



Consulting & Training

**International Cyanide Management Code Action
Close-out Report
Pt NHM - Gosowong Gold Mine and Cyanide Supply Chain**

November 2019

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This report is to confirm that actions resulting finding if arising from the recertification audit carried out in October 2018 at the Pt Nusa Halamhera Gosowong Gold Mine and Gosowong Supply Chain have now been closed-out. Details are provided in the table below.



Phil Ashton
 ICMC Lead Auditor
 12th November 2019

<p>Standard of Practice 4.1 Implement management and operating systems designed to protect human health and the environment including contingency planning, inspection, preventative maintenance procedures and management of change procedures.</p> <p>Deficiency Although the operation has a “change management” procedure to identify when changes in processing or operating practices may increase the potential for the release of cyanide and these incorporated the necessary release-prevention measures intended to define the processes and/or path to be followed when a change/modification is required, the change management forms were often completed <u>after</u> the change/modification had been carried out.</p>	<p>Change Management Procedure (NHM-OHS-SOP-026) (Rev 5 - 25th October 2018).</p> <p>Record of Training in Management of Change 21st July 2019 This form provides an attendance record for various positions including OHS. Civil, Ore Treatment, Supply, Minerals, Asset Management, Mining.</p> <p>Training Module – Management of Change A professional Management of Change training Module has been produced and delivered. The module addresses to Newcrest Management of Change Standard, changes requiring change review (with examples), risk assessment, the complete management of change cycle, organisational responsibilities, requirements for documentation, requirements for approval.</p> <p>Management of Change Form Management of Change Form has been provided. The form provides space for change title, category of change, description of change, benefits, review of alternatives, risk assessment and comprehensive risk matrix.</p>
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<p>In many cases, the Change Management Form has been used incorrectly, where, rather than a management change, the work was often simple maintenance ie there was no actual change in operation, procedure or processes and the Change Management Form was being used instead of a Work Order.</p> <p>Corrective Actions Additional training in the MOC process to relevant personnel needs to be undertaken, with reinforcement of the requirements of the MOC Procedure, and how and when it should be used.</p> <p>Evidence Required Production of a MOC Guide and evidence of additional training in the MOC process to relevant personnel.</p>	<p>It is understood this training will continue, as required, throughout the certification period.</p> <p>Complete</p>
<p>Standard of Practice 6.1 Has the operation developed procedures describing how cyanide-related tasks such as unloading, mixing, plant operations, entry into confined spaces, and equipment decontamination prior to maintenance should be conducted to minimise worker exposure, and to ensure that changes to procedures are subject to management of change review?</p> <p>Deficiency: There an overall lack of understanding of the management of change process, with cases where Management of Change forms have been completed for work which is not a change, or they have been completed after the event.</p>	<p>Refer Standard of Practice 4.1 above.</p> <p>Complete</p>

<p>Corrective Actions: Additional training in the MOC process to relevant personnel needs to be undertaken, with reinforcement of the requirements of the MOC Procedure, and how and when it should be used.</p> <p>Evidence Required: Production of a MOC Guide and evidence of additional training in the MOC process to relevant personnel.</p>	
<p>Standard of Practice 6.3 Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide</p> <p>Deficiency There is a requirement to conduct mock drill exercises annually in the Cyanide Emergency Response Plan. Several were conducted, then reviewed and recorded achievements and areas for improvement (although it was noted that some exercise record forms were not fully completed). There have also been additional exercises. However, some critical and credible emergency exercises, such as fire impacting on cyanide facilities and cyanide spills on route from the Port to Site have not been undertaken during the certification period. The Cyanide Emergency Response Plan (Section 3.2) requires a liquid cyanide spill exercise during 2016, a cyanide truck incident during 2016 and a fire incident mock exercise during 2016 and 2018. Although there has been substantial improvement in mock exercises during the certification period, these scenarios have not been addressed, although it is recognised that several exercises undertaken during the certification period and supporting</p>	<p>Emergency Response Team Report – 9th May 2019 A detailed report has been provided for an emergency response mock exercise involving a cyanide spill and associated fire outside of the process plant and port. The exercise also involved first aid response at the site of the incident and at the medical centre, together with supporting environmental monitoring.</p> <p>This exercise was carried out on 9th May 2019, between 1005hrs and 1140hrs.</p> <p>The report is provided in good detail and addresses:</p> <ul style="list-style-type: none"> • Emergency Response Team members who responded to the event and the Team Captain (10 personnel in total) • A description of the mock emergency event • A basic risk assessment and key first response controls • A detailed time line of events • An evaluation of the exercise (de-brief) with required revisions of the Crisis and Emergency Response Plan • Photographs of different stages throughout the mock exercise. <p>It has been confirmed that another exercise is scheduled for 7th October 2019.</p> <p>Emergency Management – Cyanide Emergency Response Plan (Version 11 – 28/05/2019) The CERP has been revised based on mock drills for transport from the Port of Barnabas to</p>

<p>training have direct relevance to all exercises listed in the Cyanide Emergency Response Plan.</p> <p>Corrective Actions Critical and credible emergency exercises, such as fire impacting on cyanide facilities and cyanide spills on route from the Port to Site (involving the public) have not been undertaken. The critical exercise related to an off-site spill event has since been completed. This additional area for improvement is readily correctible and does not present an immediate risk to employees, the community or the environment.</p> <p>Evidence Required Undertake additional mock emergency response exercises in compliance with the Cyanide Emergency Response Plan and provide reports and de-brief minutes on these mock exercises.</p>	<p>site.</p> <p>Emergency Response Team Report – 17th October 2019 A process area exercise was carried out and a report provided. The report is in good detail, addressing team composition, situation, hazard assessment, execution of response, time line and areas for improvement. Photographs are also provided.</p> <p>Schedule A schedule of mock exercises has been provided. The 2019/20/21 schedule requires annual process and transport exercises.</p> <p>Complete</p>
<p>Standard of Practice 7.6 Periodically evaluate response procedures and capabilities and revise them as needed.</p> <p>Deficiency: A number of mock exercise records have been provided and address various credible scenarios. However, it appears that all revisions of the Cyanide Emergency Response Plan during the certification period do not appear to relate to deficiencies identified during cyanide incidents or mock exercises. There have also been no other revisions directly resulting from debriefs after mock exercises.</p>	<p>Refer Standard of Practice 4.1 above.</p> <p>Emergency Management – Cyanide Emergency Response Plan (Version 11 – 28/05/2019) The CERP has been revised (as viewed) based on findings of the mock drill for transport from the Port of Barnabas to site.</p> <p>Actions from mock exercise:</p> <ul style="list-style-type: none"> • Revise CERP to include dedicated radio communication for medical response (noted revised on page 38) • Revise CERP to ensure victims are identified and labelled (noted revised on page 18 and 38) • Revise CERP to increase security around the area of spill (noted revised page 38) • Revise CERP to reduce confusion regarding the spill location (noted revised page 38)

<p>Corrective Actions: Ensure the Cyanide Emergency Response Plan is updated at least annually and when de-briefs dictate that amendments are required.</p> <p>Evidence Required: Evidence of an updated Cyanide Emergency Response Plan.</p> <p>Evidence of procedures in place to update key procedures and plans based on deficiencies identified during cyanide incidents and from debriefs after mock exercises.</p> <p>Annual schedule of overall mock exercises to address critical emergency response events.</p> <p><u>Supply Chain</u></p>	<p>Complete</p>
<p>Standard of Practice 3.5 Periodically evaluate response procedures and capabilities and revise them as needed</p> <p>Deficiency There is a requirement to conduct mock drill exercises annually in the Cyanide Emergency Response Plan. Several were conducted, then reviewed and recorded achievements and areas for improvement (although it was noted that some exercise record forms were not fully completed). There have also been additional exercises. However, some critical and credible emergency exercises, such as fire impacting on cyanide facilities and cyanide</p>	<p>Refer above for response</p> <p>Complete</p>

spills on route from the Port to Site have not been undertaken during the certification period. The Cyanide Emergency Response Plan (Section 3.2) requires a liquid cyanide spill exercise during 2016, a cyanide truck incident during 2016 and a fire incident mock exercise during 2016 and 2018. Although there has been substantial improvement in mock exercises during the certification period, these scenarios have not been addressed, although it is recognised that several exercises undertaken during the certification period and supporting training have direct relevance to all exercises listed in the Cyanide Emergency Response Plan.

Corrective Actions

Critical and credible emergency exercises, such as fire impacting on cyanide facilities and cyanide spills on route from the Port to Site (involving the public) had not been undertaken during the certification period under review. **The critical exercise related to an off-site spill event has since been completed (Dec 2018).** This additional area for improvement is readily correctible and does not present an immediate risk to employees, the community or the environment.

Evidence Required

Undertake additional mock emergency response exercises in compliance with the Cyanide Emergency Response Plan and provide reports and de-brief minutes on these mock exercises.

<p>Standard of Practice 8.3 Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide</p> <p>Deficiency: Critical and credible emergency exercises, such as fire impacting on cyanide facilities and cyanide spills on route from the Port to Site (involving the public) have not been undertaken. The critical exercise related to an off-site spill event has since been completed. This additional area for improvement is readily correctible and does not present an immediate risk to employees, the community or the environment.</p> <p>Evidence Required: Undertake additional mock emergency response exercises in compliance with the Cyanide Emergency Response Plan and provide reports and de-brief minutes on these mock exercises.</p>	<p>Refer 7.6 above</p> <p>Complete</p>
<p>Standard of Practice 9.3 Provide stakeholders the opportunity to communicate issues of concern.</p> <p>Deficiency: During the period of certification to which this report relates, it is noted that there has been formal and informal communication and consultation with the community and awareness of cyanide hazards and controls. This has been achieved by a number of formal presentations and site tours for Heads of Districts, schools, universities and community representatives.</p>	<p>A Cyanide Awareness Communication Plan has been prepared and supplied. The Plan addresses:</p> <ul style="list-style-type: none"> • Objectives requiring community awareness, understanding of spill events and key contacts with NHM • Approach to the community inclusive of public information sessions at sub-districts which are included in the transport route from the Port of Barnabas to the mine • Distribution of flyers to villages with the sub-districts following information sessions • Display of posters at each village head office • Information sessions for employees (who are members of the community)

<p>Plans have been developed for late 2018 and 2019 addressing target audiences, key messages and a schedule.</p> <p>There is a requirement to enhance community communication by production of community specific flyers.</p> <p>Evidence: Development and implementation of a Community Engagement Plan which includes Local stakeholders in hands-on scenario planning and training for cyanide transport, including structured risk/hazard information. Develop community friendly posters and flyers and distribute them on a regular basis.</p>	<p>Key messages are also summarised in relation to cyanide risks and characteristics, emergency response and NHM contacts.</p> <p>A schedule is included in Section 5 for November through to August 2019.</p> <p>Evidence has been provided:</p> <ul style="list-style-type: none"> • Listing of attendance at community meeting on 13th August 2019 (22 attendees) • Example community awareness poster/flyer • A power point cyanide awareness presentation containing detail related to what cyanide is, where it is used, routes of exposure, NHM commitment to use in a safe and environmentally responsible manner, detail related to transport, waste management and standards, environmental monitoring and the cyanide code • Photographs of presentations at 6 nearby villages • A cyanide information poster/flyer with information related to what cyanide is, routes of exposure, toxicity, symptoms of exposure and first aid response • Gosowong Run Sheets used for daily recording of discussions to employees and hence to the community <p>Complete</p>
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