

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
Underground Mining Control: First Workings (development) and Second Workings (extraction) width / height / pillar size	<p>First Workings beneath any feature requiring no or negligible³ environmental consequences (and all first workings beneath cliffs) required to be long term stable and non-subsiding.</p> <p>All Second Workings to be carried out only in accordance with an approved Extraction Plan</p> <p>Design Parameters to achieve predicted subsidence as per Table 8.5 of the EIS and Section 3.3.1 of the current Extraction Plan Main Report</p> <p><i>Note: Exceedance of approved mine design parameters may not automatically cause a surface impact or environmental consequence / non-compliance with the performance measures of SSD_5581. Subsequently, appropriate responses to check if such impacts have occurred are additionally triggered elsewhere below for all relevant aspects.</i></p>	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Underground mine survey and inspections confirms dimensions as mined are within compliant specifications, including: <ul style="list-style-type: none"> Extraction height ≤ 3.0m average across miniwall panel as mined Maximum roadway width ≤ 5.5m average across gateroad as mined. Maximum void width 61m on average across miniwall panel as mined Minimum Pillar System Factor of Safety (FOS) ≥1.6 (after extraction is complete) Pillar width/height (w/h) ratio >9.0 average across panel Rib spall <400mm on both ribs additional after rib support Floor heave negligible or not observed Geotechnical Engineer audit of the underground geological mapping prior to extraction identifies no additional potential impacts of any anomalous geological structures (i.e., normal faults with throws exceeding seam thickness or thrust faults) Depth of Cover (DOC) above secondary extraction is >160m and <320m Second workings are located beyond an angle of draw of 26.5 degrees of the crest of any cliffs identified in the Cliff Line Zone of First Workings Secondary extraction by Panel and Pillar mining occurs within MW13-16 Point Hatteras Panel & Pillar Mining Zone EP Area 	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Underground mine survey and inspections confirms minor variations in dimensions as mined compared to compliant specifications, including: <ul style="list-style-type: none"> Extraction height >3.2m in isolated areas of miniwall panel outside of geological structure zones Offline driveage >2m Non-compliance with condition green for FOS, w/h ratio, maximum or minimum DOC, and/or final pillar size Rib spall 400-500mm on both ribs additional after rib support Floor heave observed not severe enough to impede operations Geotechnical Engineer audit of the underground geological mapping prior to extraction identifies potential impacts of any anomalous geological structures (i.e., normal faults with throws exceeding seam thickness or thrust faults) consistent with the EIS 	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Underground mine survey and inspections confirms significant variation (i.e. greater on average across panel as mined) in dimensions as mined compared to approved minimum design parameters and /or statutory design requirements¹, including: <ul style="list-style-type: none"> Extraction height >3.0m average across miniwall panel Maximum roadway width >5.5m on average across gateroad as mined. Maximum void width >61m on average across miniwall panel as mined. Minimum Pillar System FOS <1.6 across the panel (after extraction is complete) Final pillar W/H ratio <9.0 average across panel without further controls implemented Rib spall >500mm on both ribs additional after rib support Significant roof deterioration and floor heave observed that is not isolated and consistently impedes operations Pillar condition deterioration/increased spalling observed. Geotechnical Engineer audit of the underground geological mapping prior to extraction identifies potential impacts of any anomalous geological structures (i.e., normal faults with throws exceeding seam thickness or thrust faults) inconsistent with the EIS Depth of Cover (DOC) above secondary extraction is <160m or >320m Second workings occur within an angle of draw of 26.5 degrees of the crest of any cliffs identified in the Cliff Line Zone of First Workings Secondary extraction by Panel and Pillar mining occurs beyond MW13-16 Point Hatteras Panel & Pillar Mining Zone EP Area
		<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> No response required when above parameters are met Continue Subsidence Monitoring Program to ensure impacts are as designed 	<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> Refer to and implement <i>Strata Management Plan</i> as required for additional roof support and/or rib support Review and improve training and communication with mining crews Retraining of development and miniwall crews where required Minor incident internal investigation process if offline driveage has occurred (where minor and non-reportable to Resource Regulator) Review and upgrade operational control and communication systems Review current subsidence monitoring results against the criteria of the related TARP aspects, including <i>Ground Movement and Subsidence Effects Monitoring, Built Features and Cliffs and Pagodas</i> for compliance 	<p>ACTIONS & RESPONSES:</p> <p>In addition to all actions and responses as per Condition Amber, Airly Mine will:</p> <ul style="list-style-type: none"> Notify and consult with relevant stakeholders as per requirements specified within the Extraction Plan/SMP/PSMP, Development Consent and related approvals Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur Cease secondary extraction operations in relevant areas if appropriate

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
<p>Ground Movement and Subsidence Effects Monitoring:</p> <p>Vertical Subsidence and Incremental Subsidence (Modelled vs Actual)</p>	<p>Subsidence design parameters to achieve no greater subsidence impacts or environmental consequences than predicted in the EIS are outlined in Table 8.5 of the EIS and Section 3.3.1 of the current Extraction Plan Main Report</p> <p><i>Note: Exceedance of the predicted/approved subsidence parameters may not automatically cause a surface impact or environmental consequence / non-compliance with the performance measures of SSD_5581. Subsequently, appropriate responses to check if such impacts have occurred are additionally triggered elsewhere below for all relevant aspects.</i></p>	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Regular review of the GNSS monitoring network and detailed analysis of other subsidence monitoring data shows the incremental subsidence monitoring results for each panel are within or below modelled subsidence predictions (SCT, 2021b), including: <ul style="list-style-type: none"> Vertical subsidence after one miniwall ≤50mm Vertical subsidence after two miniwalls ≤90mm Vertical subsidence after three miniwalls ≤120mm Vertical subsidence after four miniwalls ≤125mm <p><i>Note, these trigger values include a maximum subsidence survey tolerance of 20mm above the modelled predictions.</i></p> <ul style="list-style-type: none"> No alarm / notification from the GNSS monitoring network is received by Mine Surveyor / Technical Services Manager i.e., vertical subsidence measured at all GNSS stations is ≤120mm Prior to mining in Zone 1 the measured vertical subsidence are within or below the following MW16 lead indicators: <ul style="list-style-type: none"> GNSS 33 is ≤75mm (i.e. 63mm + 12mm) GNSS 26 is ≤113mm (i.e. 95mm + 18mm) GNSS 25 is ≤108mm (i.e. 90mm + 18) <p><i>Note, these trigger values include a maximum tolerance of 20% above the target lead indicator.</i></p> <ul style="list-style-type: none"> Regular review of the GNSS monitoring network whilst mining in MW15B shows the measured vertical subsidence are within or below the following MW15B performance indicators: <ul style="list-style-type: none"> GNSS 31 is ≤84mm (i.e. 70mm + 14mm) GNSS 16 is ≤90mm (i.e. 76mm + 14mm) GNSS 30 is ≤119mm (i.e. 99mm + 20mm) GNSS 29 is ≤57mm (i.e. 48mm + 9mm) <p><i>Note, these trigger values include a maximum tolerance of 20% above the target performance indicator.</i></p>	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Regular review of the GNSS monitoring network and detailed analysis of other subsidence monitoring data shows the incremental subsidence monitoring results for each panel are greater than 20mm (i.e., survey tolerance) above modelled subsidence predictions (SCT, 2021b), including: <ul style="list-style-type: none"> Vertical subsidence after one miniwall >50mm Vertical subsidence after two miniwalls >90mm Vertical subsidence after three miniwalls >120mm Vertical subsidence after four miniwalls >125mm Alarm / notification from the GNSS monitoring network is received by Mine Surveyor / Technical Services Manager i.e., vertical subsidence measured at any GNSS station is >120mm Prior to mining in Zone 1 the measured vertical subsidence are 20% greater than the expected MW16 lead indicators, including: <ul style="list-style-type: none"> GNSS 33 is >76mm GNSS 26 is >113mm GNSS 25 is >108mm Regular review of the GNSS monitoring network whilst mining in MW15B shows the measured vertical subsidence are 20% greater than the expected MW15B performance indicators, including: <ul style="list-style-type: none"> GNSS 31 is >84mm GNSS 16 is >90mm GNSS 30 is >119mm GNSS 29 is >57mm 	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Alarm / notification from the GNSS monitoring network of the above triggers is received by Mine Surveyor / Technical Services Manager and Mine Manager i.e., vertical subsidence measured at any GNSS station is >125mm
		<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> No response required when above parameters are met Continue Subsidence Monitoring Program 	<p>ACTIONS & RESPONSES:</p> <p>In consultation with the DPIE incl IEP and NPWS, Airly Mine will:</p> <ul style="list-style-type: none"> Investigate exceedance of trigger threshold / performance measure Review correlation data/process and subsidence predictions where appropriate Review mining methods, operations and monitoring against mine design criteria and implement Adaptive Management process as required, including consideration of the following potential actions where applicable: <ul style="list-style-type: none"> Increase the size of protection zones by commencing or stopping extraction further away from sensitive features than planned, for example, change the finish position of the current panel (for an increased horizontal setback) and/or change the start/finish position of future panels which have already been formed/developed Review panel design and modify pillar designs to suit altered pillar dimensions as required for future panels. 	<p>ACTIONS & RESPONSES:</p> <p>In addition to all actions and responses as per Condition Amber, Airly Mine will:</p> <ul style="list-style-type: none"> Notify and consult with relevant stakeholders as per requirements specified within the Extraction Plan/SMP/PSMP, Development Consent and related approvals Notify the landowner i.e., NPWS Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur Cease secondary extraction operations in relevant areas if appropriate and safe Following consultation and implementation of necessary changes to mine design, monitoring analysed and confirmed by external consultant. Where confirmed compliant (i.e., revised mine design performs as intended), and related performance measures satisfied, consider applying to regulators for a justified variation to the Extraction Plan to align remaining panels to the revised designs.

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
			<ul style="list-style-type: none"> ○ Change the dimension of pillars or void widths in future (unformed) panels (i.e., narrower voids, larger pillars, or a combination of both) to ensure extraction is within appropriate limits. ○ Relocate the miniwall equipment to avoid mining under and/or moving around sensitive features • Review TARP triggers • Review and update the subsidence modelling/predictions (against all available information) to assess the likelihood that subsidence after four miniwalls will remain below the maximum predictions of the EIS i.e., ≤125mm and if necessary, reduce the length of extraction in MW16 to ensure there is no area where there is four panels side by side (i.e. do not allow mining within Zone 1) • Review current subsidence monitoring results against the criteria of the related TARP aspects, including Built Features and Cliffs and Pagodas for compliance 	
Nissen Hut and Associated infrastructure (including dam)	<p>Always safe and serviceable, unless otherwise agreed with owners</p> <p>Damage must be fully repairable and must be fully repaired.</p> <p>Negligible³ additional risk to public safety, in consultation with the NSWRR and BCD.</p>	<p>TRIGGERS:</p> <ul style="list-style-type: none"> • Subsidence monitoring remains compliant within condition green triggers for <i>Ground Movements and Effects</i>, and does not identify any mining induced impacts from extraction within the EP Area • Underground Mining Controls and monitoring indicates all parameters are within design criteria / Level Green trigger levels. • The recorded water level at Nissen Hut dam has not declined below the baseline rate (i.e., any change in water level is consistent with rainfall/evaporation). 	<p>TRIGGERS:</p> <p>Level A: Monitoring indicates potential for impacts to occur (but none yet observed):</p> <ul style="list-style-type: none"> • Condition Amber triggered for GNSS network alarm notifications for <i>Ground Movement and Subsidence Effects Monitoring</i>. • Prism monitoring indicates potential for impacts to occur (but none yet observed) • The recorded water level at Nissen Hut dam indicates a downward trend or drop in water level, beyond rainfall/evaporation correlation, (including potential notification received from NPWS). <p>Level B: Impacts to relevant built features but less than Condition Red (i.e., remain safe, serviceable, and repairable):</p> <ul style="list-style-type: none"> • Impacts observed during subsidence monitoring and inspections (including dam water level). • Notification received from NPWS or users of damage or significant change observed to Nissen Hut and/or associated infrastructure (including dam water level). • Post-mining structural survey identifies impacts beyond pre-mining baseline. 	<p>TRIGGERS:</p> <p>Impacts Exceeding Approved Performance Measures of (as per Table 2, Sch3 SSD_5581):</p> <p>Due to mine subsidence:</p> <ul style="list-style-type: none"> • Nissen Hut and outbuilding are not always safe and serviceable, unless otherwise agreed with the owner • Damage is not fully repairable (including dam water level) • Additional risk to public safety is not negligible³, as determined in consultation with the NSWRR, BCD (NPWS).
		<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> • No response required • Continue Subsidence Monitoring Program, including water levels at Nissen Hut dam 	<p>ACTIONS & RESPONSES:</p> <p>LEVEL A:</p> <p>In addition to responses triggered for <i>Ground Movements and Subsidence Effects</i>, Airly Mine will:</p> <ul style="list-style-type: none"> • Notify NPWS and users of Nissen Hut (nominated in the MW13-16 BFMP) of ground movements greater than predicted. • Consult suitably qualified engineer regarding increased subsidence for updated stability advice. • Review all available data to determine if mine subsidence likely to cause requirement for <i>High Potential Incident</i> notification to NSWRR 	<p>ACTIONS & RESPONSES:</p> <p>In addition to all actions and responses as per Condition Amber, Airly Mine will:</p> <ul style="list-style-type: none"> • Take all reasonable and feasible steps to ensure that the exceedance due to mine subsidence ceases and does not recur. • Undertake inspection (by suitably qualified persons) if safely accessible where potential impact necessitates further assessment, in consultation with key stakeholders nominated in the MW13-16 BFMP.

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
			<ul style="list-style-type: none"> Investigate changes in water level and determine if change may be mining induced, including targeted visual inspections (i.e., when it is not explained by baseline data, weather patterns or observed behaviour), if potential impacts identified refer Level B. Adapt monitoring and inspections if/as appropriate. Notify NPWS and Nissen Hut users of outcomes from above. <p>LEVEL B:</p> <ul style="list-style-type: none"> Review impact to determine likely cause in consultation with relevant stakeholders as per MW13-16 BFMP. If likely cause is determined as mining induced, provide relevant support to NPWS (BCD) to fully repair damage, in consultation with relevant stakeholders nominated in the MW13-16 BFMP, including providing supplementary or alternative water source for firefighting if water levels are impacted. 	<ul style="list-style-type: none"> Consider all reasonable and feasible options for remediation where relevant in consultation with relevant stakeholders and submit a report to the Department describing those options and any preferred remediation measures or other course of action. Implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary. Written reporting to relevant agencies as per Development Consent/relevant approvals as detailed in Extraction Plan.
Airly Turret Emergency Services Communications Tower and Compound (including associated sheds and infrastructure)	<p>Always safe and serviceable</p> <p>Damage must be fully repairable and must be fully repaired.</p> <p>Negligible³ additional risk to public safety, in consultation with the NSWRR and BCD.</p>	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Tilt monitoring at Airly Turret remains <5mm/m Subsidence monitoring remains compliant within condition green triggers for <i>Ground Movements and Effects</i>, and does not identify any mining induced impacts from extraction within the EP Area Underground Mining Controls and monitoring indicates all parameters are within design criteria / Level Green trigger levels. 	<p>TRIGGERS:</p> <ul style="list-style-type: none"> 1) Tilt monitoring on the Airly Turret tower is ≥5mm/m and/or GNSS network alarm notifications for Ground Movement and Subsidence Effects Monitoring (i.e., >125mm). 2) Notification received from RFS/NSWTA/NPWS that their own alarm monitoring systems for communications services has triggered indicating loss of service and/or a decrease in signal strength 	<p>TRIGGERS:</p> <p>Impacts, due to mine subsidence, Exceeding Approved Performance Measures of (as per Table 2, Sch3 SSD_5581):</p> <ul style="list-style-type: none"> Communications are not always safe and serviceable Damage is not fully repairable Additional risk to public safety is not negligible³, as determined in consultation with the NSWRR, BCD (NPWS) and NSWTA/RFS.
		<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> No response required Continue Subsidence Monitoring Program 	<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> 1) In addition to responses in Condition Amber under Ground Movements and Subsidence Effects, notify NSWTA NPWS and RFS that tilt ground movements are greater than predicted and assess whether there has been any perceptible loss of signal strength and if identified refer responses below. 2) Review impact to determine likely cause in consultation with relevant stakeholders as per MW13-16 BFMP, if likely cause is determined as mining induced <ul style="list-style-type: none"> Provide relevant support to NSWTA/RFS to fully repair damage, in consultation with relevant stakeholders nominated in the MW13-16 BFMP. Consider requirements for potential need for High Potential Incident notification to NSWRR. Continue Subsidence Monitoring Program. 	<p>ACTIONS & RESPONSES:</p> <p>In addition to all actions and responses as per Condition Amber, Airly Mine will:</p> <ul style="list-style-type: none"> Take all reasonable and feasible steps to ensure that the exceedance due to mine subsidence ceases and does not recur. Undertake inspection (by suitably qualified persons) if safely accessible where potential impact necessitates further assessment, in consultation with key stakeholders nominated in the MW13-16 BFMP. Cease secondary extraction in relevant areas where appropriate (with direction from PIS² and DPIE). Consider all reasonable and feasible options for remediation where relevant in consultation with relevant stakeholders and submit a report to the Department describing those options and any preferred remediation measures or other course of action. Implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary. Written reporting to relevant agencies as per Development Consent/relevant approvals as detailed in Extraction Plan.

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
Cliffs and Pagodas	<p>Cliffs and pagodas within 26.5 degrees of any Airly mine workings in the EP Area, other than pagodas affected by the New Hartley Shale Mine Potential Interaction Zone: <i>No greater subsidence Impacts or environmental consequences than predicted in the EIS: (i.e., Occasional rock falls, displacement or dislodgment of boulders or slabs of less than 30 m³, or fracturing occurs, that do not impact Aboriginal heritage, EECs, or public safety, that in total. do not impact more than 2% of the total area of such cliffs or pagodas)</i></p> <p>Minor Cliffs and Steep Slopes: <i>No greater subsidence impacts or environmental consequences than predicted in the MEP EIS. (i.e. negligible³ impact, no surface cracking, collapse of features or slope failure for CLZ of First Workings).</i></p> <p>(Table 8.3 and Table 10.60 of EIS)</p>	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Subsidence monitoring remains compliant within condition green triggers for ground movements and effects, and does not identify any mining induced impacts from extraction within the EP Area, including: <ul style="list-style-type: none"> No Damage to Pagoda/Beehive formations (including visible cracking, rock fall). No Damage to cliff and minor cliff faces (e.g. no rock fall, cracking). Underground Mining Controls and monitoring indicates all parameters are within design criteria / Level Green trigger levels. 	<p>TRIGGERS:</p> <p>Level A: Surface impacts are not yet observed but monitoring indicates potential to occur:</p> <ul style="list-style-type: none"> Subsidence monitoring indicates potential for surface impact requiring further investigation (i.e., Condition Amber triggered for Ground Movements and Subsidence Effects Monitoring and/or Underground Mining Control) Subsidence monitoring indicates potential for development of subsidence which may result in a failure of ground (<i>High Potential Incidents</i> as per CI 128(5m) of the WHSMP Regulations 2014) <p>Level B: Surface impacts are observed:</p> <ul style="list-style-type: none"> Impact observed but yet to be confirmed if mining induced or natural rock fall The following mining-induced impacts occur but are within approved impacts of development consent SSD_5581 (i.e. still below Condition Red): <ul style="list-style-type: none"> <i>Occasional rock falls, displacement or dislodgment of boulders or slabs of less than 30 m³, or fracturing occurs, that do not impact Aboriginal heritage, EECs, or public safety, that in total. do not impact more than 2% of the total area of cliffs (excluding minor cliffs) or pagodas within 26.5 degrees of any Airly mine workings in the EP Area.</i> Any of the following events occurs that would have been a dangerous incident if a person were reasonably in the vicinity at the time when the event occurred (<i>High Potential Incidents</i> as per CI 128(5a) of the WHSMP Regulations 2014): <ul style="list-style-type: none"> <i>a failure of ground, or of slope stability control measures</i> <i>rock falls, instability of cliffs, steep slopes or natural dams, occurrence of sinkholes, development of surface cracking or deformations due to subsidence.</i> 	<p>TRIGGERS:</p> <ul style="list-style-type: none"> Subsidence monitoring identifies that there are mining induced surface impacts exceeding the Performance Measures approved by Development Consent SSD_5581 and/or which cause or threaten material harm to the environment or safety of persons on the surface over the mining area. These are summarised as follows: <p>Impacts Exceeding Approved Performance Measures of (as per Table 1, Sch3 SSD_5581):</p> <ul style="list-style-type: none"> Cliffs (major cliffs) and pagodas: Non-occasional rock falls, displacement or dislodgment of boulders or slabs of greater than 30 m³, or fracturing occurs, that do impact Aboriginal heritage, EECs or public safety, that in total do impact more than 2% of the total area of cliffs (excluding minor cliffs) or pagodas within 26.5 degrees of any Airly mine workings in the EP Area. Minor Cliffs and Steep Slopes: Greater subsidence impacts or environmental consequences than predicted in the MEP EIS. (i.e. exceed negligible³ impact, e.g. fracturing or collapse of steep slopes) <p>Other Relevant Impacts:</p> <ul style="list-style-type: none"> Failure of ground/slope stability control measures occurs (Including landslips) Mining-induced instability of cliffs, steep slopes occurs Development of surface cracking or deformations which present potential risk to the public/others (i.e., where trip hazards / step formation occurs or where there is potential for instability of a rock formation).

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
Cliffs and Pagodas (Continued)		<p>ACTIONS & RESPONSES:</p> <ul style="list-style-type: none"> No response required. <p>Continue Subsidence Monitoring Program.</p>	<p>ACTIONS & RESPONSES:</p> <p>In addition to Condition Amber action/responses for <i>Underground Mining Control</i> and/or <i>Ground Movement and Subsidence Effects Monitoring</i>, Airly Mine will:</p> <p>Level A: Surface impacts are not observed but monitoring indicates their potential to occur:</p> <ul style="list-style-type: none"> Assess the public safety risk and likelihood for mine-induced surface impacts and Record Assessment If no public safety risk identified and/or mine-induced surface impacts are considered unlikely, continue Subsidence Monitoring Program If public safety risk identified and/or mine-induced surface impacts are considered likely <ul style="list-style-type: none"> Further notify NPWS and key stakeholders and consider additional warning signs / closure of access in affected areas Further notify Resource Regulator under relevant WHS laws (i.e., for high potential incidents) Undertake targeted surface visual inspection over area possibly impacted and if surface impacts are observed refer Level B responses <p>Level B: Surface impacts are observed:</p> <p>In addition to Level A action/responses above, Airly Mine will review available data or undertake targeted surface investigations to confirm if the impact is mining-induced or related to natural surface movements or activation of a natural feature:</p> <ul style="list-style-type: none"> If confirmed as not a mine-induced impact, continue Subsidence Monitoring Program and notify NPWS and key stakeholders If mine-induced impact is confirmed: <ul style="list-style-type: none"> Notify and consult with relevant stakeholders as per requirements specified within the Extraction Plan/SMP/PSMP, Development Consent and related approvals Compare the impacts to relevant approved performance measure thresholds (refer condition red trigger levels), if above thresholds, refer Condition Red responses <p>Where applicable (e.g., potential for rockfall in vicinity of known heritage sites), review requirements of previously established TARPs for Heritage (Historic and Aboriginal and Cultural) Management Plans previously approved for related EP Areas in vicinity of cliffs (e.g., CLZ)</p>	<p>ACTIONS & RESPONSES:</p> <p>In addition to all actions and responses as per Condition Amber, Airly Mine will:</p> <ul style="list-style-type: none"> Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur. Undertake targeted surface inspections (by suitably qualified personnel) if safely and readily accessible (or aerial if otherwise) where potential impact necessitates further assessment is <u>required to quantify impacts</u>, as determined in consultation with key stakeholders (OEH, NPWS, DPIE and the NSW RR). Where fracturing has occurred and potential for instability is noted, undertake specialist geotechnical assessment to confirm level of residual instability, potential safety risks and recommended courses of action (with direction from PIS², DPIE, NPWS/BCD). Cease secondary extraction in relevant areas where appropriate (with direction from PIS² and DP&E). Consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action. Implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary. <p>Written reporting to relevant agencies as per Development Consent/relevant approvals as detailed in Extraction Plan.</p>

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
Unsealed Access Roads and Tracks and General Land Surface (MMBSCA Management 4WD Trails and walking tracks; steep slopes and native vegetation cover)	No greater subsidence Impacts or environmental consequences than predicted in the EIS: (i.e. Negligible ³ impacts for the Cliff Line Zone of First Workings, surface cracking is not expected, no impact on current land use).	TRIGGERS: <ul style="list-style-type: none"> Scheduled monitoring (surface inspections of the MMBSCA Management Trails) remains compliant within condition green triggers for ground movements and effects, and does not identify any mining induced impacts, such as: <ul style="list-style-type: none"> Visible cracking/fracturing (soil, trails, rock, etc). Change in grade/heaving/buckling Increased ponding Underground Mining Controls and Monitoring indicates all parameters are within design criteria / Level Green trigger levels. 	TRIGGERS: <ul style="list-style-type: none"> Scheduled monitoring (surface inspections) of MMBSCA Management Trails does not identify any mining induced impacts (refer examples in Condition Green); however, underground monitoring or aerial monitoring systems trigger further investigation/surface inspection-and/or Condition Amber for ground movements and effects is triggered (refer earlier above) <p>See also <i>Subsidence</i> and <i>Underground Mining Control</i> elements above for related triggers/responses that require further investigation to confirm any <i>potential</i> surface impacts.</p>	TRIGGERS: <ul style="list-style-type: none"> Scheduled monitoring (surface inspections of MMBSCA Management Trails) identifies the development of mining induced surface cracking/fracturing or deformation. Mining-induced changes in grade, heaving or buckling, increased ponding or other significant damage to MMBSCA management trails are observed during monitoring. Any of the following events occurs that would have been a dangerous incident if a person were reasonably in the vicinity at the time when the event occurred (High Potential Incidents as per CI 128(5a) of the WHSMP Regulations 2014): <ul style="list-style-type: none"> a failure of ground, or of slope stability control measures rock falls, instability of cliffs, steep slopes or natural dams, occurrence of sinkholes, development of surface cracking or deformations due to subsidence.
		ACTIONS & RESPONSES: <ul style="list-style-type: none"> No response required when above parameters are met. Continue Subsidence Monitoring Program. 	ACTIONS & RESPONSES: <ul style="list-style-type: none"> Airly ECM (or delegate) to undertake targeted surface inspection of accessible access roads and trails in relevant area to confirm if any impact at surface Notify landowner i.e., NPWS If no impacts observed, continue Subsidence Monitoring Program If impact observed, refer Condition Red responses. 	ACTIONS & RESPONSES: <p>Review available data or undertake targeted surface investigations to confirm if the impact is mining-induced or related to natural surface movements or activation of a natural feature:</p> <ul style="list-style-type: none"> If confirmed related to natural surface movements or activation of a natural feature, continue Subsidence Monitoring Program If confirmed mining induced impacts, Airly Mine will: <ul style="list-style-type: none"> Notify and consult with relevant stakeholders as per requirements specified within the Extraction Plan/SMP/PSMP, Development Consent and related approvals. Assess public safety risk. Consider erecting warning signs/warning tape or restricting access in immediate area. Notify Resource Regulator under relevant WHS laws (i.e. for high potential incidents). Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur. Implement Adaptive Management process as described within the Extraction Plan. Cease secondary extraction in that area if appropriate (with direction from PIS² and DPIE). Investigate remedial options in consultation with relevant stakeholders (incl. NPWS and DPIE). Implement suitable remedial option once agreed.

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
Biodiversity and Sensitive Vegetation: EEC / GDE, Threatened Species, Habitat, Aquatic Ecology	Negligible ³ Environmental Consequences to terrestrial threatened species, threatened populations, EECs and GDE's. No significant adverse Impact predicted in the EIS.	TRIGGERS: <ul style="list-style-type: none"> Mining induced impacts to key elements are not identified by subsidence monitoring as per Subsidence Monitoring Program for MW13-16 (MW13-16 SMP) or routine environmental monitoring undertaken as part of separate site EMPs (including surface and groundwater, biodiversity). Underground Mining Controls and Monitoring indicates all parameters are within design criteria / Level Green trigger levels. 	TRIGGERS: <ul style="list-style-type: none"> Subsidence monitoring program (underground/surface/aerial) identifies potential for impact at surface in the vicinity of sensitive vegetation / habitat area(s); and/or Potential Impacts to key elements are identified (but not yet confirmed if mining induced) by routine environmental monitoring (including surface flow gauging, water quality, related groundwater levels and routine biodiversity monitoring); and/or Amber Level triggers for surface water/groundwater (including alluvium) are triggered in the site Water Management Plan (Appendix D), indicating potential for Biodiversity impact requiring further monitoring/assessment. 	TRIGGERS: <ul style="list-style-type: none"> Mining induced impacts (beyond levels approved by consent / compared to baseline are identified by: <ul style="list-style-type: none"> Subsidence monitoring program (underground/surface/aerial); and/or by investigations and actions arising from Condition Amber; and/or environmental monitoring (including flow gauging, water quality and Biodiversity). Red Level triggers for surface water/groundwater (incl. Biodiversity) are triggered in the Airly Mine Water Management Plan (Appendix D);
		ACTIONS & RESPONSES: <ul style="list-style-type: none"> No response required when above parameters are met. Continue Subsidence monitoring Continue Biodiversity monitoring 	ACTIONS & RESPONSES: <ul style="list-style-type: none"> Review and confirm monitoring data, cross check Biodiversity monitoring data against other related environmental data and integrated subsidence monitoring and underground monitoring data; Analysis such as Analysis of Variance (ANOVA) would be performed to determine if the change meets a significance threshold. This analysis would be performed as part of a trigger investigation. An interim level of significance is benchmarked at 5% or p=0.05. Notify NPWS/OEH and relevant stakeholders of current findings and proposed approach for investigation. Implement responses as per relevant Amber Level trigger/responses above (where triggered) for surface water/groundwater elements in the Water Management Plan. Where review of underground monitoring and/or Biodiversity monitoring data indicates potential for mining-induced impact, or there is insufficient data to quantify the above, undertake targeted monitoring inspection over the relevant surface area to confirm and quantify the scale/extent/nature of potential surface impacts. Undertake further investigations as appropriate with the aim of identifying the cause of the issue. Assess need for any increase to monitoring frequency or additional monitoring where relevant. Continue monitoring program. 	ACTIONS & RESPONSES: <ul style="list-style-type: none"> Undertake incident notifications immediately where material harm to the environment is threatened or caused, in accordance with Reporting and Notifications section of this management plan. Implement Adaptive Management process as outlined within the Extraction Plan and Master TARP. Take all necessary steps to ensure that the exceedance ceases and does not recur (including ceasing workings in relevant areas where appropriate while incident investigated) Targeted field inspection by Environment & Community Coordinator with invitation to relevant stakeholders. Monitor impact. Investigate exceedance of subsidence prediction model. Explore all remediation options and submit a report to the department outlining them Implement remediation measures to the satisfaction of the secretary. Review of mining design / predictions against mine design criteria. Identify and implement possible changes to mine design (to make more conservative) in consultation with relevant stakeholders, if necessary (e.g. undertake review of Extraction Plan). Written reporting as per Consent / relevant approvals
Surface water and Groundwater	-	- Refer dedicated TARP within the Airly Mine Water Management Plan (Airly Mine WMP) – Appendix 1 (TARPs)		

Aspect	Performance Criterion e.g., Consent Criteria / EIS Commitments	Condition Green (Operations within Predictions & Approved Impacts)	Condition Amber (Operations within Approved Impact Performance Measures but potentially exceeding predictions/designs)	Condition Red (Operations Exceed Approved Impact Performance Measures)
		<i>Continue Operations/Monitoring as Normal</i>	<i>Review Processes & Adaptive Management as Required</i>	<i>Adaptive Management Process Fully Engaged</i>
Aboriginal and Cultural Heritage Sites	Negligible ³ Environmental Consequences (Table 1, Condition 2 Schedule 3)	<p>No registered Aboriginal and Cultural Heritage sites located within Near-field / Extraction Area. One (1) site is located within the Extended/Far-field Monitoring and Management Area</p> <p>Whilst not expected a review of Aboriginal and Cultural Heritage management in the EP Area would be required under triggers related to performance criterion of Cliffs and Pagodas e.g. where potential for impact due to rockfall in the CLZ / Extended monitoring area. In such case this will be undertaken as per the measures described in the existing approved TARP's of the EP-ACHMP previously approved for the CLZ EP Area.</p> <p><i>Note: Other heritage sites located elsewhere within the Airly Mine development consent area are managed under the Airly Mine Western Region Historic Heritage Management Plan, including actions for managing discovery of any new sites.</i></p>		
		<p>No Historic Heritage sites are located within the EP Area (including within the Near-field / Principal Subsidence Management Area or the Extended/Far-field Monitoring and Management Area)</p> <p><i>Note: Other heritage sites located elsewhere within the Airly Mine development consent area are managed under management plans previously approved for the CLZ EP Area as well as the Airly Mine Western Region Historic Heritage Management Plan, including actions for managing discovery of any new sites.</i></p>		
Historic Heritage	Negligible ³ Environmental Consequences	<p>No Historic Heritage sites are located within the EP Area (including within the Near-field / Principal Subsidence Management Area or the Extended/Far-field Monitoring and Management Area)</p> <p><i>Note: Other heritage sites located elsewhere within the Airly Mine development consent area are managed under management plans previously approved for the CLZ EP Area as well as the Airly Mine Western Region Historic Heritage Management Plan, including actions for managing discovery of any new sites.</i></p>		

1) By law, pillar sizes must conform to minimum requirements set by Schedule 3 (High Risk Activities), Part 3 of Clause 15 (Formation of Non-Conforming Pillars) of the WHS (Mines and Petroleum Sites) Regulations 2014

2) PIS – Principal Inspector - Subsidence, NSW Department of Planning, Industry and Environment – NSW Resource Regulator (Mine Safety).

3) "Negligible" impact is defined by development consent SSD_5581 as "Small and unimportant, such as to be not worth considering". With respect to biodiversity monitoring specifically, for the purposes of this MW13-16 BMP negligible is defined as 'In the longer term being small and insignificant and causing little or no impact. Short term impacts may be greater than negligible but if they are of limited duration they may be negligible when considered over the longer term'.

Other General Notes:

- An integrated Subsidence Monitoring Program for MW13-16 (MW13-16 SMP) has been developed specifically for the current EP Area in consultation with the Independent Expert Panel (IEP), which systematically integrates information from underground, surface, and aerial monitoring. This includes (but is not limited to) survey and routine inspection of underground workings to insure panels and pillars are formed as designed, detailed aerial high resolution 3D photogrammetry, conventional and unconventional monitoring of ground movements; and targeted trigger-based investigation if required as per above actions / responses. Refer to the MW13-16 SMP (Appendix 7 of the EP Main Report) document for further details.
- Detailed mine design parameters and associated subsidence predictions are provided within the EP Main Report (see Section 3)