



***Environmental Protection Act 1986 (WA)***  
**Part IV Ministerial Statement**  
**Compliance Assessment Report**

**Ministerial Statement:** 1023

**Proposal:** Argyle Diamond Mine, Underground Project

**Report period:** 1 January – 31 December 2022

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## 1 Proposal and proponent details

<b>Proposal Title:</b>	To extend the Argyle Diamond Mine operations to develop an underground diamond mine and associated infrastructure – Shire of Wyndham – East Kimberley
<b>Statement Number:</b>	1023 (365)
<b>Proponent Name:</b>	Argyle Diamonds Limited
<b>Proponent's Australian Business Number:</b>	36 009 102 621

## 2 Statement of compliance details

<b>Reporting Period:</b>	1 January to 31 December 2022
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<b>Implementation phase(s) during reporting period:</b>							
Pre-construction	<input type="checkbox"/>	Construction	<input type="checkbox"/>	Operation	<input type="checkbox"/>	Decommissioning	<input checked="" type="checkbox"/>

<b>Were all implementation conditions and/or procedures of the Statement complied with within the reporting period?</b>			
No	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>

## 3 Audit table

Details of compliance with each condition under Ministerial Statement 1023 and each Key Characteristic are presented in Table 1 and Table 2 respectively. As per condition 7-2 of Ministerial Statement 365, compliance reporting for this statement is included as part of the environmental reporting obligations pursuant to the *Diamonds (Argyle Diamonds Mines Joint Venture) Agreement Act 1981*.

**Table 1: Audit table for Ministerial Statement 1023: Argyle Diamond Mine, Underground Project**

Audit Code	Subject	Requirement	How	Evidence	Phase	Timeframe	Status	Further Information
1023: M1-1	Proposal Implementation	When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Table 2 in Schedule 1, unless amendments to the proposal and the authorised extent of the proposal have been approved under the <i>Environmental Protection Act 1986</i> .	As documented and described in Schedule 1 of the Statement subject to the conditions and procedures of the Statement.	Compliance Assessment Report (CAR)	Overall	Ongoing.	C	Refer to Table 2.
1023: M2-1	Contact Details	The proponent shall notify the Chief Executive Officer (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.	As required, submit correspondence to the CEO informing of applicable change.	Relevant correspondence to the CEO if/when required	Overall	Ongoing.	NR	No change required during the report period.
1023: M3-1	Compliance Reporting	The proponent shall prepare, submit and maintain a Compliance Assessment Plan to the CEO at least six (6) months prior to the Compliance Assessment Report required by condition 3-6.	Prepare a compliance assessment plan (CAP) and compliance audit table (CAT- this document) in accordance with OEPA guidelines.	Compliance Assessment Plan (CAP), Compliance Audit Table (CAT) and correspondence indicating the submission of the CAP and CAT to the CEO	Overall	Submit the CAP and CAT to the CEO on or before 17 May 2016.	CLD	Submission of CAP and CAT on 17 May 2016. Approval of CAP and CAT received 7 June 2016. IFS #1082089.
1023: M3-2	Compliance Reporting	The Compliance Assessment Plan shall indicate: the frequency of compliance reporting; the approach and timing of compliance assessments; the retention of compliance assessments; the method of reporting of potential non-compliances and corrective actions taken; the table of contents of Compliance Assessment Reports; and public availability of Compliance Assessment Reports.	Prepare a compliance assessment plan (CAP) and compliance audit table (CAT- this document) in accordance with OEPA guidelines.	Compliance Assessment Plan (CAP) and Compliance Audit Table (CAT)	Overall	Submit the CAP and CAT to the CEO on or before 17 May 2016.	CLD	Submission of CAP and CAT on 17 May 2016. Approval of CAP and CAT received 7 June 2016. IFS #1082089.
1023: M3-3	Compliance Reporting	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.	Annual review of compliance and update of this Audit Table ("Status" and "Further Information" columns).	Compliance Assessment Report (CAR)	Overall	Submit CAR on or before 31 March annually, reporting on the previous calendar year (1 January – 31 December).	CLD	2021 CAR - CDM.04-0000-NH-REP-00010 submitted on 31 March 2022.
1023: M3-4	Compliance Reporting	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.	Maintain compliance assessment plans (CAP) and compliance assessment reports (CAR) in the Proponent's document management system.  Compliance assessments will be made publicly available as per the requirements of the OEPA's Post Assessment Guideline 4 – " <i>Making Information Publicly Available</i> ", published August 2012.	Correspondence outlining submissions and the ability to meet requests of the CEO	Overall	As requested by the CEO.	C	All documents are stored in the Proponent's electronic Document Management Systems: CAP - #1080213 2016 CAR - #1089033 2017 CAR - #1092613 2018 CAR - #1093869 2019 CAR - CDM.04-0000-NH-REP-00005 2020 CAR – CDM.04-0000-NH-REP-00009 2021 CAR - CDM.04-0000-NH-REP-00010  No requests for reports were received during the report period.

Audit Code	Subject	Requirement	How	Evidence	Phase	Timeframe	Status	Further Information
1023: M3-5	Compliance Reporting	The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.	Written correspondence to the CEO, notifying of any potential non-compliance with the conditions of Ministerial Statement 1023.	Written correspondence to the CEO, notifying of any potential non-compliance with the conditions of Ministerial Statement 1023.	Overall	Within seven days of the potential non-compliance being known	C	No non-compliances.
1023: M3-6	Compliance Reporting	The proponent shall submit to the CEO the Compliance Assessment Reports addressing compliance in the previous calendar year. The first Compliance Assessment Report shall be submitted twelve (12) months from the date of issue of this Statement and then annually, or as agreed in writing by the CEO. The Compliance Assessment Report shall: be endorsed by the proponent's chief executive officer or a person delegated to sign on the chief executive officer's behalf; include a statement as to whether the proponent has complied with the conditions; identify all potential non-compliances and describe corrective and preventative actions taken; be made publicly available in accordance with the approved Compliance Assessment Plan; and indicate any proposed changes to the Compliance Assessment Plan required by Condition 3-1.	Prepare and submit a Statement Compliance Assessment Report (CAR) annually, in accordance with the requirements of M3-6. Compliance Assessment Reports (CAR) will be made publicly available as per the requirements of the OEPA's Post Assessment Guideline 4 – <i>"Making Information Publicly Available"</i> , published August 2012.	Compliance Assessment Report (CAR). Correspondence showing ability to meet requests for relevant records.	Overall	Submit first CAR on or before 31 March 2016 addressing the period from the issue date of Ministerial Statement 1023 to 31 December 2015. Thereafter, submit CAR annually on or before 31 March to report on the previous calendar year (1 January – 31 December). Public availability requests to be completed within seven days of the Argyle HSE Superintendent receiving the request.	C	Approval from OEPA received 7 June 2016 to combine the report period from Statement issue date (17 November 2015) to 31 December 2016 and report submission due 31 March 2017. IFS #1082089. 2021 CAR report submitted by 31 March 2022. No requests for reports were received during the report period.
1023: M4-1	Public Availability of Plans and Reports	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.	Requested environmental plans and or reports will be made publicly available as per the requirements of the OEPA Post Assessment Guideline 4 – <i>"Making Information Publicly Available"</i> , published August 2012.	Correspondence showing ability to meet requests for relevant records.	Overall	Public availability requests to be completed within seven days of the Argyle Environment department receiving the request, subject to condition M4-2.	NR	No requests for environmental plans or reports were received during the report period.
1023: M4-2	Public Availability of Plans and Reports	If any parts of the plans and reports, referred to in condition 4-1 contains particulars of: a secret formula or process; or 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.	As required by condition M4-2, correspondence to the CEO will be provided for approval to not make the information requested under condition M4- 1 publicly available.	As required, correspondence to the CEO	Overall	As required.	NR	No requests for environmental plans or reports were received during the report period.
1023: M5-1	Argyle Diamond Environmental Management Programme	The proponent shall update the Argyle Diamond Environmental Management Programme, to the requirements of the CEO, within six (6) months of the date of issue of this Statement. The Environmental Management Programme shall consist of the following Environmental Management Plans: Water (Groundwater and Surface Water) Acid Rock Drainage Air Quality Flora and Vegetation	Update the 'Environmental Management Programme' as detailed in M5-1.	Environmental Management Programme (EMP), and correspondence indicating the submissions of the EMP to the CEO	Overall	Submit the Environmental Management Programme to the CEO on or before 17 May 2016.	CLD	EMP submitted 17 May 2016 and approved 8 September 2016 (IFS #1049951. EPA – AC05- 2016-0007). Closure EMP submitted 18 August 2021 and is currently awaiting approval.

Audit Code	Subject	Requirement	How	Evidence	Phase	Timeframe	Status	Further Information
		<p>Fauna (Terrestrial, Subterranean and Aquatic)</p> <p>Non Mineral Waste</p> <p>Hazardous Waste Materials and Contamination Control</p> <p>Weed Management and</p> <p>Noise and Vibration</p> <p>Each Environmental Management Plan shall include:</p> <p>the specific environmental objectives and criteria for each environmental factor;</p> <p>the management measures to be applied to avoid and minimise the environmental impacts of the proposal;</p> <p>monitoring methods to measure the performance of management actions against trigger criteria and threshold criteria; and</p> <p>trigger level management actions and contingency actions to mitigate impacts.</p>						
1023: M5-2	Argyle Diamond Environmental Management Programme	The Proponent shall implement the most recent approved Argyle Diamond Environmental Management Programme and continue implementation until otherwise agreed by the CEO.	Implement the 'Environmental Management Programme' as detailed in M5-1.	Environmental Management Programme (EMP) with annual reviews of implementation and subsequent performance within the Compliance Assessment Report (CAR)	Overall	Environmental Management Programme implemented from CEO approval date and ongoing throughout project.	C	All objectives within EMP conducted since approval date. Refer to Table 3.
1023: M5-3	Argyle Diamond Environmental Management Programme	Revisions to the Argyle Diamond Environmental Management Programme may be approved by the CEO.	Revise the 'Environmental Management Programme' as detailed in M5-1 as required.	Environmental Management Programme (EMP) revisions, and correspondence indicating the submissions of the EMP revisions to the CEO	Overall	As required	CLD	EMP Rev4 was approved by DWER on 28 May 2020.
1023: M5-4	Argyle Diamond Environmental Management Programme	The proponent shall implement the most recent approved revisions of the Argyle Diamond Environmental Management Programme required by condition 5-1.	Implement the 'Environmental Management Programme' as detailed in M5-1.	Environmental Management Programme (EMP) with annual reviews of implementation and subsequent performance within the Compliance Assessment Report (CAR)	Overall	Environmental Management Programme implemented from revision approval date and ongoing throughout Project.	C	Actions within EMP conducted since approval date. Refer to Table 3.
1023: M6-1	Wesley Springs Management Plan	The objective of the Wesley Springs Management Plan is to ensure the proposal is implemented in a manner such that the integrity of surface water ecosystems (flow regimes, water quality and ecosystem health) are maintained.	Implement the 'Wesley Springs Management Plan' as detailed in M6-3.	Wesley Springs Management Plan with annual reviews of implementation and subsequent performance within the Compliance Assessment Report (CAR)	Overall	Ongoing	C	Actions within the Wesley Springs MP conducted since approval date. There have been no exceedances of trigger or threshold values. Refer to Table 3.
1023: M6-2	Wesley Springs Management Plan	The proponent shall update the Wesley Springs Management Plan, in consultation with the Department of Water, to the requirements of the CEO, within 12 months of the date of issue of this Statement to demonstrate the requirements of condition 6-1 have been met.	Update the 'Wesley Springs Management Plan' as detailed in M6-3.	Wesley Springs Management Plan, and correspondence indicating the submissions to the CEO	Overall	Submit the Wesley Springs Management Plan to the CEO on or before 17 November 2016.	CLD	Wesley Springs MP revision submitted Feb 2016 (IFS #284330, EPA - 1AC05-2016-0847).

Audit Code	Subject	Requirement	How	Evidence	Phase	Timeframe	Status	Further Information
1023: M6-3	Wesley Springs Management Plan	The updated version of the Wesley Springs Management Plan shall include the following measures: a response strategy, including appropriate response actions, in the event that condition 6-1 has not been met; a risk assessment of potential unacceptable impacts of the proposal on Wesley Springs; an update of existing mathematical models of the proposal's potential impacts on Wesley Springs; and trigger levels for commencement of the response strategy referred to in condition 6-3(1) in the event of unacceptable environmental impacts of the proposal on Wesley Springs.	Update the 'Wesley Springs Management Plan' as detailed in M6-3.	Wesley Springs Management Plan, and correspondence indicating the submissions to the CEO	Overall	Ongoing	CLD	Wesley Springs MP revision submitted Feb 2016 (IFS #284330, EPA - 1AC05-2016-0847).
1023: M6-4	Wesley Springs Management Plan	The proponent shall implement the most recent approved Wesley Springs Management Plan and continue implementation until otherwise agreed by the CEO.	Implement the 'Wesley Springs Management Plan' as detailed in M6-3.	Wesley Springs Management Plan with annual reviews of implementation and subsequent performance within the Ministerial Statement Compliance Assessment Report (CAR)	Overall	Wesley Springs Management Plan implemented with CEO approval June 2018; ongoing implementation	C	Actions within the Wesley Springs MP conducted since approval date. There have been no exceedances of trigger or threshold values. Wesley Springs MP requires continuous monitoring of groundwater levels. Refer to Table 3.
1023: M6-5	Wesley Springs Management Plan	Revisions to the Wesley Springs Management Plan may be approved by the CEO.	Revise the 'Wesley Springs Management Plan' as detailed in M6-3.	Wesley Springs Management Plan revisions, and correspondence indicating the CEO approval	Overall	As required	C	Wesley Springs MP revision (EMP Rev 4) submitted to the OEPA Oct 2016 (IFS #1049951, EPA - 1AC05-2016-0847). Approved May 2020.
1023: M6-6	Wesley Springs Management Plan	The proponent shall implement the most recent approved revisions of the Wesley Springs Management Plan required by condition 6-1.	Implement the 'Wesley Springs Management Plan' as detailed in M6-3.	Wesley Springs Management Plan with annual reviews of implementation and subsequent performance within the Compliance Assessment Report (CAR)	Overall	Wesley Springs Management Plan implemented from revision approval date and ongoing throughout project.	C	Refer to Table 3.
1023: M7-1	Rehabilitation and Decommissioning	The proponent shall ensure that the mine is decommissioned and rehabilitated in an ecologically sustainable manner.	Prepare and implement the Argyle Diamond Mine Closure Plan, as detailed under M7-2.	Argyle Diamonds Mine Closure Plan with annual reviews of implementation and subsequent performance within the Compliance Assessment Report (CAR)	Overall	Ongoing	C	A revised Argyle Diamond Mine Closure Plan (MCP) has been submitted for CEO approval (August 2021) following extensive stakeholder engagement.  Comments were received from regulatory agencies during 2022 and ADL provided a consolidated response to all comments received in November 2022. Company representatives met with JTSI and DWER on 7 March 2023 where it was agreed that the stakeholder engagement section of the MCP needed to be updated in light of recent revisions to the Traditional Owner engagement before it could be approved. Revision of the MCP is currently underway and scheduled for re-submission by June 2023.

Audit Code	Subject	Requirement	How	Evidence	Phase	Timeframe	Status	Further Information
1023: M7-2	Rehabilitation and Decommissioning	The proponent shall implement the proposal in accordance with the "Argyle Diamond Mine Closure Plan, Argyle Diamonds Limited, December 2014", or subsequent revisions approved by the CEO.	Implement the Argyle Diamond Mine Closure Plan	Annual reviews of the implementation and subsequent performance against the Argyle Diamonds Mine Closure Plan within the Compliance Assessment Report (CAR)	Overall	Ongoing	C	<p>A revised Argyle Diamond Mine Closure Plan (MCP) has been submitted for CEO approval; the MCP includes updates on remediation activities and performance to date.</p> <p>Comments were received from regulatory agencies during 2022 and ADL provided a consolidated response to all comments received in November 2022. Company representatives met with JTSI and DWER on 7 March 2023 where it was agreed that the stakeholder engagement section of the MCP needed to be updated in light of recent revisions to the Traditional Owner engagement before it could be approved. Revision of the MCP is currently underway and scheduled for re-submission by June 2023.</p>
1023: M7-3	Rehabilitation and Decommissioning	The Mine Closure Plan required by condition 7-2, and its subsequent revisions, shall: when implemented, manage the implementation of the proposal to meet the requirements of condition 7-1; be prepared in accordance with the Guidelines for Preparing Mine Closure Plans, May 2015 (Department of Mines and Petroleum and Environmental Protection Authority) or its revisions; and be prepared to the requirements of the CEO on advice of the Department of Mines and Petroleum.	Prepare and implement the Argyle Diamonds Mine Closure Plan, as detailed under M7-2, in accordance with DMP and OEPA guidelines.	Argyle Diamonds Mine Closure Plan with annual reviews of implementation and subsequent performance within the Compliance Assessment Report (CAR). Correspondence indicating implementation of DMP advice.	Overall	Ongoing	C	<p>A revised Argyle Diamond Mine Closure Plan (MCP) that adheres to Guidelines has been submitted for CEO approval (August 2021); the MCP includes updates on remediation activities and performance to date.</p> <p>Comments were received from regulatory agencies during 2022 and ADL provided a consolidated response to all comments received in November 2022. Company representatives met with JTSI and DWER on 7 March 2023 where it was agreed that the stakeholder engagement section of the MCP needed to be updated considering recent revisions to the Traditional Owner engagement before it could be approved. Revision of the MCP is currently underway and scheduled for re-submission by June 2023.</p>
1023: M7-4	Rehabilitation and Decommissioning	The proponent shall implement the most recent approved revisions of the Mine Closure Plan required by condition 7-2.	Implement revisions to the Mine Closure Plan if/when required following approval from the CEO	Annual reviews and subsequent performance against the Argyle Diamonds Mine Closure Plan within the Compliance Assessment Report	Overall	Ongoing	C	<p>A revised Argyle Diamond Mine Closure Plan (MCP) has been submitted for CEO approval (August 2021); the MCP includes updates on remediation activities and performance to date.</p> <p>Comments were received from regulatory agencies during 2022 and ADL provided a consolidated response to all comments received in November 2022. Company representatives met with JTSI and DWER on 7 March 2023 where it</p>

Audit Code	Subject	Requirement	How	Evidence	Phase	Timeframe	Status	Further Information
								was agreed that the stakeholder engagement section of the MCP needed to be updated in light of recent revisions to the Traditional Owner engagement before it could be approved. Revision of the MCP is currently underway and scheduled for re-submission by June 2023.

**Table 1 Notes:**

- Phases that apply in this table: Pre-Construction, Construction, Operation, Decommissioning and Overall.
- Code prefixes: M = Minister's condition, P = Proponent's commitment.
- Acronyms: CAP = Compliance Assessment Plan; CEO = Chief Executive Officer of DWER; OEPA = Office of the Environmental Protection Authority, DWER = Department of Water and Environmental Regulation.
- Compliance Status: C = Compliant, CLD = Completed, PNC = Potentially non-compliant, NC = Non – compliant, NR = Not required at this stage.

**Table 2: Key Characteristics for Ministerial Statement 1023: Argyle Diamond Mine, Underground Project**

<b>Element</b>	<b>Authorised Extent</b>	<b>Status</b>	<b>Further information</b>
Mining depth	Maximum of 675 metres	C	480 Meters
Major project components	Temporary ore and waste stockpiles; Dewatering system; Tails storage facility (TSF2); Reclaim pond (RCP3).	C	TSF2 and RCP3 not constructed
Total ore production	Stage 1 – 60Mt (approximately) Stage 2 – 37Mt (approximately)	C	Stage 1 – 36Mt Stage 2 – Not Constructed
Ore processing	Through existing processing plant at around 8Mtpa for Stage 1 and 4.5Mtpa for Stage 2	C	Stage 1 – Approximately 5.7Mt Stage 2 – Not constructed
Total waste rock over project life	4.3Mt (approximately)	C	1.16Mt
Dewatering requirements	Up to 9GL/a	C	No dewatering during reporting period
Crater area	Mostly within the existing open pit and waste rock dump area	C	Aerial photo available on request
Tailings	100Mt (approximately)	C	35.4Mt
TSF2 area of disturbance	Up to 126ha	NR	Not constructed
RCP3 area of disturbance	Up to 133ha	NR	Not constructed
Underground mine water requirements	700kL/day	C	0 kL/day – Mine Closure ceased water use December 2020
Processing water requirements	12,000 – 22,000kL/day	C	0 kL/day – Mine Closure ceased water use December 2020
Water supply	From dewatering operations, Gap Dam, Upper Limestone, Creek Waste Rock Dump Seepage Retention Dam, Reclaim Ponds, and if necessary, Lake Argyle.	C	Water flow schematic available on request.
Power supply	Ord Hydroelectric Scheme, with the deficit to be provided by the onsite diesel power station.	C	5,656MWh

## **4 Management and monitoring commitments of key environmental factors**

The below information summarises the commitments made within the Environmental Management Programme associated with the Key Environmental Factors identified in Ministerial Statement 1023: Argyle Diamond Mine, Underground Project.

## 4.1 Environmental Management Program

### 4.1.1 Management and monitoring commitments

The below table summarises the management and monitoring commitments associated with Environmental Management Program required by Ministerial Statement 1023.

**Table 3: Management and monitoring commitments associated with the Environmental Management Plan**

Objectives	Condition environmental outcome and threshold and trigger criteria set in the EMP	Status
<p><b>Groundwater &amp; Surface Water</b></p> <p>To maintain the hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance, are protected.</p> <p>To maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected.</p>	<p><b>Surface Water Trigger criteria:</b></p> <p>Water quality (annual median) measured at the nominated downstream monitoring station exceeds:</p> <p>Limestone (LCSPRGS)</p> <ul style="list-style-type: none"> <li>• EC: 1600 µS/cm</li> <li>• pH: 6-8.4</li> <li>• Mg: 130 mg/L</li> <li>• SO4: 690 mg/L</li> <li>• NO3: 9.3 mg/L</li> </ul> <p>Wesley Creek (WGS3)</p> <ul style="list-style-type: none"> <li>• EC: 900 µS/cm</li> <li>• pH: 6 – 7.5</li> <li>• Mg: 40 mg/L</li> <li>• SO4: 260 mg/L</li> <li>• NO3: 9.3 mg/L</li> </ul> <p>Smoke Creek (AGS)</p> <ul style="list-style-type: none"> <li>• EC: 580 µS/cm</li> <li>• pH: 6 – 7.5</li> <li>• Mg: 40 mg/L</li> <li>• SO4: 260 mg/L</li> <li>• NO3: 9.3 mg/L</li> </ul> <p>Less than 120 consecutive days of no flow (0 m3/s total daily discharge) is recorded in any one year as measured at the LCSPRGS, WGS3 or AGS monitoring stations.</p>	<p>Trigger criteria stated in the closure EMP exceeded for multiple analytes at LCSPRGS, WGS3 and AGS.</p> <p>2022 investigation is ongoing to analyse result trends alongside continued sampling and analysis as per the Closure EMP requirements.</p>

Objectives	Condition environmental outcome and threshold and trigger criteria set in the EMP	Status
	<p><b>Surface Water Threshold Criteria:</b>  Water quality (annual median) measured at the nominated downstream monitoring station exceeds:</p> <p>Limestone (LCSPRGS)</p> <ul style="list-style-type: none"> <li>• EC: 2000 µS/cm</li> <li>• pH: 5.7-8.7</li> <li>• Mg: 160 mg/L</li> <li>• SO4: 890 mg/L</li> <li>• NO3: 24 mg/L</li> </ul> <p>Wesley Creek (WGS3)</p> <ul style="list-style-type: none"> <li>• EC: 1080 µS/cm</li> <li>• pH: 5.7-8.0</li> <li>• Mg: 60 mg/L</li> <li>• SO4: 350 mg/L</li> <li>• NO3: 24 mg/L</li> </ul> <p>Smoke Creek (AGS)</p> <ul style="list-style-type: none"> <li>• EC: 770 µS/cm</li> <li>• pH: 5.7-8.0</li> <li>• Mg: 60 mg/L</li> <li>• SO4: 350 mg/L</li> <li>• NO3: 24 mg/L</li> </ul> <p>Less than 90 consecutive days of no flow (0 m3/s total daily discharge) is recorded in any one year as measured at the LCSPRGS, WGS3 or AGS monitoring stations.</p>	
<p><b>Acid Rock Drainage</b>  To maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected.</p>	<p>Trigger criterion: As per surface water above  Threshold criterion: As per surface water above</p>	<p>Environmental outcome achieved.</p>

Objectives	Condition environmental outcome and threshold and trigger criteria set in the EMP	Status
<p><b>Fauna</b> To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.</p>	<p>Trigger criterion: As per groundwater and surface water above &gt;3 preventable terrestrial fauna death per month Threshold criterion: As per groundwater and surface water above &gt;5 preventable terrestrial fauna death per month</p>	<p>Environmental outcome achieved.</p>
<p><b>Weed Species</b> To maintain representation, diversity, viability and ecological function at the species, population and community level.</p>	<p>Trigger criterion: Occurrence of a non-significant exotic species not previously found on site A coverage increase of &gt;25% of a previously recorded Declared plant species Threshold criterion: Occurrence of a Declared exotic species not previously found on site A coverage increase of &gt;50% of a previously recorded Declared plant species</p>	<p>Environmental outcome achieved.</p> <p>Note: <i>Cryptostegia grandiflora</i> (Rubber Vine) continued to be monitored in 2022. Refer to section 4.1.2.1 below for details.</p>
<p><b>Wesley Springs</b> To ensure the proposal is implemented in a manner such that the integrity of surface water ecosystems (flow regimes, water quality and ecosystem health) are maintained.</p>	<p>Trigger criterion:</p> <ul style="list-style-type: none"> <li>• Groundwater levels (annual average) in the Wesley Springs bore monitoring network show a decreasing trend (accounting for rainfall variation) over a period of two years.</li> <li>• Groundwater depth &gt;40 m below ground level.</li> </ul> <p>Threshold criterion:</p> <ul style="list-style-type: none"> <li>• Groundwater levels (annual average) in the Wesley Springs bore monitoring network show a decreasing trend (accounting for rainfall variation) over a period of four years.</li> <li>• Groundwater depth &gt;50 m below ground level.</li> </ul>	<p>Environmental outcome achieved.</p>

## **4.1.2 Results, analysis, and interpretation**

### **4.1.2.1 Weed Species**

*Cryptostegia grandiflora* (*C. grandiflora*, Rubber Vine) was discovered on the Argyle Diamond Mine (ADM) lease in 2019. *C. grandiflora* is a declared pest in Western Australia with a rating of “Prohibited – s12 (C2 Prohibited)” by the Department of Primary Industries and Regional Development (DPIRD). DPIRD issued ADM a Pest Control Notice (PCN) under Section 31 of the Biosecurity and Agricultural Management Act in 2019 and 2020. The seed viability for Rubber Vine is multiple years, therefore it was expected that rubber vine would be recurring on the ADM lease and DPIRD indicated that PCN's were likely to be issued annually.

ADM is committed to ongoing eradication of this species on the ADM lease and, following the outcome of the 2020 PCN inspection, ADM engaged a professional weed management contractor to conduct an extended survey and control program along Limestone Creek, from the edge of the mine footprint to the lease boundary in, as requested by DPIRD. The appointed weed contractor completed weed control activities during September and November in 2022. No rubber vine was found by the contractor in 2022.

An Eradication Plan has been developed for this species as part of the closure Weed Action Strategy Plan. Formal weed surveys will continue to be performed every 2 years during closure execution and area inspections by Traditional Owner rangers have been implemented and are ongoing.

### **4.1.2.2 Wesley Spring Groundwater Depth Monitoring**

The EMP for MS1023 includes a Wesley Springs Management Plan (EMP5) that requires continuous measurement of groundwater depth at nine bores. A bore census was conducted in 2019 reducing the number of bores monitored to 7 as WB1S and WB7D were dry and blocked, respectively. This change was submitted to DWER as part of the Closure EMP in August 2021. No dewatering operations have been undertaken since November 2020, resulting in no impact to Wesley Springs.

The environmental monitoring bores at Wesley Spring have been monitored for water level at set frequencies upon commencement of the Underground Project in 2005. The impact modelling completed on the Underground Project has determined that Wesley Spring and the surrounding area would not be affected by the Underground Project's dewatering activities. Wesley Spring groundwater level is currently monitored via continuous satellite telemetry in seven bores (WB1D-R, WB2S, WB4D, WB5S, WB6D, WB57S and WB59D).