



Report and recommendations of the Environmental Protection Authority



**Gidji Gold Processing Plant,
near Kalgoorlie
– inquiry under s46 of the
Environmental Protection Act 1986
to amend Ministerial Statements 28 & 77**

Kalgoorlie Consolidated Gold Mines Pty Ltd

Report 1566

May 2016

**ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR ENVIRONMENT**

**GIDJI GOLD PROCESSING PLANT, NEAR KALGOORLIE – INQUIRY UNDER
SECTION 46 OF THE *ENVIRONMENTAL PROTECTION ACT 1986* TO AMEND
MINISTERIAL STATEMENTS 28 AND 77**

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions and provide advice on changing the proposals relating to the Satellite Gold Roaster and Phase II Expansion of the Gidji Roaster proposals near Kalgoorlie.

The following is the EPA's Report and Recommendations (No. 1566) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986* (EP Act).

Section 46(6) requires the EPA Report include:

- a) a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be changed; and
- b) any other recommendations that it thinks fit.

As the Minister has requested advice from the EPA as to whether a change to the proposal may be approved under section 45C, this Report includes the EPA's advice to the Minister following its consideration of the matters referred to in s45C(2) of the EP Act.

Background

The Satellite Gold Roaster and Phase II Expansion of the Gidji Roaster proposals are to operate a gold concentrate processing facility, approximately 17 kilometres (km) north of the City of Kalgoorlie-Boulder. The EPA assessed the proposals in 1988 and 1989 and considered the following key environmental factors relevant to the proposals required detailed evaluation in its reports and recommendations to the Minister:

- Sulfur dioxide levels;
- Flora; and
- Fauna.

In applying the Environmental Assessment Guideline for *Environmental Principles, Factors and Objectives* (EAG 8, January 2015) these factors are now represented by:

- Air Quality and Atmospheric Gases;
- Flora and Vegetation;
- Terrestrial Fauna; and
- Human Health.

The EPA concluded in EPA Report Numbers 327 and 396 that it was likely the EPA's objectives would be achieved, provided there was satisfactory implementation by the proponent of the EPA's recommended conditions and proponent commitments.

The Minister for Environment approved the Satellite Gold Roaster for implementation, subject to the implementation conditions of Ministerial Statement 28 (23 May 1988) and approved the operation of a second gold roaster subject to the implementation conditions of Ministerial Statement 77 (11 September 1989).

Changes to the proposal to replace roasting technology with ultra fine grinding mills were approved in March 2014. The gold roasters were permanently closed in June 2015 and the major point source air emissions from the gold processing plant have been eliminated.

Requested changes

In April 2015, the proponent for the proposal, Kalgoorlie Consolidated Gold Mines Pty Ltd (KCGM), requested the following changes to the implementation conditions of Ministerial Statements 28 and 77:

- Contemporise and consolidate implementation conditions and proponent commitments; and
- Remove conditions and commitments completed or which relate to matters regulated under other legislation.

In May 2015, KCGM submitted a request for an amendment to increase production throughput in the ultra fine grinding mills from 351,000 tonnes per annum (tpa) to 438,000 tpa (25% increase). The aim of this request was to allow for maximum production rates as a result of continuous improvement and efficiencies of the new ultra fine grinding technology.

The Minister requested the EPA inquire into a change to conditions and provide advice on changes to the production throughput in the ultra fine grinding mills.

Relevant EPA policies and guidelines

The EPA, in making this recommendation and providing its advice to the Minister, has given due consideration to the relevant published EPA policies and guidelines (see Appendix 1), noting that other published policies and guidelines were considered but determined not to be relevant.

The following relevant EPA *process* policies and guidelines were applied:

- a) Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012;
- b) Environmental Assessment Guideline (EAG 1) for Defining the key characteristics of a Proposal, 2012;
- c) EAG 2 for Changes to Proposals after Assessment – Section 45C of the *Environmental Protection Act 1986*, 2011;
- d) EAG 8 for Environmental principles, factors and objectives, 2015;
- e) EAG 9 for Application of a significance framework in the environmental impact assessment process, 2015;
- f) EAG 11 for Recommending environmental conditions, 2015; and
- g) Environmental Protection Bulletin (EPB No.11) for Consultation on Conditions Recommended by the EPA, 2010.

The following policies and guidelines relevant to *environmental factors* were applied:

a) Human Health and Air Quality and Atmospheric Gases (sulfur dioxide)

- *Environmental Protection Goldfields Residential Areas Sulfur Dioxide Policy and Regulations 2003*

The objectives of the policy are to ensure that the sulfur dioxide concentration in the ambient air of identified protected areas is decreased and does not exceed 0.25 ppm after 2008.

- *Guidance Statement (GS No. 3) – Separation Distances between Industrial and Sensitive Land Uses, 2005*

GS No.3 specifies generic separation distances between industrial and sensitive land uses to protect sensitive land uses from unacceptable impacts that may result from industrial activities, emissions and infrastructure.

b) Air Quality and Atmospheric Gases (greenhouse gases)

- *Environmental Protection Bulletin (EPB 24) for Greenhouse gas emissions and consideration of projected climate change impacts in the EIA process, 2015*

EPB 24 provides that the EPA may decide to assess greenhouse gas emissions if proposals have the potential to significantly increase the State's greenhouse gas emissions, which is totalled at 70.5 Mt of CO_{2-e} in 2011-12. The EPA may require information from proponents on direct and indirect greenhouse gas emissions, maximization of energy efficiency, minimization of greenhouse gas emissions and an analysis of greenhouse gas intensity.

c) Rehabilitation and decommissioning

- *Environmental Protection Bulletin (EPB 19) for EPA involvement in mine closure, 2013*

The purpose of EPB 19 is to outline the roles of the Department of Mines and Petroleum (DMP) and the EPA in mine closure and explain the circumstances when the EPA will assess mine closure.

In accordance with EPB 19 the EPA will assess mining projects that are not subject to the *Mining Act 1978*. Examples include pre-1899 title or minerals-to-owner tenure, Hampton locations or State Agreement Act projects.

- *Guidelines for Preparing Mine Closure Plans, 2015*

The aim of the guidelines is to ensure that for every mine in Western Australia a planning process is in place so that the mine can be closed, decommissioned and rehabilitated to meet DMP and EPA's objectives for rehabilitation and closure.

Advice on changes to the proposal

Section 45C of the EP Act provides that the Minister may consent to changes to a proposal after a statement has been issued under s45(5) of the Act, provided the Minister does not consider that the change might have a significant detrimental effect on the environment in addition to, or different from, the effect of the original proposal (s45C(2) of the EP Act). Environmental Assessment Guideline (EAG 2) - *Changes to Proposals after Assessment – Section 45C of the Environmental Protection Act 1986*, identifies the six aspects considered when determining whether a change to a proposal can be approved under s45C of the Act.

The EPA has considered the change to proposal and provides the following advice to the Minister.

Proponent information

In considering the potential impacts of the proposed 25% increase in production throughput the key environmental factors, Air Quality and Atmospheric Gases,

Flora and Vegetation, Terrestrial Fauna and Human Health were confirmed. The proponent submitted information confirming that:

1. The proposed increase in production capacity can be achieved in existing facilities and infrastructure under current management practices and no additional clearing is required. No additional impacts to Flora and Vegetation and Terrestrial Fauna are expected.
2. The change in tailings deposition rate will not have an impact on the integrity and permeability of the tailings storage facility and groundwater mounding. No additional impacts to groundwater and Flora and Vegetation are expected.
3. The increase in production throughput by using ultra fine grinding technology would not increase sulfur dioxide emissions to ambient air. The proposed increase in production is consistent with GS No.3 in that emissions will not increase and no further technical analyses of the separation distance between the Gold Processing Plant and the residential areas in Kalgoorlie-Boulder are required. Sulfur dioxide and dust emissions are already managed and regulated. No additional impacts to Human Health, Air Quality and Atmospheric Gases and Flora and Vegetation are expected.

The proponent proposes to implement process efficiency improvements to maximise energy efficiency with the proposed production increase and expects an energy saving of around 20%. A maximum of 5% increase in greenhouse gas emissions is predicted for the proposed production increase.

Direct greenhouse gas emissions¹ of the original proposal were 6,129 tonnes per annum. The change in technology from roasting to ultra fine grinding and the proposed increase in production throughput using ultra fine grinding technology is calculated to result in total direct greenhouse gas emission of less than 450 tonnes per annum. The indirect greenhouse gas emissions² are calculated to increase from 31,350 tonnes per annum to 50,143 tonnes per annum (increase of 18, 739 tonnes per annum).

Consistent with EPB 24, the proponent demonstrated through a performance assessment that the Gold Processing plant is designed and will be operated in a manner which maximises energy efficiency and minimises greenhouse gas emissions as far as practicable.

¹ Greenhouse gas emissions at the Gidji Gold Processing Plant.

² Greenhouse gas emissions produced offsite in the generation of electricity.

EPA's Advice

Having regard to the six aspects referred to in EAG2, the EPA notes the following:

1. The original proposal was to process gold concentrate using gold roasting technology with a production throughput of up to 351,000 tonnes per annum.
2. The change is to process gold concentrate using ultra fine grinding technology at an increased production throughput of up to 438,000 tonnes per annum.
3. The key environmental factors identified in the assessment of the original proposal (that is, those elements of the environment detrimentally affected by the original proposal) having regard to EPA's EAG 8 are identified above. The implementation conditions in Ministerial Statements 28 and 77 mitigated the effects of the proposal on these key environmental factors.
4. The change proposed only relates to the environmental factor of Air Quality and Atmospheric Gases, specifically greenhouse gases. The other environmental factors relevant to this proposal will remain unaffected by the change. Following the change to the proposal in 2014 the decommissioning of the gold roasters removed the major point source emissions of sulfur dioxide. However, there was an increase in indirect CO_{2-e} emissions resulting from an increase in electricity use, but this increase was not significantly different from the original proposal. Consequently Air Quality and Atmospheric Gases is no longer a Key Environmental Factor.
5. The increase in production will result in a further increase in CO_{2-e} emissions as a result of an increase in electricity use.
6. EPB 24 provides for proposals that have the potential to significantly increase the State's total greenhouse gas emissions, which totalled 70.5 million tonnes (Mt) of CO_{2-e} in 2011-12, to be assessed. The predicted increase in indirect greenhouse gas emissions for the proposed increase in production throughput are 18,739 tonnes per annum. The EPA considers that the relatively small predicted increase in indirect greenhouse gas emissions does not require further assessment and is unlikely to have a significant detrimental effect on the environment.

In view of the above, the EPA's advice is that the Minister may approve the proponent changing the proposal under section 45C of the EP Act.

Assessment of the Requested Changes to conditions

The Minister also requested an inquiry into the change to conditions. The EPA's evaluation of the conditions and the recommended changes to conditions and commitments are attached to this Report (Tables 1 and 2).

EPA Conclusion(s) and Recommendation(s)

Section 45B provides that if a proposal is revised after implementation conditions have been agreed or decided under s45, each of the implementation conditions continues to apply in relation to the revised proposal subject to, relevantly, the implementation conditions be changed under s46 of the EP Act.

Having enquired into the conditions, the EPA recommends that, if the Minister approves the change to the proposal under s45C:

1. it is appropriate to, under section 46 of the *Environmental Protection Act 1986*:
 - replace Ministerial Statements 28 and 77 with a new Ministerial Statement in the manner provided for in the attached recommended Statement;
 - delete existing proponent commitments and conditions so that the new Ministerial Statement is consistent with the contemporary presentation of Implementation Conditions; and
2. after complying with section 46(8) of the *Environmental Protection Act 1986*, that the Minister issues a statement of decision to change the conditions of Ministerial Statements 28 and 77 in the manner provided for in the attached recommended Statement.

OEPA MIN2015-0344

Table 1: Gidji Roaster near Kalgoorlie – Section 46 assessment of proposed changes to implementation conditions of Ministerial Statements 28 and 77

Statement and Condition/s	Proposed change to Condition/s	Assessment and Evaluation of Proposed Changes
Statement 28 1, 2, 3, 4 and 5	Delete the conditions	Conditions 1, 2, 3, 4 and 5 of Statement 28 are surpassed by the conditions of Statement 77 and can be deleted.
Statement 28 6 Decommission the Paringa Roaster	Delete the condition	The requirements of condition 6 have been fulfilled.
Statement 77 1 Implementation and commitments	Delete the condition and replace with a consolidated contemporary style condition.	<p>Condition 1 relates to implementation and proponent commitments.</p> <p>The requirement for implementation of the condition is still relevant and will be retained but expressed in contemporary wording and format without changing the intent. The requirement for implementation are re-worded as a contemporary style condition:</p> <p>1 Proposal implementation</p> <p>1-1 The proponent shall not exceed the authorised extent of the proposal as defined in Table 1 and Table 2 in Schedule 1 and Table 4 in Schedule 2, unless amendments to the proposal and the authorised extent of the proposal have been approved under the EP Act.</p> <p>The condition also relates to proponent commitments documented in attached management commitments to Statement 77. For the full details of this assessment See Table 2 of this report.</p>
10 Proponent Nomination and Contact Details	Delete the condition and replace with a consolidated contemporary style condition.	<p>The requirements of this condition are still relevant and will be retained but expressed in contemporary wording and format without changing the intent. This condition is re-worded:</p> <p>2 Contact details</p> <p>2-1 The proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.</p>
Compliance Audit and Performance Review	Add new condition.	This condition is added to the new Ministerial Statement in accordance with “standard administrative procedures” developed by the OEPA to reflect compliance reporting requirements of contemporary statements.

Statement and Condition/s	Proposed change to Condition/s	Assessment and Evaluation of Proposed Changes
		<p>3 Compliance Reporting</p> <p>3-1 The proponent shall maintain a Compliance Assessment Plan to the satisfaction of the CEO.</p> <p>3-2 The proponent shall submit to the CEO the Compliance Assessment Plan required by condition 3-1 at least six months prior to the first compliance assessment report required by condition 3-6. The Compliance Assessment Plan shall indicate:</p> <ul style="list-style-type: none"> (1) the frequency of compliance reporting; (2) the approach and timing of compliance assessments; (3) the retention of compliance assessments; (4) the method of reporting of potential non-compliances and corrective actions taken; and (5) the table of contents of Compliance Assessment Reports. <p>3-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 3-2 the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 3-1.</p> <p>3-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.</p> <p>3-5 The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.</p> <p>3-6 The proponent shall submit to the CEO an annual Compliance Assessment Report by 28 February of each year, or as otherwise agreed by the CEO, addressing the period of the preceding calendar year.</p> <p>The Compliance Assessment Report shall:</p> <ul style="list-style-type: none"> (1) be endorsed by the proponent's CEO or a person delegated to sign on the CEO's behalf; (2) address the proponent's compliance with each condition of this Statement; (3) identify all potential non-compliances and describe corrective and preventative actions taken; and (4) indicate any proposed changes to the Compliance Assessment Plan required by condition 3-1.

Statement and Condition/s	Proposed change to Condition/s	Assessment and Evaluation of Proposed Changes
Public Availability of Environmental Plans and Reports	Add new condition	<p>This condition is added to the new Ministerial Statement in accordance with “standard administrative procedures” developed by the OEPA to streamline the Administrative Implementation Conditions in Ministerial Statements.</p> <p>4 Public Availability of Plans and Reports</p> <p>4-1 Subject to condition 4-2, within a reasonable time period approved by the CEO of the issue of this Statement and for the remainder of the life of the proposal the proponent shall make publicly available, in a manner approved by the CEO, all environmental plans and reports required under this Statement.</p> <p>4-2 If any parts of plans or reports referred to in condition 4-1 contains particulars of:</p> <p>(1) a secret formula or process; or</p> <p>(2) confidential commercially sensitive information;</p> <p>the proponent may submit a request for approval from the CEO to not make those parts of the plans or reports publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why those parts of the plans or reports should not be made publicly available.</p>
Statement 77 2 Sulfur dioxide monitoring programme	Delete the condition.	<p>The change from gold roasting technology to ultra-fine grinding technology in March 2014, resulted in a removal of the major sulphur dioxide point source emissions from the site. As a result Air Quality and Atmospheric Gases is no longer a Key Environmental Factor.</p> <p>Having regard to EPB 24, the EPA does not consider the indirect greenhouse gas emissions resulting from the change to the proposal will be significant and does not recommend a condition be imposed.</p>
Statement 77 3 Prediction and control of sulfur dioxide emissions	Delete the condition.	<p>In relation to any other emissions, the EPA notes that the implementation of the proposal will require regulation under Pt V of the EP Act. The EPA is confident that the regulation of the proposal by way of licence under Part V of the EP Act will ensure the implementation of the revised proposal (existing and the change once approved) can meet the EPA’s objective for Air Quality and Atmospheric Gases.</p>
Statement 77 4 and 5 Monitoring and assessment of the impact of sulfur dioxide on vegetation	Delete the conditions.	<p>This approach is consistent with the EPA’s policy position to avoid duplication with other regulatory processes where it is confident that other regulatory processes can ensure the EPA’s environmental objects for the relevant environmental factors can be achieved: EAG 9 - <i>Application of a significance framework in the environmental impact assessment process.</i></p>

Statement and Condition/s	Proposed change to Condition/s	Assessment and Evaluation of Proposed Changes
Statement 77 6 Refer any proposal to expand the project to the EPA	Delete the condition.	The proposed condition 1 replaces this condition.
Statement 77 7 Zoning of Gidji site and buffer area	Delete the condition.	This condition does not regulate the proponent's implementation of the proposal. The condition calls upon the Minister for Planning to initiate zoning controls.
Statement 77 8 Decommissioning of Croesus roaster	Delete the condition	The proponent fulfilled the requirements of this condition.
Statement 77 9 Decommissioning and rehabilitation	Delete the condition	<p>EPB No. 19 – <i>EPA involvement in mine closure</i> provides that the EPA may regulate mine closure in different circumstances, relevantly to this condition, where the EPA considers a risk element that may require corrective action to meet the EPA's objective of ensuring that premises are closed, decommissioned and rehabilitated in an ecologically sustainable manner.</p> <p>The Gidji Gold Processing plant are subject to the closure provisions of the <i>Mining Act 1978</i>. The EPA notes that the holders of the tenements, which include tenement conditions requiring rehabilitation and closure, are not the proponent for the Gidji Gold Processing Plant.</p> <p>Rehabilitation and Closure was not identified as a key environmental factor in the assessment of the original proposal, but condition 9 for Decommissioning and rehabilitation was included in Ministerial Statement 77.</p> <p>Consistent with EPB 19, rehabilitation and closure of the Gidji containment facilities are required to protect groundwater and the ecology to meet the EPA's Objectives. Therefore the requirements of this condition are still relevant and will be retained but expressed in contemporary wording and format without changing the intent. Condition 9 is deleted and replaced by condition 5, which requires the proponent to apply the joint <i>Guidelines for Preparing Mine Closure Plans (May 2015)</i> and <i>Guidance Statement 6 for Rehabilitation of Terrestrial Ecosystems (2006)</i> in the preparation of the Plan.</p>

Statement and Condition/s	Proposed change to Condition/s	Assessment and Evaluation of Proposed Changes
		<p>5 Rehabilitation and Closure</p> <p>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.</p> <p>5-2 The proponent shall implement the <i>Kalgoorlie Consolidated Gold Mines - Mine Closure Plan</i> (dated March 2015).</p> <p>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 <i>Guidelines for Preparing Mine Closure Plans</i>, (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.</p> <p>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.</p>

Table 2: Gidji Roaster near Kalgoorlie - assessment of proposed changes to proponent commitments

Statement	Commitment	Assessment and Evaluation of Proposed Changes
28	Air Quality, Flora and Fauna, Rehabilitation, Safety Measures and Controls and Management of Dangerous Goods	The proponent commitments were surpassed by Ministerial Statement 77.
77	<p>Emission controls and Air Quality</p> <p>Treatment of roaster off-gases, sulfur dioxide monitoring and a predictive control strategy</p>	<p>The main source of sulfur dioxide emissions has been removed. Atmospheric emissions from the Gidji plant are regulated under Part V of the EP Act. (See – Statement 77, conditions 2 to 5 in Table 1) and the EPA recommendation above in relation to conditions 4 and 5.</p> <p>This commitment can be deleted.</p>
77	<p>Flora, vegetation and fauna</p> <p>Preserve flora and monitor the impact of atmospheric sulfur dioxide emissions on native vegetation;</p> <p>Prevent access of larger fauna to tailings ponds; and</p>	<p>There is no change to infrastructure and the extent of clearing and none of the EPA guidelines and policies relevant for <i>Flora and Vegetation</i> and <i>Terrestrial Fauna</i> apply.</p> <p>The EPA notes that KCGM is avoiding and minimising impacts to avifauna through being a signatory to the <i>International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold</i>, which requires the prevention of avifauna access to tailings ponds through netting and fencing.</p>

Statement	Commitment	Assessment and Evaluation of Proposed Changes
	Monitor avifauna use of tailings ponds.	<p>During the inquiry it was established that:</p> <ul style="list-style-type: none"> - Impacts of atmospheric emissions to flora and vegetation are regulated through limits on air emissions and monitoring of relevant vegetation parameters required by Licence Number L5946/1988/13 under Part V of the EP Act; - Access of larger fauna to tailings ponds is prevented through fencing and access control, required under the <i>Occupational Safety and Health Act 1984</i>; and - Covering (netting) of containment infrastructure during tailings deposition is required by Licence Number L5946/1988/13 under Part V of the EP Act. <p>Consistent with <i>EAG 9</i>, duplication with other regulatory processes is avoided and no condition is required.</p> <p>These commitments can be deleted.</p>
77	<p>Rehabilitation</p> <p>Rehabilitate the gold roaster after decommissioning.</p>	<p>The requirements of this commitment are still relevant and will be managed by the Mine Closure Plan (required by proposed condition 5).</p> <p>This commitment can be deleted.</p>
77	<p>Safety measures and controls</p> <p>The proponent undertakes to comply with all relevant Acts and Regulations.</p>	<p>Safety is regulated under the <i>Mines Safety and Inspection Act 1994</i>, the <i>Poisons Act 1964</i> and the <i>Radiation Safety Act 1975</i>. Consistent with <i>EAG 9</i>, duplication with other regulatory processes is avoided and no condition is required.</p> <p>This commitment can be deleted.</p>
77	<p>Management of dangerous goods</p> <p>The proponent undertakes to comply with all government regulations related to the storage and handling of dangerous goods.</p>	<p>Storage and handling of chemicals and hazardous materials are regulated under Part V of the EP Act and the <i>Dangerous Goods Safety Act 2004</i> and regulations. Consistent with <i>EAG 9</i>, duplication with other regulatory processes is avoided and no condition is required.</p> <p>This commitment can be deleted.</p>

Appendix 1

EPA Policy and Guidance - change to proposal and conditions for the Gidji Gold Processing Plant, near Kalgoorlie

The following EPA Policies and Guidelines were considered relevant and were applied:

Process/ Factor	Policy or Guidance
Change to conditions and change to proposal	Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012
	Environmental Assessment Guideline (EAG 1) for Defining the key characteristics of a proposal, 2012
	EAG 2 for Changes to Proposals after Assessment – Section 45C of the <i>Environmental Protection Act 1986</i> (EAG 2), 2011
	EAG 8 for Environmental principles, factors and objectives, 2015
	EAG 9 for Application of a significance framework in the environmental impact assessment process, 2015
	EAG 11 for Recommending environmental conditions, 2015
	Environmental Protection Bulletin (EPB No. 11) for Consultation on Conditions Recommended by the EPA, 2010
Air Quality and Atmospheric Gases	Guidance Statement (GS No. 3) – Separation Distances between Industrial and Sensitive Land Uses, 2005
	EPB 24 for Greenhouse gas emissions and consideration of projected climate change impacts in the EIA process, 2015
	Environmental Protection Goldfields Residential Areas Sulfur Dioxide Policy and Regulations 2003
Human Health	GS 3 for Separation Distances between Industrial and Sensitive Land Uses, 2005
	Environmental Protection Goldfields Residential Areas Sulfur Dioxide Policy and Regulations 2003
Rehabilitation and Closure	EPB 19 for EPA involvement in mine closure, 2013
	Guidelines for Preparing Mine Closure Plans, 2015
	GS 6 for Rehabilitation of Terrestrial Ecosystems, 2006

RECOMMENDED ENVIRONMENTAL CONDITIONS

**STATEMENT TO CHANGE THE IMPLEMENTATION CONDITIONS APPLYING TO
A PROPOSAL
(Section 46 of the *Environmental Protection Act 1986*)**

GIDJI GOLD PROCESSING PLANT, NEAR KALGOORLIE

Proposal: The operation of a gold concentrate processing plant and associated infrastructure at Gidji approximately 17 km north of the City of Kalgoorlie-Boulder.

Proponent: Kalgoorlie Consolidated Gold Mines Pty Ltd
Australian Company Number 009 377 619

Proponent Address: Level 2, 388 Hay Street, Subiaco, WA 6008

Report of the Environmental Protection Authority: 1566

Preceding Statements Relating to this Proposal: 28, 77

Pursuant to section 45 of the *Environmental Protection Act 1986* (EP Act), as applied by s46(8), it has been agreed that implementation conditions set out in Ministerial Statements No. 28 and 77, be changed as specified in this Statement.

This Statement authorises the implementation of the proposal described and documented in Schedules 1 and 2. The implementation of the proposal is subject to the following implementation conditions and procedures which replace and supersede all conditions and procedures of Ministerial Statements 28 and 77 and Schedule 2 details definitions of terms and phrases used in the implementation conditions and procedures.

1 Proposal Implementation

1-1 The proponent shall not exceed the authorised extent of the proposal as defined in Table 1 and Table 2 in Schedule 1 and Table 4 in Schedule 2, unless amendments to the proposal and the authorised extent of the proposal have been approved under the EP Act.

2 Contact Details

2-1 The proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within

twenty eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

3 Compliance Reporting

3-1 The proponent shall maintain a Compliance Assessment Plan to the satisfaction of the CEO.

3-2 The Compliance Assessment Plan shall indicate:

- (1) the frequency of compliance reporting;
- (2) the approach and timing of compliance assessments;
- (3) the retention of compliance assessments;
- (4) the method of reporting of potential non-compliances and corrective actions taken; and
- (5) the table of contents of Compliance Assessment Reports.

3-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 3-2 the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 3-1.

3-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.

3-5 The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.

3-6 The proponent shall submit to the CEO the first Compliance Assessment Report by 28 February of each year, or as otherwise agreed in writing by the CEO, addressing the period of the preceding calendar year.

The Compliance Assessment Report shall:

- (1) be endorsed by the proponent's CEO or a person delegated to sign on the CEO's behalf;
- (2) address the proponent's compliance with each condition of this Statement;
- (3) identify all potential non-compliances and describe corrective and preventative actions taken; and

- (4) indicate any proposed changes to the Compliance Assessment Plan required by condition 3-1.

4 Public Availability of Plans and Reports

4-1 Subject to condition 4-2, within a reasonable time period approved by the CEO of the issue of this Statement and for the remainder of the life of the proposal the proponent shall make publicly available, in a manner approved by the CEO, all environmental plans and reports required under this Statement.

4-2 If any parts of plans or reports referred to in condition 4-1 contains particulars of:

- (1) a secret formula or process; or
- (2) confidential commercially sensitive information;

the proponent may submit a request for approval from the CEO to not make those parts of the plans or reports publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why those parts of the plans or reports should not be made publicly available.

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.

Table 1: Summary of proposal

Proposal Title	Gidji Gold Processing Plant, near Kalgoorlie
Short Description	<p>Kalgoorlie Consolidated Gold Mines Pty Ltd operates a gold concentrate processing plant at Gidji approximately 17 km north of the City of Kalgoorlie-Boulder (Figure 1).</p> <p>The facility treats refractory sulphide ore concentrate which is transported by road from the Fimiston Plant. Infrastructure includes a carbon-in-pulp (CIP) circuit, two Ultra Fine Grinding Mills (Isa Mill M3000 and Isa Mill M10000) with a combined production throughput of 438,000 tpa, two concentrate roasters that would be closed after commissioning of the Isa M10000 Ultra Fine Grinding Mill, tailings storage facilities and associated infrastructure.</p>

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Authorised extent
Tailings storage facilities and associated infrastructure	Within the 'Tailings Storage Facility' area shown in Figure 2.	Clearing of no more than 63 ha within a 73 ha disturbance area.
Concentrate processing area	Within "Concentrate Processing Area" shown in Figure 2.	Clearing of no more than 10 ha within a 73 ha disturbance area.

Note: Text in **bold** in Table 1, indicates the change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i> , or his delegate.
km	Kilometre
tpa	tonnes per annum
ha	Hectare

Figures (attached):

Figure 1: Regional location of the Gidji Gold Processing Plant

Figure 2: Location of proposal elements and disturbance boundary for the Gidji Gold Processing Plant

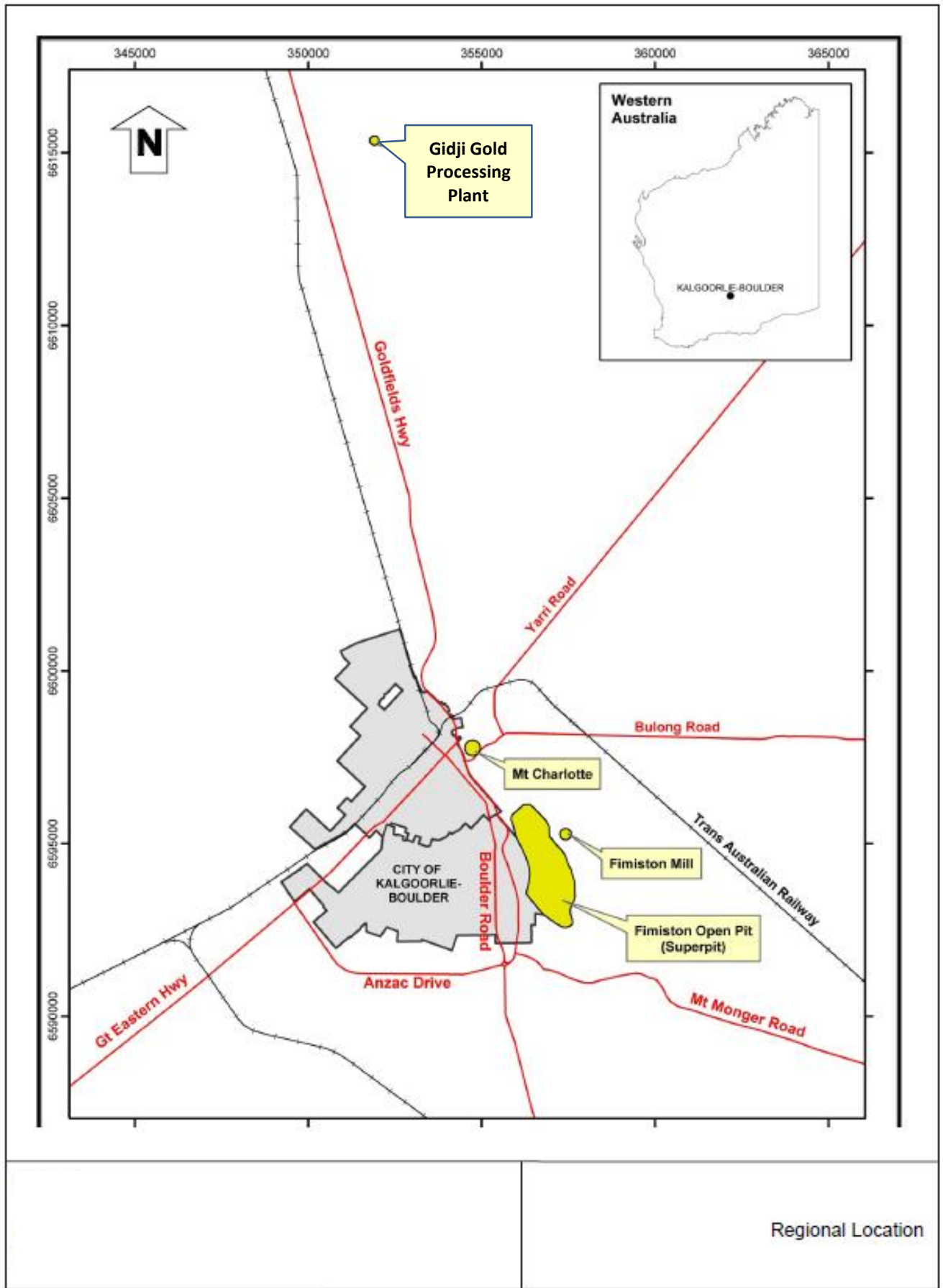


Figure 1: Regional location of the Gidji Gold Processing Plant



Figure 2: Location of proposal elements and disturbance boundary for the Gidji Gold Processing Plant

Schedule 2

Table 4: Coordinates defining the Gidji Gold Processing Plant disturbance boundary
(Map Grid of Australia Zone 51 (MGA Zone 51), Geocentric Datum of Australia 1994 (GDA94).)

Proposal Footprint	Coordinate no.	Easting	Northing
Tailings Storage Facility	1	352042	6615152
	2	351830	6614938
	3	351285	6615488
	4	351867	6616067
	5	352411	6615521
Concentrate Processing Area	1	351830	6614938
	2	352042	6615152
	3	352270	6614921
	4	352057	6614709