

14 December 2017

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Mr Eric Schwamberger  
International Cyanide Management Institute (ICMI)  
1400 I Street, NW – Suite 550  
Washington DC 20005  
UNITED STATES OF AMERICA

## LIHIR GOLD LIMITED'S CORRECTIVE ACTION PLAN IMPLEMENTATION LETTER FOR THE PAPUA NEW GUINEA SUPPLY CHAIN

Dear Sir

### BACKGROUND

Lihir Gold Limited's (LGL) Papua New Guinea (PNG) Supply Chain was found to be substantially-compliant with the *International Cyanide Management Code for the Manufacture, Transport, and use of Cyanide in the Production of Gold* (the Code) on 18 April 2017. Accordingly, the operation developed a Corrective Action Plan (CAP) to address the identified deficiencies (Report No. 1661924-007-R-Rev0, Golder Associates Pty Ltd, December 2016).

This letter confirms the successful implementation of the CAP resulting in the PNG Supply Chain being fully compliant with the Code.

### VERIFICATION OF CORRECTIVE ACTION PLAN IMPLEMENTATION

A review of the evidence presented by LGL supporting the full implementation of the CAP was conducted by Golder Associates Pty Ltd (Golder) intermittently over a six-month period and a site visit was conducted by the Lead Auditor on 21-25 August 2017. The results are summarised in Table 1 below.

**Table 1: Corrective Action Plan Implementation Table**

<b>Transport Practice 1.2, Question 2</b>	
Deficiency	Lihir Gold Operations (LGO) has not complied with its minimum training requirements specified in its Cyanide Transportation procedure as not all drivers had received training in Dangerous Goods Handling.
Corrective Action and evidence required	To achieve full compliance with this question, LGO is required to: <ul style="list-style-type: none"> <li>■ Train all relevant personnel in Dangerous Goods Handling prior to working with cyanide</li> </ul> Evidence to be provided includes: <ul style="list-style-type: none"> <li>■ Training records confirming all drivers have received Dangerous Goods Handling training.</li> </ul>
Assessment	A review of training records during the site confirmed that this corrective action has been satisfactorily completed.



**Transport Practice 3.1, Question 1**

Deficiency	LGO has developed the Lihir Emergency Management Plan, in addition to the Cyanide Emergency Response Plan (CERP) that forms part of the emergency response system and regulates the response to cyanide related emergencies at LGO. There are also Hazardous Materials Incidents and Cyanide Emergency procedures however the document map in the CERP does not appear to reflect other relevant emergency management documents applicable to the operation.
Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Review and update the CERP to ensure it accurately reflects the relationship or hierarchy between the various procedural documents relevant to emergency management at LGO.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ A revised CERP containing and updated document map that accurately reflects the relationship between all relevant documents.</li> </ul>
Assessment	Discussion with Emergency Response personnel during the site visit has clarified the document linkages, and a review of the revised CERP has confirmed that this corrective action has been satisfactorily completed.

**Transport Practice 3.1, Question 7**

Deficiency	The approach to emergency response on site varies between specific pre-incident plans, as noted in the CERP and Cyanide Procedures, and generic responses as guided by SAA/SNZ HB 76: 2010. Australian/New Zealand Handbook Dangerous Goods Initial Emergency Response Guide, Safety Data Sheets and Chemalert systems.
Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Review and update the CERP to ensure it reflects the relationship or hierarchy between the various procedural documents relevant to emergency management at LGO.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ Revised emergency management documentation and associated cyanide procedures containing details of emergency response actions, including pre-incident planning.</li> </ul>
Assessment	A review of the CERP confirmed that this corrective action has been satisfactorily completed.

**Transport Practice 3.2, Question 1**

Deficiency	LGO has developed an Emergency Response Team (ERT) Training Matrix, however it is not aligned to the training specifications outlined in the CERP. The minimum training requirements outlined in the CERP are not included in the ERT Training Matrix and personnel are not trained as indicated within the document.
Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Review cyanide training requirements and ensure that the ERT Training Matrix is aligned with the training requirements specified in the CERP and other emergency documentation.</li> <li>■ Train LGO ERT members in the requirements of the revised ERT Training Matrix.</li> <li>■ Implement a system that manages training needs and tracks compliance with the training plan.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ Training records confirming all ERT members have received training in the required elements of the revised ERT Training Matrix.</li> <li>■ Evidence of the system that has been implemented to schedule, track and retain documented evidence that mandatory training has been provided including content, participants and trainer.</li> </ul>

Assessment	A review of training records and learning management system during the site visit confirmed that the corrective action has been satisfactorily completed.
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**Transport Practice 3.2, Question 4**

Deficiency	The list of emergency response and health and safety equipment available for cyanide emergency response is listed in the CERP however the list has not been reviewed against the changed emergency response procedures (generic responses as guided by SAA/SNZ HB 76: 2010. Australian/New Zealand Handbook Dangerous Goods Initial Emergency Response Guide) to see if they are still appropriate.
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Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Review and update the emergency response equipment list in the CERP to ensure it aligns to the revised emergency management documents (refer to 3.1.7) including pre-incident scenarios.</li> <li>■ Purchase and maintain emergency response equipment as specified in the revised CERP and checklists.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ A revised CERP containing an updated emergency response equipment list.</li> <li>■ Two months of completed emergency response checklists.</li> </ul>
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Assessment	A review of the CERP and completed emergency response checklists confirmed that this corrective action has been satisfactorily completed.
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**Transport Practice 3.2, Question 5**

Deficiency	LGO has not adequately managed Cyanide Awareness refresher training, particularly for stevedore and other site personnel. Training requirements of the CERP and Cyanide Awareness procedure stipulate that relevant personnel complete refresher training at least every 18 months however a review of training records indicated that the frequency of refresher training extended well beyond this period in some cases.
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Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Train all staff in Cyanide Awareness prior to working with cyanide in accordance with CERP and Training Needs Analysis requirements.</li> <li>■ Retrain all staff who had not received their refresher training within the specified period.</li> <li>■ Implement a system that manages training needs and tracks compliance with the training plan.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ Training records confirming all relevant transport personnel have received Cyanide Awareness refresher training within the specified refresher training frequency.</li> <li>■ Evidence of the system that has been implemented to schedule, track and retain documented evidence that mandatory training has been provided including content, participants and trainer.</li> </ul>
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Assessment	A review of training records and learning management system during the site visit confirmed that the corrective action has been satisfactorily completed.
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**Transport Practice 3.2, Question 6**

Deficiency	LGO has a process in place, as defined in the CERP, to check and inspect emergency response equipment and assure its availability when required however LGO is not identifying and actioning deficiencies such as equipment in unsuitable condition or equipment not in sufficient quantities. The checks noting deficiencies (missing equipment or substandard equipment) are being signed off by supervisors as acceptable (i.e. no comments to indicate what action was taken to address the deficiency).
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Corrective Action and evidence required	Refer to 3.2.4
Assessment	A review of the CERP and completed emergency response checklists confirmed that this corrective action has been satisfactorily completed.
<b>Transport Practice 3.3, Question 2</b>	
Deficiency	LGO has not updated emergency contact information within the CERP during the audit period.
Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Revise the emergency management documentation to articulate where emergency contact information will be kept and how it will be updated.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ A revised CERP.</li> <li>■ Updated emergency contact information</li> </ul>
Assessment	A review of the CERP and updated emergency contact information confirmed that this corrective action has been satisfactorily completed.
<b>Transport Practice 3.5, Question 1</b>	
Deficiency	The CERP contains provisions for periodic review and evaluation however the CERP document revision history indicates that LGO has not reviewed the CERP since February 2013.
Corrective Action and evidence required	<p>To achieve full compliance with this question, LGO is required to:</p> <ul style="list-style-type: none"> <li>■ Review the CERP.</li> <li>■ Re-establish awareness and knowledge of the ICMC and LGL's commitments across the management team, with a focus on front line supervisors. The operational decisions and actions of frontline supervisors have a significant bearing on ICMC compliance.</li> </ul> <p>Evidence to be provided includes:</p> <ul style="list-style-type: none"> <li>■ A revised CERP.</li> <li>■ Evidence of a system or process that will trigger review of the CERP within committed timeframes.</li> <li>■ Interview with personnel to evaluate knowledge of LGO commitments, the systems used to meet them and the ICMC.</li> <li>■ Full completion of the corrective actions contained within this CAP within the specified timeframe.</li> <li>■ Evidence of a system or process that will enable LGL to maintain the knowledge level of ICMC across the management team.</li> </ul>
Assessment	A review of the CERP and discussion with Emergency Response, Environmental, Safety, and Supply personnel confirmed that this corrective action has been completed.

## STATEMENT OF COMPLIANCE

Based on the evidence observed, I am satisfied that LGL has fully implemented the Corrective Action Plan submitted to the ICMI and consequently the PNG Supply Chain is fully compliant with the Code.

Should you require any additional information, please do not hesitate to contact me.

Yours sincerely

**GOLDER ASSOCIATES PTY LTD**



Ed Clerk  
Principal EHS Consultant

MCW/EWC/as

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