Smith, Land Administrator, KCGM, dated 12 May 2005 (NOI 5004) and retained on Department of Industry and Resources File No. E2561/200305	L26/91	Document unable to be reviewed.
Southern Borefield		
"Fimiston Stage II, Water Supply Development - Notice of Intent" dated February 1991 and retained on Department of Minerals and Energy File No. 1365/90;		**Page 27:**" Sumps and dams associated with the borefield and water supply pipeline will be rehabilitated upon decommissioning of the pipeline, by removal of saline residue, filling and application of seed and fertiliser if necessary. Progressive rehabilitation of salt damage areas caused by accidental leakage Access tracks, if no longer required, will be ripped, and seed and fertilizer will be applied as necessary. Pumping installations will be left in a condition to satisfy the State Mining Engineer" "Upon decommissioning, sumps associated with the borefield and water supply pipeline will be cleared of saline

REFERENCE DOCUMENT	TENEMENT	COMMITMENT
		residue and in filled with the soil stockpiled adjacent to them during excavation. Access tracks, if no longer required, will be ripped. Where necessary, restoration will be assisted by the addition of native seed and fertiliser. Buried pipelines will remain *in situ* as their recovery would be uneconomic and involve considerable additional disturbance. Pumping installations will be left in a condition satisfactory to the State Mining Engineer.”

2. APPENDIX 2: STAKEHOLDER ENGAGEMENT REGISTER 2003-2015

More recent engagement is documented in Vol 1 Section 4 of the MCP

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
2/9/2003	Kalgoorlie-Boulder community	Chaffers headframe media release	Available at www.superpit.com.au	
1/12/2004	Kalgoorlie-Boulder community	News and Views 2004 SIA	Available at www.superpit.com.au	
2/12/2004	Kalgoorlie-Boulder community	Social Impact Assessment	Available at www.superpit.com.au	
Dec 2004	Kalgoorlie-Boulder community	Community Attitudes Survey		
Dec 2004	Kalgoorlie-Boulder community	KCGM Social Needs Survey		
4/9/2006	Kalgoorlie-Boulder community	Super Pit extension consultation media release	Available at www.superpit.com.au	
Sept/Oct 2006	Kalgoorlie-Boulder community	Public Environmental Review (PER)	Available at www.superpit.com.au	
1/10/2006	Kalgoorlie-Boulder community	News and Views PER	Available at www.superpit.com.au	
2007	Kalgoorlie-Boulder community	Social Impact Assessment	Available at www.superpit.com.au	
8/2/2008	Kalgoorlie-Boulder community	Query from The Australian regarding Super pit expansion		
May 2008	Kalgoorlie-Boulder community	News and Views Stakeholders		
Nov 2009	Kalgoorlie-Boulder community	News and Views Closure		
15/12/2009	Local and State Government	Govt stakeholder workshop (Perth) with DMP, OEPA, CME, DEC		

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
16/12/2009	Local and State Government	Government stakeholder workshop (Kalgoorlie) with DEC, DoP, GEDC, CKB, DMP, DIA		
2009	Kalgoorlie-Boulder community	Closure Survey		
Feb 2010	Kalgoorlie-Boulder Community	Closure Focus Groups		
4/5/2010	Kalgoorlie-Boulder community	Social Impact Assessment	Available at www.superpit.com.au	
20/7/2010	Kalgoorlie-Boulder community	News and Views 2010 SIA	Available at www.superpit.com.au	
13/8/2010	OEPA	Response letter to 2010 Closure and Reclamation Plan		
Nov 2010	DIA	Response letter to 2010 Closure and Reclamation Plan		
2010	DMP	Response letter to 2010 Closure and Reclamation Plan		
2010	DoW	Response letter to 2010 Closure and Reclamation Plan	DoW supports comments provided by the Office of Environmental Protection Authority on this issue (Acid and Metalliferous Drainage)	
26/3/2011	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: “Solar Power Needed for Sustainable Future”	Potential for solar power generation in Kalgoorlie	
14/4/2011	City of Kalgoorlie-Boulder	Initiate dialogue and discussion on submitted closure plan		
12/5/2011	DMP	Update on Closure, AER and inspections	Ongoing dialogue	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
27/5/2011	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: “Can the Mine Live On?”	Discussion on mine life, resources not currently mined and even time rosters	
28/5/2011	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “KCGM Will Not Be Fooled”	Response to comments from Perth-based politician Robin Chapple	
28/5/2011	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: “No Comment on Super Pit Future”	Article response based on media article “Can the Mine Live On?”	
30/5/2011	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Use It Or Lose It”	KCGM to use or lose known mineral resources	
4/6/2011	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Wake Up John, Stop Sitting on the Fence”	Call for John Bowler to stop sitting on the fence in regards to KCGM tenements	
15/6/2011	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Time for Barrick/Newmont to Act”	Call for Barrick and Newmont to act on KCGM tenements	
15/6/2011	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Super Pit for City’s Benefit”	Discussion on KCGM resources	
18/6/2011	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: “Getting the Loopline Back on Track”	Discussion on future for the Loopline Railway	
20/6/2011	City of Kalgoorlie-Boulder	Update on Closure and Reclamation Plan 2010 to City Councillors at their All Purpose Committee Meeting	Acknowledged that City had been consulted during the development and review of the Closure and Reclamation Plan 2010.	
26/7/2011	John Bowler MLA	Letter to Barrick and Newmont regarding KCGM Rosters and	“I would also like to lend my support to the growing community concern about the lack/level of exploration and lack of a long-term mining plan on all of your northern	Mine closure is also an important consideration for KCGM and the community. Mineral resources are

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
		Life of Mine	tenements, which are north and east of the Mount Charlotte Gold Mine"	finite and even though the life of mine may be prolonged through reducing costs, mining lower grades, benefiting from higher commodity prices, and additional resource definition, eventually the mine will cease operating. KCGM has provided the community with a nominal closure date to ensure that adequate planning can commence and minimise any potential impacts. Rest assured that Barrick, Newmont and KCGM are endeavouring to extend the life of the operations where possible.
25/7/2011	Kalgoorlie-Boulder community	Media Article: "Future at Risk"	Exploration program at Fimiston and Mt Percy "KCGM undertakes continual planning to investigate opportunities that further extend the mine life, including the potential for underground mining from the open pit, While we are in the exploratory phase of this planning, future directions cannot be declared."	
2/8/2011	Kalgoorlie Liberal Party	Meeting to discuss long term mining plan	Questions regarding long term mining plans, focus on the closure date.	KCGM focussing on efforts to keep mine open and legacy plans
3/8/2011	Kalgoorlie-Boulder community	Media Article: "Mine Life Key for Barrick"	Article on Mine Life and even time rosters	
11/8/2011	Kalgoorlie Liberal Party	Letter in regards to long term mining plan	Appears to be no long term mining plan. Urges KCGM to "look at the bigger picture to developing long term mining plan of open pit resources"	KCGM are committed to remaining in the city, and do not want to see the mine close. However, mineral resources are finite and even though the life of mine may be prolonged through reducing costs,

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
				mining lower grades, benefiting from higher commodity prices, and additional resource definition, eventually the mine will cease operating. KCGM has provided the community with the nominal closure date of 2021 to ensure that adequate planning can commence and minimise any potential impacts.
18/8/2011	Curtin University	Social Closure Research	Ongoing dialogue	Note: due to staff change over at Curtin, project did no proceed.
28/9/2011	Curtin University	Social Closure Research	Ongoing dialogue	
17/1/2012	DMP	Update on KCGM Closure Plan and discuss key issues	Concept of mosaic type of rehabilitation supported providing there were good environmental outcomes	
			KCGM need to consider potential risk of access, and would need the RSD, Director Inspector's signoff on noise bund being the abandonment bund	KCGM will retain fence
			DMP stated that there would have to be a responsible party to take over maintenance of the fence, such as the Shire	Recently discussed with Shire, and the focus had been on human aspects
			Expectation that the Closure Plan would include sufficient detail	
			DMP prefers one briefing of the final document only	
25/01/2012	Local Tourism Operator	Local resident and tourism operator contacted KCGM regarding future plans for the open pit.	How is KCGM involved with the Mining Hall of Fame, what are KCGM's plans beyond 2021 to assist local tourism.	KCGM remains committed to the local community but at this stage does not have a formal agreement with the Hall of Fame.
March 2012	Kalgoorlie-Boulder community	Barrick 3rd Party Assurance Audit – interviews with key stakeholders regarding KCGM's	The future of the town is tied directly to the life of the mine. The recent approval for a pit expansion has extended the mine for another 10-12 years. Many local	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
		performance and community concerns.	businesses are dependent on the mine and are relieved to see the extension. Several stakeholders said they would rather that KCGM stopped talking about closure because it only creates anxiety with local residents. Several said they believe that something else will take the place of the mine when it closes.	
4/04/2012	Kalgoorlie Miner	Media Article in Kalgoorlie Miner: "Public Feedback Sought"	Article regarding the City of Kalgoorlie-Boulder's draft strategic community plan, developed in consultation with KCGM.	
5/4/2012	City of Kalgoorlie-Boulder	Response letter to 2010 Closure and Reclamation Plan	At this time the City is satisfied with KCGM's interim Closure and Reclamation Plan 2010	
5/05/2012	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: "Future Questioned"	Article regarding parliamentary questions asked by MLC Robin Chapple about possible expansion plans for KCGM	
6/07/2012	All	Radio interview (6PR Radio) with Ron Yurevich, Mayor of Kalgoorlie-Boulder	Includes comments "unsure how long the Super Pit will continue to operate for but Kalgoorlie is a regional city that doesn't rely on the Super Pit and continue to function after it closes."	
23/07/2012	Kalgoorlie-Boulder community	KCGM Media Release: "KCGM to support mining tourism destination"	KCGM commits to reopening the historical attractions at the Mining Hall of Fame to provide long lasting benefits to local tourism industry	
24/07/2012	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: "Mining Giant Steps In"	Tourist attractions at the Australian Prospectors and Miners Hall of Fame will reopen under the management of Kalgoorlie Consolidated Gold Mines. Aims to be a legacy project for the long-term benefit of the local tourism industry.	
7/08/2012	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: "Newmont steps up local spending"	Newmont increasing exploration spending at the Super Pit	
7/08/2012	Kalgoorlie-Boulder	Media Article in Kalgoorlie Miner:	Engineering work has begun on the Loopline Railway to	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
	community	"Rail line to increase access to Super Pit"	increase tourist access to the Super Pit Lookout	
27/09/2012	Kalgoorlie-Boulder community	Media Article in Kalgoorlie Miner: "KCGM calls for new members"	KCGM calls for nominations to the KCGM Community Reference Group (CRG)	
18/10/2012	Kalgoorlie-Boulder community	KCGM Media Release: "15 million ounces poured at KCGM"	KCGM continues to look for opportunities to extend the life of mine	
25/10/2012	ABC Goldfields	Interview with John Bowler, MP for Kalgoorlie	Discusses the contributions made by KCGM to the Hall of Fame	
8/12/2012	Kalgoorlie Miner	Media Article in Kalgoorlie Miner: "Super Pit Shop reopening"	KCGM Super Pit Shop reopens at the Hall of Fame site	
8/02/2013	Kalgoorlie-Boulder community	KCGM Media Release: "KCGM launches Hannans North Tourist Mine"	KCGM is working with the local community to build a sustainable tourism business	
13/02/2013	Kalgoorlie Miner	Editorial: "2021 is less than a decade away"	Discussion around the positive affect of KCGM's residential workforce, but questions what will happen beyond closure.	
21/02/2013	KCGM Community Reference Group	Presentation: Mine Closure Plan 2012	Discussion around the closure planning process, \that the current plan was under review by OEPA and had been assessed by DMP.	
7/03/2013	Kalgoorlie Miner	Media article: "How much longer? Production to decline"	Independent predictions of KCGM mine life add 10 years. Discusses the affects KCGM LOM has on town planning, real estate prices and long-term economic viability of the city, and demands declaration of longer mine life.	
9/03/2013	Kalgoorlie Miner	Letter to the Editor in Kalgoorlie Miner: "Kalgoorlie-Boulder not gold-dependent"	Asks critics to end speculation around KCGM mine life as it undermines local confidence, and that KCGM is bound by JORC requirements when setting LOM	
22/07/2013	WA Today	Media article: "The Kalgoorlie-Boulder pit that really is super"	Tourism article that speculates on the uses of the super pit after mine closure	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
8/08/2013	KCGM Community Reference Group	Presentation: “The way forward”	Following announcement of redundancies at KCGM, discussion around KCGM’s future priorities, including reduction in costs, ongoing commitment to community investments, and recruitment freeze.	
7-11/10/2013	KCGM Community Perception Survey	50 local residents interviewed	Feedback regarding mine closure and planning: Closure not largely influencing residents’ intentions to stay long-term More information regarding closure planning KCGM not responsible for the town’s future (local government) Mixed response re the impact of closure Good understanding that closure dates change	
14/11/2013	KCGM Community Reference Group	Presentation: “Community Perception Survey results”	Discussed survey results, including views on mine planning and closure.	
07/12/2013	Kalgoorlie Miner	Media article: “KCGM pours $1m into new clubhouse”	KCGM to donate $1m to new sporting complex for the long-term benefit of the local community	
07/01/2014	GEDC and KBCCI	Participation in the Regional Blueprint Survey workshop	KCGM attended workshop. Discussion around development of local key infrastructure will be a driver for change in the region	
15/01/2014	Kalgoorlie Miner	Opinion Column: “What does the region’s future hold?”	The future of KCGM as a major economic factor in the region. A proactive Govt regional development policy is required.	
4/02/2014	CKB, KBCCI, CME, GEDC, local politicians, CRG, regulators	Life of Mine Stakeholder briefing session. Attendees: Ron Yurevich (Mayor), Don Burnett (CEO, City of Kalgoorlie-Boulder), Lee Jacobsen and Hugh Gallagher (Kalgoorlie-Boulder Chamber of Commerce and Industry), Holly	Development of Life of Mine plans, KCGM continues to look for opportunities to extend LOM, Plans are subject to change. 2013 LOM plan extends processing from 2021 to 2029. Key projects required: • Fimiston II Height Increase	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
		Phillips (Chamber of Minerals and Energy), Robert Hicks (Goldfields Esperance Development Commission), Marius Hannekom (Dept of Mines and Petroleum), Community Reference Group members	• Fimiston Gold Room Upgrade • Gidji UFG upgrade • Additional tailings storage	
4/02/2014	KCGM staff and contractors	Memo: KCGM Life of Mine announcement	All staff and contractors advised of the new Life of Mine plan prior to media release being issued. Advises that dates can change and are based on various factors.	
5/02/2014	Kalgoorlie-Boulder community	Media article in the Kalgoorlie Miner: “Chance to have a say on Super Pit”	Calls for new KCGM CRG members – “will give residents an opportunity to have a say about KCGM’s future”	
5/02/2014	Kalgoorlie-Boulder community	KCGM Media release: “KCGM processing gold to 2029”	KCGM will continue to mine in the open pit to 2019, and process low grade stockpiles to 2029. Nominal dates are provided to ensure adequate planning, and are dependent on a number of factors.	
5/02/2014	Kalgoorlie-Boulder community	Radio clip (ABC Goldfields): “KCGM announces new life of mine”	Announcement of new Life of Mine – extension to 2029	
5/02/2014	Kalgoorlie-Boulder community	Radio interview (ABC Goldfields) with KCGM ESR Manager about the extension to mine life	Lorraine Horsley's interview with Michelle Berryman from Kalgoorlie Consolidated Gold Mines [KCGM] about the mine life of the Kalgoorlie Super Pit. Varischetti says KCGM, who run the Kalgoorlie Super Pit, today announced an extension of the project's mine life until 2029.	“She says mining will still cease in five years. Berryman says they have been able to extend the mineral processing life of the mine by eight years. She says the open cut mining will go until about 2019. Berryman says the extended life was caused by the inclusion of low grade stock piles allowed by the gold price. She says the low grade yields about two grams of gold per

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				ton.”
5/02/2014	All	Media article (ADVFN Australia Online): “Australian Super Pit Gold Mine Operations Set to Be Extended”	Barrick Gold Corp. (ABX) and Newmont Mining Corp.'s (NEM) giant Super Pit mine in Western Australia could continue processing gold for the next 15 years under plans unveiled Wednesday that will extend the life of the operation. The Super Pit operations--which produce around 800,000 ounces of gold a year--run 24 hours a day, every day of the year, according to the operator's website.	
5/02/2014	All	Media article (Reuters, Yahoo.com): “Australia's Super Pit gold mine gets 8-year lifeline”	Australia's giant Super Pit gold mine was given an eight-year extension by its operator on Wednesday, delaying its closure until 2029 and allaying concerns weakening bullion prices would lead to an early shutdown. As a result, it was overtaken by Newmont's Boddington mine 700 km (400 miles) away as Australia's biggest gold mine.	
5/02/2014	All	Media article (ABC Online): “What would Kalgoorlie-Boulder be like without the Super Pit?”	Kalgoorlie Consolidated Gold Mines today announced plans to process gold until 2029, which community leaders say will allow time for planning for the city's future.	"Kalgoorlie-Boulder will continue in its existence as it has for the last hundred and twenty years, I'm an optimist and I would suggest that gold will continue to be mined in one way or another for many years to come."
5/02/2014	All	Media article (Australian Mining): “Kalgoorlie's Super Pit mine life extended to 2029”	Gold processing at Kalgoorlie’s Super Pit will be extended by eight years until 2029, the mine’s owner today announced.	“The two roasters at Gidji are scheduled to cease operating by the end of 2015, and will be replaced with a large Ultra Fine Grinding (UFG) Mill,” Cole said.
5/02/2014	All	Media article (My Resources, WA Business News, NT News, News.com.au, Townsville Bulletin	The operators of the Kalgoorlie Super Pit - Australia's largest open cut gold mine - say they will extend its processing life.	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
		Tasmania Mercury World News Australia, Herald Sun, Trading Room, Perth Now Adelaide Now, NineMSN, Cairns Post, Prime 7, Yahoo, Sydney Morning Herald, West Australian, Brisbane Times, WA Today, GWN 7): “Super Pit's life to be extended”	More than 1000 people are employed at the Super Pit.	
5/02/2014	All	Media article (Yahoo, ABC Online, GWN 7, Prime 7, ABC Online): “Kalgoorlie's Super Pit mine life extended to process low grade ore”	The operators of the Kalgoorlie Super Pit have announced an eight year extension to the mine's life, to process additional low-grade ore.	It is important for the community to understand that while KCGM endeavours to extend the life of the operations, gold price is variable and economically viable mineral resources are finite, and one day the mine will close.
6/02/2014	All	Media article in the Kalgoorlie Miner: “Kal’s Super Pit sets 2029 use-by date”	Gidji Roaster, the towering landmark that has processed sulphide concentrate from Kalgoorlie- Boulder’s Super Pit for the past 25 years, will be shut down by the end of next year. “Providing a nominal date for mine closure ensures that adequate planning is undertaken by the operation, government and community to minimise potential impacts,” Mr Cole said.	
6/02/2014	Kalgoorlie-Boulder community	Radio interview (ABC Goldfields):: “Super Pit remains an Australian icon”	Kalgoorlie-Boulder Chamber of Commerce and Industry commenting on the new life of mine announcement	
6/02/2014	Kalgoorlie-Boulder community	Radio interview (ABC Goldfields): Holly Phillips, Chamber of Minerals and Energy	CME comments on the new life of mine, good news for industry	
6/02/2014	All	Radio clip (ABC1 Perth (TV) / GWN 7): The processing of low-grade gold will be expanded at	KCGM Mine Technical Services manager speaks about the importance of resources to the local region	

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		the Kalgoorlie super pit		
6/02/2014	Kalgoorlie-Boulder community	Radio interview (ABC Goldfields WA): Hugh Gallagher, CEO, Kalgoorlie Boulder Chamber of Commerce and Industry	Discusses the history of mining in the region, that while the super pit is an integral part of the community, many local mines closed in the 1970s and the town survived	
6/02/2014	All	Media article (ABC Online): “Super Pit to 'always be iconic attraction'”	“There have been many radical proposals as to what could be done to the Super Pit once the mine closes”	
6/02/2014	All	Media article (International Business Times): “Super Pit Gold Extends Mining to 2029 - International Business Times”	While mine life at KCGM has been extended, the mining industry continues to face tough challenges	
6/02/2014	All	Media article (ABC Online): “Super Pit Gold Extends Mining to 2029”	The extension of LOM is good news for the industry	
7/02/2014	KCGM staff and contractors	Article in KCGM Newsletter – The Dirt: “Future Process”	Details inclusions of the 2013 LOM plan, and that long-term planning can be challenging due to the changing conditions in the mining industry.	
12/02/2014	Kalgoorlie-Boulder community	Media article in the Kalgoorlie Miner: “Survey will help identify areas of need”	Local tourism figure commenting that the announcement of the extension to Life of Mine is great news for local business and the wider community	
March 2014	Kalgoorlie-Boulder Community	Newsletter article: Kalgoorlie-Boulder Chamber of Commerce and Industry News	Article written by KBCCI CEO Hugh Gallagher congratulating KCGM on the extension to LOM, discussing ongoing drilling programs, and reiterating that KCGM can only make future plans public under JORC conditions.	
March 2014	Kalgoorlie-Boulder Community	Newsletter article: Kalgoorlie-Boulder Chamber of Commerce and Industry News	Article written by KBCCI President Lee Jacobsen regarding the LOM announcement and that the community can be confident the Superpit will be a key	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
			feature of our landscape for some time to come.	
14/07/2014	City of Kalgoorlie-Boulder	KCGM participation in community planning workshops conducted by CKB		
22/07/2014	DMP and CKB	DMP received call from Kalgoorlie Airport regarding KCGM waste dump heights and how there are managed with regards to OLS.		
29/07/2014	Kalgoorlie Miner	Opinion column: “A vision for the City beyond mining”	While the Super Pit is an integral part of the community, more planning for the region is needed as its closure is inevitable.	
4/08/2014	Kalgoorlie Miner	Media article in the Kalgoorlie Miner: “Hush money above board”	KCGM has secured federal government funding for a project to reduce noise from haul trucks. KCGM continues to look for was to improve and extend mine life.	
14/08/2014	KCGM Community Reference Group	Presentation: “Proposed extension to underground mining – Hidden Secret”	Positive response overall. Could see there is potentially going to be issues with local residents, predominantly around blast vibration.	
19/08/2014	Williamstown Residents Committee	A letter from the WRC in response to a meeting invitation regarding the proposed Hidden Secret project.	Along with questions about the project, the WRC also asked: • The number of drill holes used to determine an ‘underground mineable resource’ • What is the LOM of the project	KCGM is bound by the NI 43-101 when providing drill results. KCGM continues to look for opportunities to extend the life of its operations. Further Central Corridor drilling will be undertaken in 2015.
28/08/2014	Kalgoorlie-Boulder Community	KCGM Media release: “KCGM identifies new underground resource”	KCGM proposes to mine the Hidden Secret ore body, utilising existing underground infrastructure at Mt Charlotte. KCGM continues to explore opportunities to extend mine life.	
28/08/2014	Williamstown	KCGM letter drop: Identification	Feedback was received from 12 residents. 2 asked about	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
	residents	of new resource “Hidden Secret” (letter includes copy of Hidden Secret Information Sheet and invites feedback)	KCGM’s future plans for the area, 3 requested relocation/compensation, and 3 offered to sell their properties. Other feedback was specifically related to the project (vibration, fumes)	
29/08/2014	Kalgoorlie-Boulder community	Media article in the Kalgoorlie Miner: “Hidden Secret concerns”	Residents’ concerned that the Hidden Secret proposal will damage properties in Williamstown. The project raises questions about KCGM’s long-term plans for the area, and past suggestions that 20 years could be added to mine life.	
30/08/2014	Kalgoorlie-Boulder community	Editorial in the Kalgoorlie Miner: “Williamstown deserves transparency”	Following KCGM’s announcement to mine the proposed Hidden Secret ore body, Williamstown residents call on KCGM to declare long-term plans (beyond current LOM)	
2/09/2014	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Pit owners must talk to us”	Calls for Barrick and Newmont to reveal long-term plans for the area around Williamstown. Discusses KCGM as a major employer in the region	
3/09/2014	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Open up on Williamstown’s hidden secret”	KCGM are sitting on abundant resources and should announce longer mine life to boost the local economy	
7/09/2014	All	Media article in The Australian: “Kalgoorlie golden secret sent offshore”	Claims that Barrick have briefed investors on long-term plans but not told locals	
8/09/2014	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Let’s get on with reality”	States that mining is still the main reason for the existence of Kalgoorlie-Boulder and Williamstown residents should not be standing in the way of mine developments (Hidden Secret)	
8/09/2014	All	Radio interview (6PR Radio): Dianne Mills, President of the Williamstown Residents Committee (WRC)	Barrick and Newmont are not being honest with residents about their future plans for the area around Williamstown. Calls on KCGM to release all drill results.	

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
9/09/2014	All	Radio interview (6PR Radio, ABC Midwest): Graeme Campbell, former Federal Govt member for Kalgoorlie-Boulder	Claims that Barrick and Newmont are withholding information and that allegedly a shareholder told him KCGM has an unlimited mine life.	
9/09/2014	Kalgoorlie-Boulder community	Radio interview (ABC North West): President of Chamber of Commerce and Industry	KCGM are within their right to not disclose drill results	
12/09/2014	Kalgoorlie-Boulder community	Radio interview (ABC Midwest): former Liberal Party President Matt Eggleston	Calls for resignation of KCGM GM for withholding drill results. “To help investment in the city, the community needs to be reassured about a potential second large gold deposit”	
18/09/2014	Kalgoorlie-Boulder community	Letter to the Editor in Kalgoorlie Miner: “Mining, not tourism, is the future of this town”	Claims that KCGM has proven resources for two more open pits	
23/09/2014	Kalgoorlie-Boulder community	Radio interview (ABC North West, ABC Goldfields): KCGM General Manager	KCGM GM dispels claims that the company is withholding information, and explains the requirements of establishing a mine resource under the JORC code.	
24/09/2014	Kalgoorlie-Boulder community	Media article in the Kalgoorlie Miner: “KCGM denies super secret”	KCGM is not withholding information, and has been upfront about proven, mineable resources.	
November 2014	Community Reference Group	Annual Survey of the group included questions directly related to closure planning.	Main priorities for closure to maintain the KCGM site for tourism use and management of environmental aspects such as dust, groundwater. Lower priorities were the aesthetics of the waste dumps and returning the area to a pre-mining state.	
11/12/2014	Community Reference Group	Consultation and presentation on KCGM’s closure planning, including:	Would the sides of the pit, the walls remain the same if left unattended i.e. Will they fall in?	No they will remain the same/ we have hard rock in Kalgoorlie.
			When the pit closes, shops will close and people will leave town. Is it the responsibility of the company to	There will be a period of transition, redundancies are spread out over a

DATE	STAKEHOLDERS	DESCRIPTION OF CONSULTATION	STAKEHOLDER COMMENTS	PROPONENT RESPONSE AND/OR RESOLUTION
		• Overview of mine closure planning • 2015 KCGM Mine Closure Plan inclusions • Project priorities – public access, rehabilitation, visual amenity, social impacts of closure	maintain this? I think its KCGM's responsibility to tell the community when the mine closes then it is up to the city of Kal-Boulder to work out what to do with the town. KCGM is not responsible for the future of the town.	period of time so it doesn't collapse at once and instead is gradual. KCGM's Community Investment programme focuses on big infrastructure projects in order to establish sustainable community venues/ buildings that will still be available long term for the town after the mine closes.
			I suggest you talk to KBCCI regarding the social impacts of closure.	KCGM has been involved in the CKB strategy planning workshops.
			You say the Super Pit is going to be there for a long time, can we see a Super Pit bus going down in the mine to see what has been done over the years for tourists?	Unlikely that mines department will allow it. Also raises the question of who would pay for and maintain this?
			What does beautify or strengthen the waste dumps actually mean?	Don't want to create a dust bowl, but need to return to as natural as possible. Will take 8 years to grow.
			Have other mines in the world done exercises like this?	None in Australia this size. JV's have had a number of mine closures so we can and are learning from them. Closure auditor visited in 2014.
03/03/2015	OEPA	Telephone meeting regarding OEPA's requirements for the MCP, incl format and submission logistics.	The OEPA would prefer the MCP focuses on the Management component, and technical detail be in the Appendices, which can remain confidential. Also discussed submission of MCP.	
05/03/2015	DMP	Consultation with respect to DMP's requirements of the MCP.	Discussed format and submission of MCP, and ongoing closure planning engagement.	

3. APPENDIX 3: CLOSURE RISK ASSESSMENT

Context to Risk Assessment

As part of the review process of the Mine Closure Plan, KCGM reassesses the risks posed through implementation in order to ensure that these risks are identified, are still relevant and mitigated through the application of current and future controls. The results of the risk assessment are intended to drive the revision of the Mine Closure Plan, in a risk based approach. This version was updated in 2020 in preparation for the 2021 Mine Closure Plan.

Assumptions:

- Only plausible risks are considered;
- Risks are assessed on the basis of current control and risk mitigation measures (current controls);
- Focus on planned closure with risks determined after completion of closure (future controls); and
- Closure prescriptions are based on those in the current Closure Cost Estimate Report.

3.1.1 Risk Matrix

KCGM			CONSEQUENCE				
			Insignificant	Minor	Moderate	Major	Catastrophic
			5	4	3	2	1
LIKELIHOOD	Almost Certain Expected occurrences - once per week	A	5A Medium	4A Medium	3A High	2A High	1A High
	Likely Probable occurrences - once per month	B	5B Medium	4B Medium	3B High	2B High	1B High
	Possible Possible occurrences - once per year	C	5C Low	4C Medium	3C Medium	2C Medium	1C High
	Unlikely Unlikely to occur - once every 5-10 years	D	5D Low	4D Low	3D Low	2D Medium	1D Medium
	Rare May occur in exceptional circumstances >10 years	E	5E Low	4E Low	3E Low	2E Medium	1E Medium

Measures of Likelihood			
Likelihood	Description		Criteria (read as either/ or)
	Almost Certain	A	The event is expected to occur in most circumstances Once per week
	Likely	B	The event will probably occur in most circumstances Once per month
	Possible	C	The event could occur at some time Once per year
	Unlikely	D	The event could possibly occur at some time but is unlikely Once every 5 - 10 years
	Rare	E	The event may occur in exception circumstances > 10 years

MEASURES OF CONSEQUENCE					
	Insignificant (5)	Minor (4)	Moderate (3)	Major (2)	Catastrophic (1)
Health and Safety	First aid injury or Minor reversible health effects of no concern	Medical treatment of restricted work injury/illness or Reversible health effect of concern, no disability	Lost time injury/illness or Severe, reversible health effect resulting from acute, short term exposure or progressive chronic condition, infection disease	Single fatality or Permanent disability or exposure resulting in irreversible health effect of concern	Multiple fatalities or health effects resulting in multiple disabling illness leading to early mortality
Community	No negative socio-economic impact or inconvenience to the community or No media attention	Minor negative socio-economic impact or disturbance to the community or Local media attention	Negative socio-economic impact or disturbance to the community or negative local media attention with enquiries from NGOs	Major negative socio-economic impact and serious community relations impacts or negative national headlines with high levels of NGO attention	Loss of social licence to operate with disastrous community relations impacts or negative international media headlines
Environment	Localised environmental impacts, contained with no regulatory reporting	Minor on-site environmental impact, reportable to regulators	Moderate environmental impacts, extends beyond site boundary or regulatory violations with fines	Serious medium term environmental impacts or major regulatory violations	Severe irreversible environmental impacts or severe breach of regulations with operation suspended
Emergency and Crisis Management	Emergency response may be required with notification of management. No crisis or Emergency Management Activation required.	The Registered Manager and Managing Director are notified.	The Registered Manager is notified and the Emergency Management Team may be activated. The Managing Director is notified. Action by off-site persons is necessary.	The Emergency Management Team and Crisis Management Team is activated.	As for Level 2 / Major incident.

3.1.2 Risk Assessment

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
1	Site Wide	Environmental	Closure	Personnel injury or death during decommissioning (demolition).	Ineffective implementation of risk assessment and safety plans. Ineffective decontamination of plant/equipment/ buildings prior to dismantling/demolition activities commencing. Fall from height. Electrical isolation not implemented correctly.	Continue to use KCGM's operational safety systems during operational demolition and rehabilitation works eg, risk assessments, TBRA, engineering controls etc; Use of suitable licenced demolition company with trained and experienced staff.	Major	Unlikely	2D MED	Post closure, retain existing KCGM safety systems and procedures, and retain a core of (safety or other) competent staff to ensure continuity of systems	Major	Unlikely	2D MED
2	Site Wide	Environmental	Closure	Underestimation of cost of closure; Closure budget not well managed causing delay in relinquishment with increased closure period and costs.	Inadequate closure provision estimation; Contamination remains undetected during decommissioning phase; Non-compliance with Legislation; Increased costs due to unforeseen additional works.	Internal & external closure & financial audits Adequate studies, with detailed designs and costings, to reduce risk; Annual ongoing closure cost estimation & costing studies to improve accuracy; Targeted cost estimation improvements during annual reviews; Internal and External Audits of costing procedure.	Major	Unlikely	2D MED	Internal & external closure & financial audits Annual closure estimation including further detailed and improved closure designs and costings. Studies eg TSF closure design & costing Projects move to execution phase, with improved costing accuracy	Major	Rare	2E MED
3	Site Wide	Environmental	Closure	Post closure TSF outer embankment failure (geotechnical) causing release of tailings material and potential loss of infrastructure (Fimiston II TSF close to national rail line and roads).	Excessive rainfall; Inadequate construction of TSF; Raised piezometric levels within embankment; Tension cracks developing as material dries out.	Engineered dam design and wall lift verification by Professional Engineer on Record; Monthly inspections and annual geotechnical audits of facilities; Trained and experienced wall lift contractors; Geotechnical decommissioning report (Mt Percy).	Major	Unlikely	2D MED	TSF will have erosion resistant closure capping. Geotechnical decommissioning reports.	Major	Rare	2E MED
4	Site Wide	Environmental	Closure	Changing stakeholder expectations over life of project causing delay in relinquishment with increased closure period and costs.	Change in government; Change in knowledge base regarding rehabilitation; change in best practice over time.	Documentation of agreed outcomes Ongoing consultation with stakeholders throughout Life of Mine; Approval of closure designs and plans by Regulators.	Moderate	Possible	3C MED	Ongoing consultation with stakeholders throughout Life of Mine; Approval of closure designs and plans by Regulators	Moderate	Possible	3C MED

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
5	Site Wide	Environmental	Closure	Operational decisions and activities not aligned with closure outcomes potentially leading to loss of opportunities, completion criteria not being achieved, delay in seeking relinquishment and increase in closure cost (possible rework)	Lack of understanding of consequences of decisions or inadequate maintenance works/ controls; Conflicting priorities Time and budget constraints; Lack of understanding of closure strategy.	Pit: Zone of instability considered during pit design, infrastructure placement, WRD design & sign off TSFs: Pond size management WRDs: Closure integrated into design and signoff considerations; existing systems and controls for tipping to design Integration of closure with operational activities; Risk based decision making includes closure considerations; Continue socialisation of importance of maintaining controls	Moderate	Possible	3C MED	Flexible closure planning to allow for operational changes; Operational planning includes closure considerations	Minor	Possible	4C MED
6	Site Wide	Environmental	Closure	Geotechnical instability of pit walls outside demarcated zone of instability	Pit wall changes in stress regime; Inadequate offsets for long term closure; Unravelling of unsupported voids; Stability of geological structures not well understood	Fimiston: Detailed geotechnical work completed; Predicted rock mass performance has been proven. Geotechnical monitoring. Greater understanding of structural controls developed over recent years (since Golden Pike). Mt Percy: Geotechnical monitoring; structural controls, particularly on south walls, well understood; Buttressing strategy in place. Mt Charlotte: Backfilling strategy in place to provide buttressing of pit wall. Ongoing geotechnical monitoring and backfill assessment.	Major	Rare	2E MED	Post-Closure Monitoring Programmes Fimiston: Geotechnical monitoring; implement backfill Mt Percy: Geotechnical monitoring. Implement preferred closure strategy - buttressing south and west walls Mt Charlotte: Complete Backfilling and buttressing of pit wall; Geotechnical monitoring	Major	Rare	2E MED
7	Site Wide	Environmental	Closure	Unsuccessful rehabilitation (active erosion, underperforming rehabilitation)	Approved rehabilitation techniques have not been suited to material characteristics and other site specific limitations; Ineffectual past rehabilitation strategies; Poor quality rehabilitation materials; Poor understanding of material properties at the time of rehabilitation; Inadequate design or design implementation	Visual amenity concept used to optimise use of rehabilitation resources; Explore opportunities to expand WRDs and encapsulate poor rehabilitation; Consider implementing water control measures and viability of rework of VA priority slopes, after further studies & planning	Moderate	Unlikely	3D LOW	Post-Closure Monitoring Programmes	Moderate	Unlikely	3D LOW

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
8	Site Wide	Environmental	Closure	Mine Drainage adverse effect on beneficial use of water (Acid/Metalliferous/Saline)	Degradation and decreased success of rehabilitation; AMD beyond landform footprint. Exposure of problematic materials, saline waste rock	Low rainfall, high evaporation; Kinetic study outcomes classified Black Flag as 'uncertain'/ long lag for AMD generation; KCGM taking conservative approach for operational management - identification of all low grade PAF material, correct placement and encapsulation; Waste Rock Management Standard and Procedure; Planning of waste dump design considers locations of High Grade Black Flag, in particular for surface water management. Mining only beneficial use of groundwater.	Moderate	Unlikely	3D LOW	Low rainfall, high evaporation; Kinetic study outcomes classified Black Flag as 'uncertain' for AMD generation; KCGM taking conservative approach for operational management - identification of all low grade PAF material, correct placement (not within 50m of final tip to face) and encapsulation; Waste Rock Management Standard and Procedure; Planning of waste dump design considers locations of High Grade Black Flag, in particular for surface water management (unsure if stockpiles will be processed at LOM). Consideration of bunding at base of waste dumps for low flow events	Moderate	Unlikely	3D LOW
9	Site Wide	Environmental	Closure	Underestimation of Contaminated Sites legal and financial requirements	Contaminants not previously identified or area of contamination not fully identified; or new area of contamination identified	Risk assessment and screening process to rank sites; Planned studies and investigations to reduce liability; Operational controls associated with EMS to reduce risk of new contamination	Moderate	Unlikely	3D LOW	Decommissioning to include investigations of potential contamination. Post-Closure Monitoring Programmes	Moderate	Rare	3E LOW
10	Site Wide	Environmental	Closure	Unknown relinquishment process, with changing requirements to meet relinquishment	Regulatory processes are unclear or change through Life of Mine	Raise concerns via internal management structure to be considered in forums between industry representatives and Regulator	Moderate	Possible	3C MED	Communication with Stakeholders; progressive rehabilitation	Moderate	Unlikely	3D LOW

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
11	Mining - Surface	Environmental	Closure	Inadvertent Public Access - Injury to public and/or degradation of rehabilitation areas	Ineffective restriction of inadvertent vehicle/pedestrian access and hazard warnings (signage and/or barriers). Close proximity to public roads and illegal use of area by 4x4 and motorbike enthusiasts	Fencing and security patrols during operations; Rock bund at base of slope costed in design Hazard warnings (signage and/or barriers). Mine roads to be closed off and rehabilitated; Preventing inadvertent access to pit with abandonment controls as per approvals and MCP; Closure provision includes construction of appropriate measures for pit abandonment and sealing portal.	Moderate	Unlikely	3D LOW	Preventing inadvertent access to pit with abandonment controls as per approvals and MCP; Closure provision includes construction of appropriate measures for pit abandonment and sealing portal. Mine roads to be closed off and rehabilitated; Hazard warnings (signage and/or physical barriers).	Moderate	Unlikely	3D LOW
12	Processing Gidji	Environmental	Closure	Mine drainage adverse effects on beneficial use of water (Acid/Metalliferous/Saline)	Inherent geochemical properties of tails; groundwater plume	Gidji II lined facility Gidji I to be dug off for Gidji II construction Gidji I and II water shedding cover design Gidji II tailings identified as PAF No surface water systems nearby; Groundwater is a perched water table, not thought to be connected to deep aquifer. Mining only beneficial use of GW.	Moderate	Unlikely	3D LOW	Implement pumping strategy as per Solution Management plan ie pumping & continue monitoring with assessment	Moderate	Rare	3E LOW
13	Site Wide	Environmental	Closure	Non compliance with legal and other requirements	Lack of understanding of approvals and conditions by personnel; Commitments not recorded and tracked; Commitments become outdated/irrelevant with time; Conflicting requirements included in approvals over Life of Mine; Approvals (tenement conditions) don't reflect site conditions; Relevant documentation no longer available.	Closure documentation in MCP Legal register, Mine Closure Plan and other internal documents; Good legal compliance systems in place eg Inform legal database; Review compliance & consider amendments to unaligned / dated approval documents, if any	Insignificant	Possible	5C LOW	Possible amendments to unaligned approval documents, if any	Minor	Possible	4C MED

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
14	Site Wide	Environmental	Closure	Stakeholders retract earlier undertakings or agreements to take over certain infrastructure/facilities	Unable to fund maintenance / insurance etc.	All agreements and commitments considered as part of decommissioning phase; Finalise agreements prior to demolition; Provide potential benefactor with maintenance cost estimations for life of infrastructure.	Minor	Unlikely	4D LOW	All agreements and commitments referred to Legal Services prior to decommissioning phase; Finalise agreements prior to demolition / hand over of asset; Provide potential proposed owner with maintenance costs estimations for life of infrastructure; Plan & cost for demolition.	Minor	Unlikely	4D LOW
15	Site Wide	Environmental	Closure	Theft of equipment or vandalism	Uncontrolled access by public to site during closure activities	Effective security (fence) Security protocols as during operations Maintain fencing until final lease relinquishment	Moderate	Rare	3E LOW	Effective security (fence) Security protocols as during operations Maintain fencing until final lease relinquishment	Moderate	Rare	3E LOW
16	Site Wide	Environmental	Closure	Rehabilitation (new design) Rehabilitation designs not suited to site materials or poor implementation of design	Poor quality rehabilitation materials; Erosion based design; Poor implementation.	Classification of rehabilitation materials; Reoptimisation of rehabilitation design and deployment of materials available. Robust planning including site specific appropriate designs; Implementation procedures and quality control/ supervision.	Minor	Unlikely	4D LOW	Implementation of 'Visual Amenity' rehabilitation concept and erosion resistant designs.	Minor	Rare	4E LOW
17	Site Wide	Environmental	Closure	Mine Drainage adverse effect on beneficial use of water (Acid/Metalliferous/ Saline)	Saline or other Mine Drainage beyond landform footprint. Exposure of problematic materials, saline waste rock	Low rainfall, high evaporation environment; long term flushing of salts for WRDs; Existing rehabilitation and encapsulation will reduce likelihood; Stormwater control considered in designs	Minor	Unlikely	4D LOW	Continue monitoring; Salinity will reduce with time	Minor	Unlikely	4D LOW
18	Site Wide	Environmental	Closure	Drill holes not rehabilitated	Lack of effective record keeping; Lack of progressive rehabilitation by former tenement holders or KCGM	Audit of drilling from 2003; field verification of rehabilitation planned; older historic drill holes not captured; Development of improved tracking system, and rehabilitation of drill holes where required	Minor	Unlikely	4D LOW	Audit and gap assessment prior to end of LOM	Minor	Rare	4E LOW

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
19	Site Wide	Environmental	Closure	Environmental impacts from historic TSFs and/or remnant TSF footprints	Historic tailings discharge (saline and possible elevated metals) impacts on surface water or shallow groundwater	Contaminated Sites Preliminary Investigations; Most facilities capped with Fimiston waste dumps; Planned risk based further work for assessment and planning;	Minor	Unlikely	4D LOW	Ensure adequate funding of contamination assessment and planning process; Contaminated Sites Detailed investigations (where required); Remediation and rehabilitation where deemed necessary by Contaminated Sites.	Minor	Rare	4E LOW
20	Mining - Underground	Environmental	Closure	Geotechnical instability, seismicity - voids unravelling to surface	Unravelling of underground voids, seismicity	Risk assessment of voids for stability; Backfilling strategy in place for high risk mining areas to prevent unravelling to surface . Geotechnical assessment found voids of 15m span or less is not a significant geotechnical risk. Ongoing geotechnical monitoring and backfill assessment. Backfill on schedule.	Minor	Unlikely	4D LOW	Complete final Backfilling strategy & final assessment	Minor	Unlikely	4D LOW
21	Site Wide	Environmental	Closure	Groundwater levels at TSFs impact vegetation	Groundwater levels impact root zone	Fimiston: Operational SGMP to reduce manage pond size; Post closure abstraction via production bores, est. 10 years duration; Develop closure criteria; Post closure monitoring period; Gidji: Gidji I decommissioned and Gidji II lined - no active seepage source; Ongoing monitoring and assessment.	Minor	Unlikely	4D LOW	Implement Solution management plan ie pumping & continue monitoring with assessment	Minor	Rare	4E LOW
22	Site Wide	Environmental	Closure	Stockpiles change unfavourably chemically	Encapsulation of high grade Black Flag delayed, may allow oxidation to commence	Location is recorded; Planning in place for encapsulation	Minor	Unlikely	4D LOW	Material evidences long lag Consider decision making and scheduling of capping earlier in LOM	Minor	Unlikely	4D LOW
23	Site Wide	Environmental	Closure	Adverse visual impact of landforms	Visual amenity of rehabilitation does not meet public perception;	Waste dump and TSF closure strategies, including visual amenity concept (approved in MCP 2015) to ensure best outcomes for City of Kalgoorlie-Boulder.	Minor	Unlikely	4D LOW	Implement Visual Amenity concept to ensure rehabilitation visible from City of KB is best possible	Minor	Rare	4E LOW

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24	Site Wide	Environmental	Closure	Dusting from completed rehabilitation	Inappropriate rehabilitation cover	Limited dusting from rehabilitated faces if correct materials and methods are used; Hardsetting materials are present in some locations, hindering wind erosion; Rocky cover design lessens impacts of wind erosion	Minor	Unlikely	4D LOW	Erosion resistant rocky cover design lessens impacts of wind erosion; consider whether monitoring warranted (base on data closer to end of LOM)	Insignificant	Unlikely	5D LOW
25	Site Wide	Environmental	Closure	Mine drainage adversely affect beneficial use of water (Acid/Metalliferous/ Saline)	Inherent geochemical properties of tails	All geochemical studies show low ARD risk; Significant controls during operations: Large production bore and monitoring bore network Fimiston: Large production bore and monitoring bore network to be operated for time period of time post closure; TSF closure design to consider management of surface and groundwater Mt Percy: Groundwater situation considered stable (no apparent groundwater mound); Regulator agreed to discontinue monitoring (licence ended)	Minor	Unlikely	4D LOW	Implement Solution Management plan, with post closure pumping as primary control Monitor & periodic assessment	Insignificant	Unlikely	5D LOW
26	Site Wide	Environmental	Closure	Impact on health of fauna and birds	Animals and birds attracted to water body and drink contaminated water	Hypersaline nature of water discourages drinking (unpalatable) and alternative water bodies in area (sewage effluent dams/ natural water bodies); Observations at Fimiston TSFs have indicated that birds do not actively drink hypersaline water (secondary ingestion possible when foraging insects, but very minimal)	Minor	Unlikely	4D LOW	No further treatment likely to be required	Insignificant	Rare	**5E LOW**
27	Mining - Surface	Environmental	Closure	Stockpiles not consumed	Stockpiles that were originally to be processed, remain at end of LOM	Cost of stockpile rehabilitation is quantified in FASB costing	Minor	Unlikely	4D LOW	No further treatment likely to be required	Insignificant	Rare	**5E LOW**

Detail				Risk & Causes			Current Risk Level			Post Action (Residual) Risk Level			
Item	Department	Functional Area	Step in Process / Component / Section	Risk Description (Include Activity, Product, Service)	Potential Cause(s)	Current Controls (Engineering, Separation, Procedures, PPE)	Consequence	Likelihood	Risk Level	Risk Treatment Actions	Consequence	Likelihood	Risk Level
28	Mining - Surface	Environmental	Closure	Pit lake water level over topping	Excessive storm runoff off surrounding waste rock dumps. Excessive inflow from TSF seepage recovery discharge coupled with inaccuracy of pit lake water balance model.	Fimiston: Massive capacity; very well calibrated pit lake model; Mt Percy: Observation over 17 years since cessation of mining have not had an overtopping event including during cyclonic rainfall events (Vance 1999 for example); Water balance to be completed after data is gathered from pit lake volumes gathered from aerial photos.	Insignificant	Rare	**5E LOW**	No further treatment likely to be required	Insignificant	Rare	**5E LOW**
29	Mining - Surface	Environmental	Closure	Pit lake water quality affecting beneficial use of groundwater	Capacity of pit lake insufficient for volume of seepage/groundwater/ uncontrolled inflow of stormwater. Inaccuracy of pit lake water balance model.	Modelling indicated a large unused capacity (50% of the pit volume) Host rock has significant buffering capacity for ARD; Natural groundwater is hypersaline and acidic, with mining as only beneficial users; Waste characterisation assessment completed, further refinement of pit lake water quality modelling to be completed.	Insignificant	Rare	**5E LOW**	No further treatment likely to be required	Insignificant	Rare	**5E LOW**
30	Mining - Surface	Environmental	Closure	Geotechnical stability of WRD	Material properties create instability	Geotechnical review of designs in WRD design sign off (approval) process; rehabilitation of WRD with push down will improve stability; Majority of waste rock is GM Dolerite or Paringa Basalt (highly competent rock)	Insignificant	Rare	**5E LOW**	Not required	Insignificant	Rare	**5E LOW**
31	Mining - Surface	Environmental	Closure	Mine drainage adversely effects beneficial use of water (Acid/Metalliferous/ Saline)	Rising groundwater levels and altered groundwater chemistry (geochemistry); Migration of contaminated mine groundwater into adjacent aquifers	No fresh water aquifers present Groundwater flow (hydrogeological linkage) is to Fimiston Pit (groundwater sink) and does not flow to other aquifers; Deep aquifer that is naturally hypersaline and acidic with no other beneficial use other than mining. Volume from Mt Charlotte modelled to be very small	Insignificant	Rare	**5E LOW**	Ensure portal plug has pvc pipe to allow for discharge to Fimiston pit	Insignificant	Rare	**5E LOW**