

# **2022 INDEPENDENT ENVIRONMENTAL AUDIT**

**Hunter Valley Operations** 



#### REPORT

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#### Approval for issue

Ian Richardson

30 June 2023

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# INDEPENDENT AUDIT REPORT DECLARATION FORM

Independent Audit Report Declaration Form		
Project Name	Hunter Valley Operations	
Consent Number PA 06_0261 (HVO South) and DA 450-10-2003 (HVO North) as more		
Description of Project	In accordance with Schedule 5, Condition 5 of PA06_0261 as modified (the approval) and Schedule 5, Condition 10 of DA450-10-2003 as modified (the consent), HVO is required to conduct an Independent Environment Compliance audit every three years.	
Project Address	1011 Lemington Road, Ravensworth NSW 2330	
Proponent	Hunter Valley Operations Pty Limited	
Title of Audit	Independent Environmental Audit 2022 – HVO	
Date 30 June 2023		

I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:

- i. the Audit has been undertaken in accordance with relevant condition(s) of consent and the Independent Audit Compliance Requirements (Department 2019);
- ii. the findings of the Audit are reported truthfully, accurately and completely;
- iii. I have exercised due diligence and professional judgement in conducting the Audit;
- iv. I have acted professionally, objectively and in an unbiased manner;
- I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the Audit, or by relationship as spouse, partner, sibling, parent, or child;
- vi. I do not have any pecuniary interest in the Audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child;
- vii. neither I nor my employer have provided consultancy services for the Audited project that were subject to this Audit except as otherwise declared to the Department prior to the Audit; and
- viii. I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for Auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

#### Notes:

- a. Under section 10.6 of the Environmental Planning and Assessment Act 1979 a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an Audit Report produced to the Minister in connection with an Audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information in) a report of monitoring data or an Audit Report produced to the Minister in connection with an Audit if the person knows that the information in (or provide information for inclusion in) a report of monitoring data or an Audit Report produced to the Minister in connection with an Audit if the person knows that the information is materially relevant to the monitoring or Audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- The Crimes Act 1900 contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both).

Name of Auditor	Ian Richardson
Signature	
	S
Qualification	Bachelor of Environmental Science
	Exemplar Global Certified Lead Auditor – Environmental Management Systems (ISO 14001)
Company	RPS APP Consulting Pty Ltd
Company Address	RPS Newcastle – Unit 2A, 45 Fitzroy Street, Carrington NSW 2294

# **EXECUTIVE SUMMARY**

RPS AAP Consulting Pty Ltd (RPS) was engaged by Hunter Valley Operations Pty Ltd (HVO) to conduct an Independent Environmental Audit (IEA) of HVO located in the Hunter Valley, New South Wales. HVO operates under two (2) development consents being DA 450-10-2003 that covers HVO North and PA 06\_0261 that cover HVO South (the consents).

The IEA is required as per Schedule 5, Condition 10 of DA 450-10-2003 as modified and Schedule 5, Condition 5 of PA 06\_0261 as modified, as issued by the Department of Planning and Environment (DPE) which requires HVO to conduct an IEA every three years.

The previous IEA carried out at the site was conducted for the period of 1 November 2016 to 1 December 2019 with the audit period to which this audit applies being inclusive of the period from 2 December 2019 to 30 November 2022. This report presents the findings of the audit. The IEA was undertaken in general accordance with:

- The Department's Post-approval requirements for State Significant Developments Independent Audit Guideline (Independent Audit Guideline, 2015).
- The Department's Post-approval requirements for State Significant Developments Independent Audit Guideline, May 2020 (Independent Audit Guideline, 2020).
- AS/NZS ISO 19011:2018 Guidelines for auditing management systems.
- RPS's proposal.

The RPS audit team was approved by the Department on 28 August 2022. A copy of the approval letter is located in **Appendix A**. The site inspection was conducted from 28 to 30 November 2022, with RPS's rehabilitation specialist attending site on 6 December 2022.

The IEA identified a total of 16 non-compliances against PA 06\_0261, DA 450-10-2003, EPL 640, and reviewed mining leases during the audit period.

Approval	Total No. of Conditions	Compliant	Non-Compliant	Not Triggered
PA 06_0261	104	66	7	31
DA 450-10-2003	121	90	8	23
EPL 640	124	105	2	17

#### Table 1Summary of Audit Findings

The site operates under an approved Environmental Management Strategy, and observations during the site inspection demonstrated good overall environmental management practices. The use of CMO Compliance Management Software (CMO) provides a robust and proactive approach to environmental management of the site.

Positive observations were noted with respect to air quality and noise management through the use of predictive met data and real time monitoring to implement controls suitable to changing conditions and activities. The use of aerial seeding was noted as a good initiative for the reduction of wind generated dust from stockpiles.

Substantial improvement to the surface water management system was noted with the implementation of the pipe burst detection system and water level monitoring on key water infrastructure. This provides assurance in the capture of offsite discharges, improved data inputs to the site water balance and enables better management of water volumes across site to reduce the chance of off-site discharges.

The rehabilitation program on site is very well organised, with robust systems to track aspects from the ground disturbance permit (GDP) process through to post rehabilitation monitoring. Areas not subject to active mining were being rehabilitated, with temporary seeding of inactive areas and stockpiles in place.

The CHPP, Workshops and other infrastructure were in good condition and well managed, with waste segregation, pollution controls and bunding in place and effective.

# **GLOSSARY OF TERMS**

Abbreviation	Description	
Annual Review	The review required by condition 4 of Schedule 5 of PA06_0261 and condition 9 of Schedule 6 DA450-10-2003	
Applicant	HV Operations PTY LTD, or any person carrying out any development under this consent	
Approved Disturbance Area	The area identified as such within Figure 1	
ARTC	Australian Rail Track Corporation	
Ashton Open Cut Mine	Ashton Open Cut Mine as approved under project approval MP 08_0182 for the Ashton South East Open Cut Project, as modified	
BCA	Building Code of Australia	
BCD	Biodiversity & Conservation Division within the Department	
CCC	Community Consultative Committee	
CHPP	Coal handling and preparation plant	
Conditions of this consent	Conditions contained in Schedules 2 to 5 (inclusive) of this document	
Council	Singleton Shire Council	
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays	
Department	NSW Department of Planning and Environment	
Development	The development described within the documents listed in condition 2 of Schedule 2	
Development Layout	The general layout of the development, as shown in Figure 1 of Appendix 2	
DPE Water	Water Group within the Department	
DSC	Dams Safety Committee	
EPA	Environment Protection Authority	
EP&A Act	Environmental Planning and Assessment Act 1979	
EP&A Regulation	Environmental Planning and Assessment Regulation 2021	
EPL	Environment Protection Licence issued under the Protection of the Environment Operations Act 1997	
EPL 640	Environment Protection Licence No. 640 issued for HVO's operations north of the Hunter River or any subsequent replacement for, or variation of, EPL 640	
Evening	The period from 6pm to 10pm	
Feasible	Means what is possible and practical in the circumstances	
Heritage NSW	Heritage NSW within the Department	
HVGC	Hunter Valley Gliding Club Co-operative Limited	
HVO	The Applicant's mining complex known as Hunter Valley Operations	
HVO North	The Applicant's activities and facilities at its HVO mining complex located north of the Hunter River	
HVO South	The Applicant's activities and facilities at its HVO mining complex located south of the Hunter River	
Incident	An occurrence or set of circumstances that:	
	<ul> <li>causes, or threatens to cause material harm to the environment, or</li> </ul>	
	results in non-compliance with this consent	
Land	Has the same meaning as the definition of the term in section 4 the EP&A Act, except for where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent	
Lemington underground mine	The underground mine workings identified in THE APPROVAL	
LCPP	Lemington coal preparation plant	

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Abbreviation	Description	
Material harm	Is harm to the environment that:	
	<ul> <li>involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or</li> </ul>	
	<ul> <li>results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> </ul>	
	This definition excludes "harm" that is authorised under either this consent or any other statutory approval	
Mine water	Water that accumulates within active mining areas, coal reject emplacement areas, tailings dams and infrastructure areas (excluding sedimentation dams)	
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development	
Mining Operations	The removal and emplacement of topsoil and overburden, and the extraction, processing, and transportation of coal carried out on site	
Minister	NSW Minister for Planning, or delegate	
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring	
Modification Report (MOD 6)	Modification Report titled Proposed Modular Ammonium Nitrate Emulsion Plan Modification Report dated July 2021 and the Submissions Report dated September 2021	
Modification Report (MOD 7)	Modification Report titled MTW/HVO Lemington Underground Mine Water	
	Storage Project, Modification Report dated September 2021 and the Submissions Report dated December 2021, and associated response titled MTW-HVO Lemington Underground Water Storage Modifications (MP06_0261 MOD 7 AND SSD-6464 MOD 2) – Response To Additional Information Request dated 15 March 2022.	
Negligible	Small and unimportant, such as to be not worth considering	
NPWS	National Parks and Wildlife Service	
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays	
NOHSC	National Occupational Health and Safety Commission	
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent	
Planning Secretary	Planning Secretary of the Department, or nominee	
POEO Act	Protection of the Environment Operations Act 1997	
Privately-owned land	Land that is not owned by a public authority, or a mining company (or its subsidiary)	
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements	
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting	
Resources Regulator	NSW Resources Regulator	
ROM	Run-of-Mine	
SANSW	Subsidence Advisory NSW (formerly the Mine Subsidence Board)	
Site	The land listed in Appendix 1 and outlined in pink in Figure 1 of Appendix 1	
Statement of Commitments	The Applicant's commitments in Chapter 16 of EA (Mod 5)	
TfNSW	Transport for NSW	
Wambo Mine	Wambo Mine as approved under development consent DA 305-7-2003, as modified, and its associated rail facilities as approved under development consent DA 177-8-2004, as modified	

Abbreviation	Description
Warkworth Mine	Warkworth Mine as approved under development consent SSD-6464 for the Warkworth Continuation Project, as modified
Warkworth Mine EIS	The Environmental Impact Statement titled Warkworth Continuation Project 2014 Environmental Impact Statement (6 volumes) dated June 2014, and associated response to submissions titled Warkworth Continuation 2014 Response to Submissions (2 volumes) dated 10 November 2014, and associated response titled Warkworth Continuation 2014 Response to Planning Assessment review report dated 20 March 2015

# 1 INTRODUCTION

RPS AAP Consulting Pty Ltd (RPS) was engaged by Hunter Valley Operations Pty Ltd (HVO) to conduct an Independent Environmental Audit (IEA) of HVO located in the Hunter Valley, New South Wales. HVO operates under two (2) development consents being DA 450-10-2003 that covers HVO North and PA 06\_0261 that cover HVO South (the consents).

The IEA is required as per Schedule 5, Condition 10 of DA 450-10-2003 as modified and Schedule 5, Condition 5 of PA 06\_0261 as modified, as issued by the Department of Planning and Environment (DPE) which requires HVO to conduct an IEA every three years.

The previous IEA carried out at the site was conducted for the period of 1 November 2016 to 1 December 2019 with the audit period to which this audit applies being inclusive of the period from 2 December 2019 to 30 November 2022. This report presents the findings of the audit.

# 1.1 Background of the project

HVO is situated in the Upper Hunter Valley between Singleton and Muswellbrook, approximately 24 km northwest of Singleton, and approximately 100 km northwest of Newcastle. The Hunter River geographically divides HVO into HVO North (DA 450-10-2003) and HVO South (PA\_06\_0261); however, they are integrated operationally with personnel, equipment, materials, and management plans utilised as required. This improves operational efficiency, rationalisation of infrastructure and resource utilisation.

HVO is a jointly controlled operation through a Joint Venture (JV) between Glencore (49%) and Yancoal (51%). The regional context and layout of the HVO pits and facilities are shown in Figure 1 and Figure 2 respectively.

### 1.1.1 HVO North - DA 450-10-2003

Hunter Valley Operations - North Modification 7

Issue Date: 28/07/2017

Expiry Date: 12/06/2025

HVO West Pit Extension & Minor Modifications (2003); and associated modifications.

MOD 7 approved July 2017.

Covers West Pit (approved production limit of 12mtpa), Carrington Pit (approved production limit of 10mtpa), HVCHPP (approved processing limit of 20mtpa) and WCHPP (approved processing limit of 6mtpa).

### 1.1.2 HVO South - PA 06\_0261

Hunter Valley Operations - South Coal Project & associated modifications

Issue Date: 26/11/2021

Expiry Date: 24/03/2030

MOD 6 Approved 26 November 2021

Permits onsite Manufacturing of Ammonium Nitrate Emulsion.

MOD 5 approved February 2018

The modification covered:

- the progression of mining to the base of the Bayswater seam from Cheshunt Pit into Riverview Pit, and to the base of the Vaux seam in South Lemington Pit 2.
- increased overburden emplacement height in some areas to 240m AHD and incorporation of micro-relief
- extraction rate increase from 16Mpta to 20Mtpa of ROM coal at peak production and increased processing rate from 16Mpta to 20Mtpa of ROM coal across HVO coal preparation plants.

# 1.1.3 Mining Leases

RPS was requested by the NSW Resource Regulator to assess compliance against the relevant environmental management conditions of the following mining leases:

- CCL 714 (1973)
- ML 1526 (1992)
- CCL 755 (1973)
- ML 1560 (1992)
- CL 327 (1973)
- ML 1589 (1992)
- CL 359 (1973)
- ML 1622 (1992)
- CL 360 (1973)
- ML 1634 (1992)
- CL 398 (1973)
- ML 1682 (1992)
- CL 584 (1973)
- ML 1704 (1992)
- CML 4 (1992)
- ML 1705 (1992)
- ML 1324 (1992)

• ML 1337 (1992) ML 1707 (1992) • ML 1359 (1992) ML 1710 (1992) ML 1406 (1992) ML 1732 (1992) ML 1428 (1992) ML 1734 (1992) ML 1465 (1992) ML 1748 (1992) ML 1474 (1992) ML 1753 (1992) ML 1482 (1992) ML 1810 (1992) ML 1500 (1992) ML 1811 (1992)

ML 1706 (1992)

The IEA was required to assess compliance against the relevant environmental management conditions of the mining leases up to 1 July 2022, including the mining operations plan.

From 2 July 2022, the IEA is required to provide an assessment of compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016.

### 1.1.4 Environment Protection Licence

HVO operates under Environment Protection Licence (EPL) 640, with an anniversary date of 1 April. Monitoring results are reported to the EPA as part of the HVO EPL The monitoring data is available on the HVO website with the Annual Returns being provided by HVO upon request.

# **1.2 Operations During the Audit Period**

Open cut mining continued at HVO North and South during the reporting period. Truck, dragline, and shovel mining methods are used to handle overburden and coal, following pre-strip and drilling and blasting activities. The mine operated 24 hours a day, seven days a week, and currently supports approx. 1500 jobs. The general site layout is presented in **Figure 1** below. The mining equipment fleet employed to carry out mining operations at HVO in 2021 and forecasted for use in 2022 (as reported in the 2021 Annual Environment Review) is detailed in **Table 2** below.

#### Table 2HVO Equipment Used 2021 and forecasted in 2022

Equipment	Number Used in 2021	Forecast Numbers in 2022
Scrapers	2	2
Drills	7	8
Draglines	2	1
Shovels	3	3
Excavators	7	10
Trucks	73	84
Loaders	6	7
Service Trucks	5	5
Track Dozers	27	30

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Equipment	Number Used in 2021	Forecast Numbers in 2022
Rubber Tyre Dozers	4	4
Graders	11	11
Water Trucks	10	10
Floats	1	1
Cable Reeler	1	1
Cable Tractors	5	5
Totals	164	182

## 1.2.1 Exploration

Exploration activities occurred within EL5606 and 8812 during the audit period. These areas were not inspected during the audit site inspection.

## **1.2.2 Coal Handling and Preparation Plants**

Coal is transported to one of two Coal Handling and Preparation Plants (CHPPs) (Coal Handling and Preparation Plant) where it is crushed to size and processed to remove impurities. Processing produces saleable coal, along with coarse and fine reject materials. Coarse rejects are disposed of in-pit and fine rejects are placed in a tailings dam in accordance with the MOP. Each CHPP site has storage facilities for processed (saleable) and raw (unprocessed) coal.

No material changes or additions were made to process or facilities during the reporting period.

Processed, or product coal is transported to one of the two loading points via conveyor belt or road. The coal from Hunter Valley CHPP (HVCHPP) is transported to either the Hunter Valley Load Point (HVLP) or Newdell Load Point by means of overland conveyor whereas coal from Howick CHPP is trucked to Newdell Load Point (NLP). After the coal has reached either HVLP or the NLP it is transported to the Port of Newcastle by rail.

### **1.2.3 Mining Production**

HVO's project approvals allow for the extraction of up to 22 million ROM tonnes from HVO North and 20 million ROM tonnes from HVO South. A summary of production and waste at HVO during the audit period is provided in **Table 3** below.

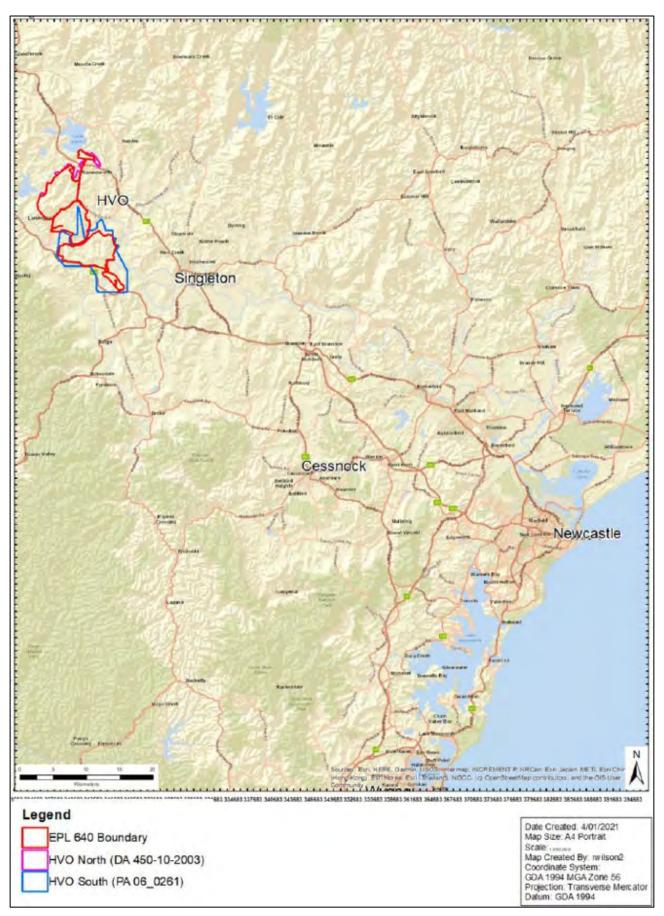
Material	Approved Limit (PA 06_0261 and DA450-10-2003)	2020 Reporting Period	2021 Reporting Period	2022 Reporting Period (forecast)
Prim Waste Rock/ Overburden (Mbcm)	-	90.83	81.19	101.24
ROM Coal (Mtpa) (mined)	42	16.83	14.41	18.34
-HVO South	20	10.23	9.87	11.67
-West Pit	12	6.60	4.54	6.67
-Carrington Pit	10	0	0	0
Coarse reject (Mt)	-	3.17	3.02	3.20
Fine reject (Tailings) (Mt)	-	1.63	1.43	1.91
Product (Mtpa)	-	11.98	10.57	13.79
ROM Coal Processed	26	15.85	14.86	18.90
-Hunter Valley CHPP	20	13.45	14.59	16.36

#### Table 3 Production Summary (PA 06\_0261)

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### REPORT

Material	Approved Limit (PA 06_0261 and DA450-10-2003)	2020 Reporting Period	2021 Reporting Period	2022 Reporting Period (forecast)
-Howick CHPP	6	2.4	0.25	2.54





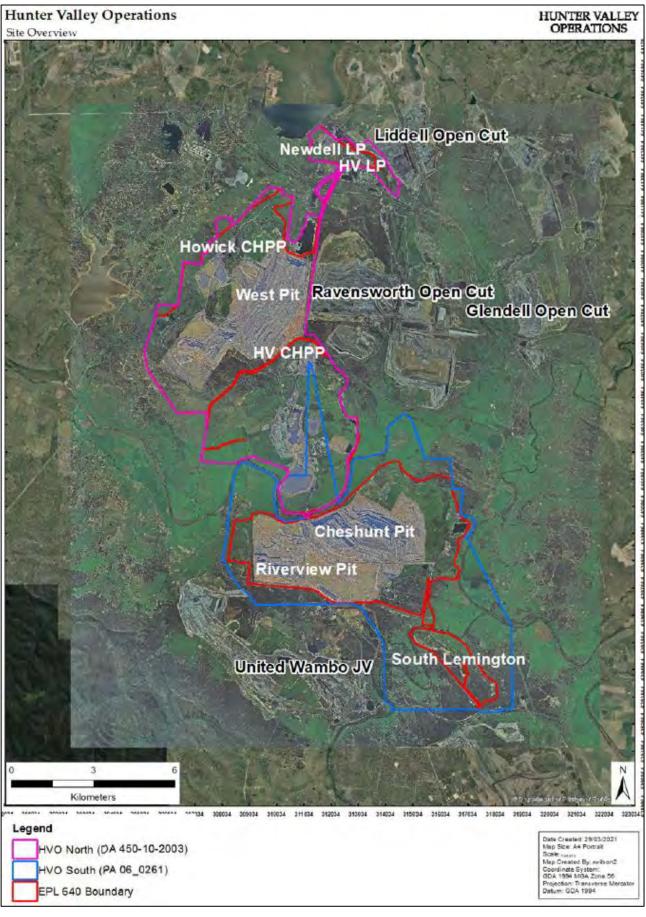


Figure 2 Site Overview

# 1.3 Audit Team

The RPS 2022 IEA team, inclusive of the required technical specialists, included personnel outlined in Table 4 below. The audit team, inclusive of specialists, was approved by the Department to conduct the audit. Refer to the letter from the Department provided in **Appendix A**.

Personnel	Audit Team Role
Ian Richardson	Lead Auditor / Air Quality Specialist – RPS Group
Sam Mitchell	Back up Lead Auditor – RPS Group
Clayton Richards	Rehabilitation Specialist – Minesoils
Dale Redwood	Noise and Vibration – Muller Acoustic Consulting
Kat Hutton	Groundwater Specialist – WSP
Dean Jarvis	Surface Water and Sediment / Erosion – Northrop

### Table 42022 HVO IEA Team

# 1.4 Audit Scope

RPS undertook the IEA in accordance with:

- The Department's Post-approval requirements for State Significant Developments Independent Audit Guideline, October 2015 (Independent Audit Guideline, 2015).
- The Department's Post-approval requirements for State Significant Developments Independent Audit Guideline, May 2020 (Independent Audit Guideline, 2020).
- AS/NZS ISO 19011:2018 Guidelines for auditing management systems.

### 1.4.1 PA 06\_0261

The requirement for the IEA is set out in Schedule 5, Condition 5 and 6 of PA 06\_0261 as modified (the approval), which requires the following scope of works be carried out:

#### INDEPENDENT ENVIRONMENTAL AUDIT

- 5. By 31 March 2010, and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - a. be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Planning Secretary;
  - b. include consultation with the relevant agencies;
  - c. assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant mining lease and EPL (including any strategy, plan or program required under these approvals);
  - d. review the adequacy of strategies, plans and/or programs required under these approvals;
  - e. recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals; and
  - f. be conducted and reported to the satisfaction of the Planning Secretary.

Note: This audit team should be led by a suitably qualified auditor, and include experts in the field of noise and air quality, surface water and groundwater and mine rehabilitation.

6. Within 12 weeks of commencing each audit, or as otherwise agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The Applicant must implement these recommendations.

### 1.4.2 DA 450-10-2003

The requirement for the IEA is set out in Schedule 5, Condition 10 and 11 of DA 450-10-2003 as modified (the consent), which requires the following scope of works be carried out:

#### INDEPENDENT ENVIRONMENTAL AUDIT

- 10. Prior to 1 December 2019, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - a. be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - b. include consultation with the relevant agencies and the CCC;
  - c. assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licences (including any assessment, plan or program required under these approvals);
  - d. review the adequacy of strategies, plans or programs required under the abovementioned approvals;
  - e. recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals; and
  - f. be conducted and reported to the satisfaction of the Secretary.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

11. Within 12 weeks of commencing each audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures proposed to address the recommendations.

# 2 AUDIT METHODOLOGY

# 2.1 Task 1 Pre-audit Activities

### 2.1.1 **Pre-Audit Meeting and Documentation Requests**

RPS undertook initial discussions with HVO to organise the audit, including the provision of documentation through requests for information (RFI) and provided an Audit Agenda for the site visit and timing.

Review of documentation provided by HVO and their representatives and preparation of compliance assessment checklists that included a list of conditions of key regulatory approvals to be assessed for compliance.

## 2.1.2 Approval and Regulator Consultation

Following DPE approval of the RPS Audit Team, RPS consulted via email with relevant regulators with respect to the audit scope in accordance with the DPE *Independent Audit Post Approval Requirements*, 2015 and 2020 Guidelines.

Relevant comments and requests from these regulators were included in the Audit Report and investigated as part of the audit as required.

# 2.2 Task 2 Site Inspection and Interviews

The Audit Team conducted the audit site visit over three (3) days between 28-30 November 2022 with RPS's rehabilitation specialist attended site on 6 December 2022. The audit site inspection comprised of:

- Document reviews.
- Interviews with relevant personnel.
- Site inspection.

Opening and closing meetings were held to ensure open communication with HVO and provide preliminary Audit findings. The audit was conducted as per the Audit Agenda, which was prepared and sent to HVO on 26 October 2022, prior to the site visit.

## 2.2.1 Opening Meeting

An opening meeting was held on 28 November 2022 upon commencement of the audit at the site. The purpose of this meeting was to confirm the objectives of the audit, the scope of the audit, the resources required and methodology to be applied.

### 2.2.2 Site Inspection and Interviews

The Lead Auditors and specialists (Air Quality, Surface Water, Noise/Vibration, and Rehabilitation) undertook a site inspection, which involved physical validations and collection of a photographic record. The auditor's observations used to supplement information gathered during the review of documents and records.

The site inspection occurred between 28-30 November 2022 however RPS's rehabilitation specialist attended site on 6 December 2022. During the site inspection, interviews were conducted with HVO staff to verify compliance with the consents and associated documents. The following personnel were interviewed during the audit site inspection:

- Andrew Speechly Environment and Community Manager
- Brenton Hubert Environment and Community Coordinator
- Marg Lannen Tenement & Compliance Coordinator

- Michael Lloyd Environment & Community Coordinator
- Peter Bowman Environment and Community Officer
- Merri Bartlett Environment & Community Officer
- Nicholas van Bezouwen Environment and Community Officer
- Danny Davy Infrastructure Fitter
- Craig Hargrave Mechanical Supervisor Infrastructure
- Shane Russell Operations and Manufacturing Superintendent AECI Mining
- Brett Johnson Maintenance Superintendent
- Jess Male Dispatch Shift Leader
- Ernie Martin Drill and Blast Engineer Technical Services

## 2.2.3 Close-out Meeting

At the completion of the audit site inspections, a brief close-out meeting was held with relevant HVO personnel via Microsoft Teams on 9 December 2022. The purpose of the close-out meeting was to provide and receive feedback on the audit process and present the summary of preliminary findings, recommendations, and any post-audit actions. It should be noted that additional findings based on a detailed document reviews as part of the audit process were required following the completion of the site inspection. As such, the summary of preliminary findings detailed in the closeout meeting did not cover all findings associated with the audit.

# 2.3 Task 3 Draft IEA Report

During the site visit, and as required following the site visit, the audit team conducted a review of the key documentation provided. Each requirement within the audit compliance tables were reviewed and evidence gathered to support an assessment of compliance. Whilst personal communication does provide valuable input into this process it was not relied upon as verification of compliance.

An assessment of environmental performance was undertaken and reported in the audit report where issues were identified. A review of the Environmental Management Strategy and Environmental Monitoring Program were undertaken, and a summary provided in the audit report.

A single consolidated report was prepared (this report), with separate audit tables appended to address each of the approval instruments.

# 2.4 Task 4 Finalise IEA Report

Following receipt of consolidated comments from HVO, RPS updated and finalised the IEA Report and reissued for HVO to submit to the Department via the Major Project website.

# 2.5 Audit Team Approval

The Department reviewed the nominations and information provided in accordance with the requirements of the consents and the Department's Post-approval requirements for State Significant Developments Independent Audit Guideline, October 2015 (IEA Guideline 2015) and was satisfied that the RPS audit team was suitably qualified and experienced.

RPS was directed by Department to undertake the audit in accordance with the IEA Guideline 2015 utilising the compliance indicators noted in the Department's Post-approval requirements for State Significant Developments Independent Audit Guideline, May 2020 (Independent Audit Guideline, 2020).

The audit team was approved by the Department on 28 August 2022. A copy of the approval letter is located in **Appendix A**.

The Department requested that a copy of the IEA report was to be submitted to the Major Projects Portal, together with HVO's responses to any recommendations contained in the report, must be submitted within 12 weeks commencing the audit (the last inspection date) as required by Schedule 5, Condition 11 and Schedule 5, Condition 6 of the consents, or as otherwise agreed by the Planning Secretary.

# 2.6 Scope Development

The IEA was undertaken in general accordance with:

- The Department's Post-approval requirements for State Significant Developments Independent Audit Guideline (Independent Audit Guideline, 2015).
- The Department's Post-approval requirements for State Significant Developments Independent Audit Guideline, May 2020 (Independent Audit Guideline, 2020).
- AS/NZS ISO 19011:2018 Guidelines for auditing management systems.
- RPS's proposal (dated 26 July 2022).

## 2.7 Consultation

Schedule 5, Condition 10 of DA 450-10-2003 and Schedule 5, Condition 5 of PA 06\_0261 requires the IEA to include consultation with the CCC and relevant agencies. A summary of the consultation undertaken is provided in **Table 6** of the regulatory agencies which were sent requests for comment on 24 October 2022 as well as the status of any responses received.

#### Table 5 Regulator Response Summary

Regulatory Agency	Response Received	Date Received
NSW Department of Planning and Environment	Yes – specific WMP assessment	28 August 2022
NSW Department of Regional NSW, Mining, Exploration and Geoscience	No	-
NSW Department of Planning and Environment, Biodiversity Conservation Division	No	-
NSW Department of Planning and Environment, Water Division	No	-
NSW Environment Protection Authority	No	-
NSW Resources Regulator	Yes	26 October 2022
Singleton Shire Council	No	-
Community Consultative Committee	Yes – Singleton Shire Healthy Environment Group (SSHEG) "Community Cultural Heritage Audit 2020" provided. Sue George – Singleton Shire Council Councillor – no comment due to only recently joining CCC.	3 November 2022

A summary of comments received from the regulatory agencies as well as responses to regulator consultation is provided in **Appendix C**.

# 2.8 Site Inspection

A three (3) day site inspection was conducted at HVO North and South between 28-30 November 2022. During both site inspections the weather conditions were generally sunny with significant rain events occurring earlier in the month prior to the site inspection. Daytime maximum temperatures ranging from approx. 24°C to 27°C over the three days on site. Wind conditions were moderate during the inspection days.

Photographs from the audit site inspection supporting audit findings are provided in Appendix D.

### 2.8.1 Opening and Closing Meetings

In accordance with ISO 19011:2018 Guidelines for auditing management systems an opening and closing meeting was held during the Site inspection.

# 2.9 Compliance Status

The compliance status was determined using the relevant descriptors in accordance with the Independent Audit Post Approval Requirements (the Department, May 2020) provided in **Table 6** below.

Table 6 Compliance status descriptors

Status	Description
Compliant	The auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.
Non-compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Not triggered	A requirement has an activation or timing trigger that has not been met during the temporal scope of the audit being undertaken (may be a retrospective or future requirement), therefore an assessment of compliance is not relevant.

Previous audit descriptors of partial compliance, partial non-compliance, not verified or administrative noncompliance or other similar terms must not be used in accordance with the above requirements.

As part of the Audit evaluation, the auditor may make observations, including identifying any opportunities for improvement in relation to any compliance requirement or any other aspect of the project. Any observations or notes are in addition to the compliance status descriptor assigned to each compliance requirement, limited to the descriptors listed in **Table 6**.

# 2.10 Evidence Validation

The audit team undertook verification activities to confirm the reliability of audit evidence. This included interviews, data checking, the examination of records, and site inspections. Records were provided in electronic and/or hard copy by site personnel and additional documents were reviewed whilst on site.

Some aspects of the audit process may have relied on information such as judgements and assumptions where external supporting evidence was unavailable or limited. Where this information was considered, its validity was confirmed to the extent possible prior to use by the auditors and is noted in appropriate areas of the audit checklists.

The majority of information was assessed off-site prior to the site inspection. The site inspections concentrated on assessment of the effectiveness of environmental management and adequacy of performance. The extent of audit activities was limited to the time available for the audit site inspections and interviews over four (4) days.

# 2.11 Technical Specialists Input

The Department requested on 28 August 2022 that the IEA team include technical specialists in the following fields:

- Rehabilitation.
- Air Quality.
- Noise and Vibration.
- Surface Water
- Groundwater.

The technical specialists provided technical advice to the IEA Lead Auditor during the audit site inspection and reporting periods. Specific findings from the technical specialists have been incorporated into the Audit Checklists and recommendations where applicable.

# 3 ENVIRONMENTAL MANAGEMENT

A detailed implementation review was conducted against each management plan condition in DA 450-10-2003 and PA 06\_0261; and can be found in the Project Approval audit checklists in **Appendix B**. The approved strategies, plans or programs required under DA 450-10-2003 and PA 06\_0261 including a brief summary of the implementation review conducted against each plan are summarised in **Table 7**. This section satisfies the IEA requirement to review the adequacy of any approved strategies, plans or programs required under Schedule 5, Condition 5(d) of PA 06\_0261 and Schedule 5, Condition 10(d) of DA 450-10-2003.

HVO is required by the development consent approvals to develop and submit a range of environmental management plans for approval prior to implementation. Approved management plans are made publicly available on the HVO website (<u>https://hvo.com.au/</u>). A number of management plans cover both approvals for HVO North and HVO South whereas some management plans are specific to one approval.

Document	Findings from Review
Agricultural Land Reinstatement Management Plan	Document Number: HVOOC-748212775-24 Version: 1.3 Effective: 23 May 2022 Latest version submitted for approval: N/A The Agricultural Land Reinstatement Management Plan (ALRMP) was approved on 20/06/2022 by Stephen O'Donoghue as nominee of the Secretary. The plan is required under Condition 62D of Schedule 4 of DA 450-10-2003 with agreeance that in accordance with condition 3 of Schedule 5, that due to the administrative nature of the revisions that consultation with the public authorities listed in condition 62D of Schedule 3 was not required. The purpose of the ALRMP is to outline reasonable and feasible measures to ensure that alluvial agricultural lands that have been mined, are restored to a productive capacity, at least equivalent to their pre- mining state, and are able to be
	managed using techniques and equipment typical of the management of equivalent lands in the district. Work has not yet commenced hence no monitoring or reporting against the management plan specific to the Carrington West Wing project.
Air Quality and Greenhouse Gas Management Plan	Document Number: MANOC-1772150304-4624 Version: 3.5 Effective: 19/05/2022 Latest version submitted for approval: 24/8/2022 The revised AQGGMP was approved on 19 May 2022 by Joe Fittell as nominee of the Secretary. The AQGGMP was prepared by HVO in accordance with Condition 6, Schedule 3, of the HVO North Approval and Condition 23, Schedule 3 of the HVO South Approval. Air quality monitoring at HVO is undertaken in accordance with the HVO Air Quality Monitoring Program (AQMP). An extensive network of monitoring equipment is utilised to assess performance against the relevant conditions of HVO's approvals and was observed to be active during the site inspection. Air quality monitoring Report, available on the HVO website. A total of 97 exceedances of the short term (24 hr) PM10 criteria were recorded in 2020 over 31 days, 24 of these days were deemed to have been effected by extraordinary events. Air Quality was influenced by a combination of smoke from bushfires which significantly affected the Hunter Valley between January and February, and regional dust events. Despite these events, HVO continued to implement operational controls to manage dust emissions in accordance with its Air Quality Management Plan. HVO responded to 1361 air quality alerts and recorded over 906 hours of operational downtime in 2020 to manage dust in response to real time monitoring alerts and visual inspections. A total of 27 air quality monitoring exceedances were recorded in 2021, including a
6082   2022 INDEPENDENT ENVIRONME	total of 20 exceedances of the short term (24 hr) PM10 criteria over a period over 13 days. Each of the 27 exceedances was investigated to determine the level of contribution from either HVO North, HVO South, or where relevant, both. Four of

#### Table 7 Management Plan Adequacy Review

Document	Findings from Review
	the recorded exceedances were deemed to be attributable to HVO. One exceedance of the short term (24hr) PM10 criteria was due to incremental contributions from HVO. The other three exceedances are against "Total" criteria where HVO contributed but was not the cause of the exceedance.
	<ul> <li>Long Term (annual average) PM10 criteria at the Hunter Valley Gliding Club monitoring location</li> </ul>
	<ul> <li>Long Term (annual average) dust deposition rate at DL21, DL30 and Warkworth monitoring locations.</li> </ul>
	<ul> <li>Long Term (annual average) PM2.5 criteria at Maison Dieu and Kilburnie South monitoring locations.</li> </ul>
	Investigation by an external consultant found HVO not to be the primary contributor. HVO responded to 797 air quality alerts and recorded over 1054 hours of operational downtime in 2021 to manage dust in response to real time monitoring alerts and visual inspections. It was noted that aerial seeding was conducted over an approximate area of 300 ha to help reduce dust from wind erosion of mine stockpiles in 2021.
	During the site inspection and following review of the real time data, incidents, and quarterly air monitoring reports it was noted that HVO is satisfactorily implementing the AQGGMP.
Integrated Biodiversity	Document Number:
Management Plan	Version: 1.2
	Effective: 25/06/2018
	Latest version submitted for approval: 5/10/2022 The BMP was approved on 2/8/2018 by Howard Reed as nominee of the Secretary.
	The Integrated BMP has been prepared to meet the requirements of Condition 33A of PA 06_0261.
	Biodiversity areas were managed in accordance with approved management plans and restoration strategies. Management activities included ecological monitoring, seed collection, removal of redundant fence posts, fencing and pest and weed controls during the audit period. Monitoring of the Carrington Billabong and the site inspection indicated relatively stable health of the River Red Gum population despite increasing exotic species with increased rainfall.
	Following the site inspection and review of biodiversity monitoring data it was noted that HVO is satisfactorily implementing the BMP.
Blast Management Plan	Document Number: N/A
	Version: 3.3
	Effective: 28/03/2019
	Latest version submitted for approval: 7/4/2022 The Blast Management Plan was approved on 3/4/2019 by Jessie Evans as nominee of the Secretary.
	Blast Management Plan required under condition 19 of Schedule 3 of HVO North (DA 450-10-2003) and condition 18 of Schedule 3 of HVO South (MP 06_0261).
	A total of 186 blast events were initiated at HVO, 119 from HVO South and 67 from HVO North. HVO complied with all blasting related consent and licence criteria with the exception of one blast on 27 August 2020 in the HVO South area. This blast exceeded the air blast overpressure criteria at Knodlers Lane with a recorded air blast overpressure result of 127.16dB. This result was independently reviewed which deemed the exceedance to be a result of inadequate stemming in blast holes. The DPE issued HVO with a Penalty Infringement Notice of \$15,000. HVO implemented a number of improvement actions to prevent a reoccurrence.
	HVO employs a blast fume management protocol to mitigate generation of post blast fume emissions. There were no Category 3, 4 or 5 fume events recorded in 2020.
	A total of 214 blast events were initiated at HVO, 153 from HVO South and 61 from HVO North. HVO complied with all blasting related overpressure and vibration development consent and licence criteria during 2021.
	HVO employs a blast fume management protocol to mitigate generation of post blast fume emissions. During 2021, there was once incident related to blast fume. On 10 June 2021, a level 4 post blast fume event was identified after firing a blast in the West Pit (WN45ULD01A) following high rainfall. The blast was fired when wind

Document	Findings from Review
	conditions were predicted to carry the fume over the mine and dissipated without
	leaving the site.
	No blasting incidents were recorded during 2022 in the audit period. A blast was observed on 29 November 2022 and upon review appeared to managed in accordance with the Blast MP.
	The HVO South approval was modified permitting manufacturing of Ammonium Nitrate Emulsion on site. Inspection of the facility during the site inspection found that it was generally being operated in accordance with the conditions of consent.
	During the site inspection, review of blasting data, and complaints register it was determined that HVO are satisfactorily implementing the Blast MP.
Bushfire Management Plan	Document Number: HVOOC-1797567310-41
	Version: 4
	Effective: 01/04/2020
	Latest version submitted for approval: N/A
	The Bushfire Management Plan has been prepared in accordance with
	Schedule 3, Conditions 59 and 60 of HVO South Project Approval 06_0261 and
	Schedule 3, Conditions 60 and 61 of the HVO North Development Consent 450-10-
	2003. HVO was observed to have adequate fire management equipment on site and undertakes inspections and hazard reduction works in accordance with the BMP during the audit period.
Environmental Management	Document Number: N/A
Strategy	Version: 4.0
	Effective: 08/01/2019
	Latest version submitted for approval: 7/4/2022
	The EMS was approved on 8/01/2019 by Howard Reed as nominee of the Secretary.
	The EMS was found to satisfy the relevant requirements of the current consents and has been prepared by suitably qualified and experienced person and was submitted to the Planning Secretary for approval. The EMS provides a range of procedures that are implemented to manage communication, complaints, incidents, and monitoring. Review of the communication, complaints, incidents registers found that HVO was implementing these procedures. The EMS references the various management plans for specific details for plans, programs, and monitoring requirements.
	During the site inspection and following review of associated management plans it was noted that HVO is satisfactorily implementing the EMS.
Fine Reject Management	Document Number: 101041R96-2
Strategy	Version: 8
	Effective: 19/1/2023
	Latest version submitted for approval: N/A
	The Life of Mine Fine Reject Strategy was initially prepared with Rev 0 issued on 30 June 2015. The most recent update was submitted to the Department on 16 November 2022 and was approved on 19 January 2023.
Goulburn River Biodiversity Area	Document Number:
Management Plan	Version: 2
	Effective: December 2017
	Latest version submitted for approval: N/A (MTW document)
	This Management Plan is the framework for the protection and management of a 1,066-hectare offset area under a legally binding conservation mechanism to satisfy conditions of Warkworth Mining Limited's Commonwealth approval (EPBC 2002/629) and NSW approval (NSW SSD-6464), and the 140-hectare offset area to satisfy conditions of the Hunter Valley Operations NSW approval (NSW PA 06-0261). Given the location and access constraints, this area was not inspected during the audit. Management of this area is reported regularly in the annual reviews prepared by HVO. It is noted that recent weather conditions, and particularly flooding in 2021 have restricted access to this area for weed control and infrastructure monitoring and management. Despite this, some supplementary bird assemblage monitoring to further develop baseline data, and vertebrate pest management has been undertaken.
	ากลางชุดการที่เป็นอาจากสายเป็นเป็นเป็นเป็น

Document	Findings from Review
HVGC Amenity Management	Document Number:
Plan	Version: 8
	Effective: October 2012
	Latest version submitted for approval: 9/9/2022
	Approved on 22/01/2013 by Scott Books as nominee of the Secretary.
	HVO were observed to have implemented the plan during the audit period and
	assessment data against the air and noise quality criteria. Mining has not occurred in the South Lemington Pit 2 during the audit period.
HVO North Aboriginal Heritage	Document Number: HVOOC-1797567310-3088 and HVOOC-1797567310-3087
Management Plan	Version: 1
	Effective: 19/12/2019
HVO South Aboriginal Cultural	Latest version submitted for approval: N/A
Heritage Management Plan	The north and south ACHMPs were approved on 19/12/2019 by Matthew Sprott as nominee of the Secretary.
	Under the provisions of both the HVO South and HVO North Aboriginal Cultural
	Heritage Management Plans (ACHMP), eight field based due diligence assessments were undertaken at various locations across HVO in 2021. A number of artefacts were identified and managed in accordance with relevant Management
	Plans.
	Two compliance inspections were conducted under the provision of the HVO South ACHMP and one inspection was conducted under the HVO North Heritage Management Plan (HMP) during each year. The inspections found that all sites
	have been managed in conformance with the ACHMP/HMP requirements.
	Additional sites were recorded and sites requiring maintenance and upgrades to
	site barricading and fencing were identified. Upgrade and maintenance work will be
	implemented in 2022. Maintenance works were undertaken to preserve and maintain Heritage
	infrastructure.
	There were no incidents, nor any unauthorised disturbance caused to heritage sites at HVO during the audit period with HVAO observed to be satisfactorily implementing the plans.
Noise Management Plan	Document Number: HVOOC-1797567310-4028
· · · · · · · · · · · · · · · · · · ·	Version: 1
	Effective: 16/12/2021
	Latest version submitted for approval: 7/4/2022
	The NMP was approved on 16/12/2021 by Stephan O'Donoghue as nominee of the
	Secretary.
	HVO was observed to have received and responded to internal noise alarms as evident by the recorded hours of equipment downtime for the management of noise during the audit period. All operational haul trucks at HVO have been fitted with sound attenuation kits. A routine sound power level testing schedule was
	implemented across site in 2021 and continue during 2022.
	During 2021, there was one incident related to noise monitoring. On 22 July during
	the monthly attended noise monitoring at the Jerrys Plains East monitoring location
	an LA1(1 min) result of 55dB(A) was recorded against the compliance criteria of 45dB(A). HVO followed its approved Management Plan in response to the
	exceedance. The exceedance constitutes non-compliance with EPL but not the HVO South Development Consent.
	During the site inspection, review of noise data, and complaints register it was determined that HVO are satisfactorily implementing the NMP.
Rehabilitation Management Plan	Document Number: HVOOC-748212775-24 Version: 1
	Effective: July 2022
	The RMP has been prepared in accordance with the NSW Department of Regional
	NSW – Resources Regulator's (RR) Form and Way: Rehabilitation management
	plan for large mines (2021). Review of the plan indicates that it contains the
	required information to satisfy the requirements for a Rehabilitation Management
	Plan under Schedule 3, Condition 62C of Development Consent DA 450-10-2003

Document	Findings from Review			
	for HVO North and Schedule 3, Condition 36 of Project Approval PA 06_0261 for HVO South.			
	The RMP has been submitted and is currently awaiting approval.			
River Red Gum Rehabilitation	Document Number:			
and Restoration Strategy	Version:			
	Effective: 19/5/2022			
	Latest version submitted for approval: N/A			
	The River Red Gum Rehabilitation and Restoration Strategy (RRGRRS) describes baseline and subsequent surveys (2007 and 2008) along with future monitoring including year 3 (2010), year 5 (2012) and year 10 (2017) monitoring which predates the scope of this audit.			
	The Integrated Biodiversity Management Plan references the RRGRRS and proposes management measures for these areas. The RRGRRS was most recently updated 19/05/2022. Site inspections, and monitoring included in the Annual Reviews, indicate that management of these areas has been improved, although recent conditions have contributed to increased weed growth which requires ongoing management.			
Water Management Plan	Document Number: N/A			
	Version: 3.4			
	Effective: 16/10/2018			
	Latest version submitted for approval: 23/11/2022			
	Version 3.0 of the WMP was approved on 16/10/2018 by Megan Dawson as nominee of the Secretary, and is included on the HVO website. Subsequent to this approval, a number of updates and minor amendments have been made to incorporate additional monitoring, response to audits and annual reviews and on feedback from DPE. Version 3.4 has been submitted to DPE for approval following the approval of PA 06_0261 Mod 6.			

# 4 ENVIRONMENTAL PERFORMANCE

This section assesses the requirement of Schedule 5, Condition 5(e) of PA06\_0261 and Schedule 5, Condition 10(e) of DA450-10-2003 to assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals). RPS based the assessment of the environmental performance of the site on the following:

- Section 3\_ provides an assessment of the effectiveness and adequacy of the environmental management plans and programs required under the approvals.
- An assessment of compliance with the conditions of PA06\_0261, DA450-10-2003, EPL640, and authorised leases. The findings of this assessment are provided in the compliance checklists presented in **Appendix B** with the identified non-compliances and associated recommendations summarised in the Audit Findings in Section 6.
- Section 4.1 provides a review of compliance management practices in place at HVO.
- Section 4.2 provides a review of incidents reported during the audit period.
- Section 4.3 provides a review of complaints received during the audit period.
- Section 4.4 provides a review of Notices, Orders, Penalty Notices or Prosecutions received during the audit period.
- Section 4.5 provides a review of performance against EIS predictions.
- Section 4.6 provides an assessment of water management structures as specifically requested by the Department.

The site operates under an approved Environmental Management Strategy, and observations during the site inspection demonstrated good overall environmental management practices. The use of CMO Compliance Management Software (CMO) provides a robust and proactive approach to environmental management of the site.

Positive observations were noted with respect to air quality and noise management through the use of predictive met data and real time monitoring to implement controls suitable to changing conditions and activities. The use of aerial seeding was noted as a good initiative for the reduction of wind generated dust from stockpiles.

Substantial improvement to the surface water management system was noted with the implementation of the pipe burst detection system and water level monitoring on key water infrastructure. This provides assurance in the capture of offsite discharges, improved data inputs to the site water balance and enables better management of water volumes across site to reduce the chance of off site discharges.

The rehabilitation program on site is very well organised, with robust systems to track aspects from the ground disturbance permit (GDP) process through to post rehabilitation monitoring. Areas not subject to active mining were being rehabilitated, with temporary seeding of inactive areas and stockpiles in place.

The CHPP, Workshops and other infrastructure were in good condition and well managed, with waste segregation, pollution controls and bunding in place and effective.

# 4.1 Compliance Management

### 4.1.1 Compliance Monitoring

Glencore Coal Assets Australia (GCAA) utilise CMO Compliance Management Software (CMO) as a management tool across all of its sites. The CMO Compliance Management database system is used to store and track compliance with development consents, leases, licences, and other approvals and their associated conditions. CMO is updated regularly as triggered by actions or the addition of new or modified approvals. CMO is also utilised to assign and complete inspections and to track complaints, actions arising from internal or external consultation practices or actions following an audit.

During the audit site inspection, HVO demonstrated its use of CMO to the auditors. The CMO database included the requirements of the Project Approval, Development Consent, EPL, Mining Leases, and other

applicable approvals and the key commitments / requirements for each management plan. The HVO Environment and Community (E&C) department used CMO to access evidence to demonstrate compliance with specific conditions of consent.

### 4.1.2 Internal Assurance

GCAA implements an internal audit program which is conducted in accordance with the Glencore corporate procedure for internal and external auditing. The audit program involves internal compliance audits conducted every three years prior to an IEA. The internal compliance audit assesses compliance against the site's Project Approval conditions and associated approval conditions which have been entered into CMO. HVO is required to enter evidence into CMO against each relevant condition to assist with the compliance review process.

### 4.1.3 Monthly Inspections

The HVO E&C department conducts monthly environmental inspections of the site. The monthly inspections are conducted to:

- Identify any potential non-conformances or environmental incidents that have not been previously identified/reported;
- Maintain a visual presence around the site to promote environmental awareness to mine personnel and contractors; and
- Maintain site familiarity by ensuring E&C personnel are aware of any physical changes to operations or processes at the site.

The monthly environmental inspections include a description of general environmental conditions as well as checks of specific areas. The inspections include identified actions, an action category, due date and status and include photos and attachments where relevant. Depending on the category of the action, it may be entered into CMO and tracked.

The auditors sighted examples of completed inspections conducted by the HVO E&C department. Inspections were observed to be undertaken monthly. The reports were considered to be sufficiently detailed and well completed with appropriate actions identified for issues raised.

### 4.1.4 Ground Disturbance Permit (GDP) Process

HVO implements a work permit system in accordance with the GCAA Work Authorisation and Permit Management procedure. In the event that ground disturbance is identified during the Work Authorisation process a Ground Disturbance Permit (GDP) is required to be completed. The GDP is a risk management tool designed to ensure the proposed works have the required environmental approval and that the person undertaking the works has appropriately managed risks to minimise impacts on the environment and community. The GDP provides a checklist of environmental aspects that must be completed by the employee / contractor initiating the work and internally approved by the HVO E&C department prior to the commencement of any work.

## 4.2 Incidents

Environmental incidents are recorded in CMO, the compliance management tool used by GCAA (discussed further in Section 6.1.1) and determines the appropriate corrective or preventative action using the Incident Cause Analysis Method (ICAM) where required.

An incident is defined by the project approvals PA06\_0261, DA450-10-2003, and EPL640 as a set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval.

The auditors reviewed the site's incident database, external consultant's investigation reports as well as results presented in the Annual Reviews during the audit period. Multiple reportable incidents occurred during the audit period which required reporting under Schedule 5, Condition 2 of PA06\_0261 and Schedule 5, Condition 2 of DA450-10-2003.

### 4.2.1 2020 Incidents

#### Air Quality:

- Missed HVAS Sample 9 January 2020
- Missed HVAS Sample 15 January 2020
- Missed HVAS Sample 21 January 2020
- Missed TEOM Sample 23 January 2020
- Missed HVAS Sample 28 April 2020
- Missed TEOM Sample 10 August 2020
- Missed TEOM Sample 27 August 2020
- Missed HVAS Sample 30 August 2020
- Missed TEOM Sample 20 September 2020
- Missed HVAS Sample 23 & 29 September 2020
- Missed TEOM Sample 2 December 2020
- Missed HVAS Sample 4 December 2020

### **Blasting:**

Air Blast Overpressure Exceedance - 27 August 2020

### 4.2.2 2021 Incidents

#### Air Quality:

- PM10 Dust Exceedance Knodlers Lane TEOM 28 July 2021
- PM10 Dust Exceedance Cheshunt East HVAS 12 September 2021

#### Water:

- Sediment Dam Discharge 23 March 2021
- HRSTS TSS exceedance 23 March 2021

#### Noise:

• Noise Exceedance LA1 (1 minute) - 22 July 2021

### 4.2.3 2022 Incidents

#### Air Quality:

- Missed TEOM Sample 9 & 10 January 2022
- Missed HVAS Sample 16 January 2022
- Missed HVAS Sample 10 April 2022
- Missed HVAS Sample 16 April 2022
- Missed HVAS Sample 10 May 2022
- Missed HVAS Sample 3 June 2022
- Missed HVAS Sample 15 June 2022
- Missed HVAS Sample 9 July 2022
- Missed HVAS Sample 13 September 2022

- Missed HVAS Sample 7 & 19 October 2022
- Missed HVAS Sample 11 November 2022

#### Water:

- Sediment Dam Discharge 6 and 9 March 2022
- Sediment Dam Discharge 28 March 2022
- Sediment Dam Discharge 4 & 6 July 2022

# 4.3 Complaints

Complaints are managed in accordance with the HVO Community Complaints Management Procedure. This procedure provides a process to ensure that complaints are properly documented and handled in accordance with licence requirements and company policy. HVO operates a free Environment and Community Enquiry Hotline which operates 24 hours per day, 7 days per week. The number is 1800 888 733. In addition to this hotline, potentially impacted stakeholders also have the contact details of the HVO Environment and Community Manager.

Complaint Type	2020	2021	2022*
Noise	5	5	0
Dust	1	1	4
Lighting	4	3	0
Blasting	2	15	2
Traffic and Property Access	2	0	1
Other	0	1	0
Totals	14	25	7

#### Table 8 Summary of complaints by issue during the audit period

\*Complaints received during the audit period in 2022.

A total of 46 complaints were received during the audit period. Each of these complaints followed HVO Community Complaint Procedure and the response is available in the complaints register on the HVO website. Complaints have generally trended down during the audit period.

Review of complaints received during the audit period found that written or verbal acknowledgement to complaints within 24 hours or on the next business day if received outside work hours occurred. Where possible, complaints were generally resolved within a timely manner with more complex complaints requiring further investigation and actions.

# 4.4 Notices, orders, penalty notices or prosecutions

A show cause notice was issued by DPIE on 23 September 2020 in relation to an Airblast overpressure level exceedance on 27 August 2020. HVO provided a response to this show cause notice on 22 October 2020, providing representation with respect to the incident, and the resulting low impact of the event. The Department of Planning, Infrastructure and Environment (DPI&E) issued HVO with a Penalty Infringement Notice of \$15,000. HVO implemented a number of improvement actions to prevent a reoccurrence

# 4.5 Key Commitments and EIS Predictions

Review of environmental performance with respect to environmental commitments and predictions from the EIS are regularly reviewed and incorporated into the approved management plans for the project. Further to this, comparison with predictions is included in the Annual Environmental Review reports as required under the consents.

## 4.5.1 Air Quality

Annual average PM<sub>10</sub>, TSP and deposited dust results were typically at, or below predicted air quality levels as noted in the respective EIS' for the North and South pit operations over the audit period. The exception to this generally was in 2019, when regional drought and bushfire conditions contributed to elevated results.

Outside of the 2019 results, air quality results typically demonstrated a downward trend over the audit period. The Warkworth TSP HVAS recorded significantly higher levels than the other monitors in the network. Given that the PM<sub>10</sub> level at the Warkworth TEOM, which is located approximately 850m to the southeast of the HVAS, corresponds reasonably well with the modelled predictions, it is considered that the Warkworth HVAS monitoring location is likely impacted by localised sources of dust.

## 4.5.2 Greenhouse Gas Emissions

HVO is registered as a Safeguard facility and therefore also has a Safeguard baseline. Emissions above the baseline for that year need to be offset by retiring Australian Carbon credit Units (ACCUs). HVO was below the baseline during the audit period and also below EIS predictions.

Total greenhouse gas emissions decreased year on year over the audit period. This is largely due to a reduction in fuel usage emissions and electricity consumption. HVO reports greenhouse gas emissions (GHG) in accordance with National Energy and Greenhouse Gases (NGER) legislation. Each financial year HVO is required to submit to the Federal government the emissions from their NGERs registered facility into the Emissions and Energy Reporting System (EERS). Because HVO emits over 100kt of CO2e- each year, HVO is registered as a Safeguard facility and therefore also has a Safeguard baseline. Emissions above the baseline for that year need to be offset by retiring Australian Carbon Credit Units (ACCUs).

The EIS forecast estimated that the annual average greenhouse gas emissions (Scope 1 and Scope 2) from HVO South would be 708,038 CO2e-.Total emissions during FY2022 were 671,739 CO2e-. Total emissions reported are for the HVO Complex, which includes activities in both HVO South and HVO North. While Scope 1 emissions were slightly (1.2%) above prediction, this prediction is for HVO South only. Considering that total emissions are below forecast and that the forecast does not include HVO North, HVO is operating below predictions.

### 4.5.3 Noise

HVO engages a suitably qualified and experienced acoustic consultant to undertake routine attended noise compliance monitoring at nearby private residences to assess compliance with the relevant Project Approval and EPL noise criteria, in accordance with the HVO NMP. Monitoring is undertaken at a frequency of one night per month and an additional one night per quarter as required by the HVO North Approval. This monitoring is undertaken to evaluate and assess noise impacts under a range of meteorological conditions throughout the year.

Over 100 measurements were taken over each year of the audit period. Each measurement involves an assessment of HVO mine noise against the various L<sub>Aeq, 15minute</sub> and L<sub>A1,1min</sub> noise criteria in place under the HVO North and South Approvals. Full details for all noise assessments completed can be found in the Hunter Valley Operations Monthly Environmental Monitoring Report, published on the HVO website.

Across the audit period, results were below the noise levels predicted in the respective HVO North and South approvals, with the following exceptions:

- There was one exceedance of the LA<sub>1(1 min)</sub> criteria on 22 July 2021 at the Jerrys Plains East monitoring location. Attended monitoring recorded a result of 55dB, above the compliance criteria of 45dB. The acoustic consultant contacted the Senior OCE to explain the monitoring result and that the source of the noise was coming from the dragline bucket in Riverview Pit. The dragline was shut down and progressively restarted while monitoring noise levels. Follow up monitoring was below criteria with five additional 1-minute measurements taken on the night and additional measurement taken the following week.

# 4.5.4 Blasting and Vibration

During the audit period HVO complied with all blasting related consent and licence conditions with the exception of the following:

 Blast on 27<sup>th</sup> August 2020 in the HVO South area which exceeded the air blast overpressure criteria at Knodlers Lane. Four blasts recorded overpressure greater than 115 dB(L) during the reporting period. Comparison of total overpressure measurements above 115dB(L) against the requirement for 5% of total number of blasts complied with this requirement during the reporting period. There were no exceedances of the 5 mm/s or 10 mm/s ground vibration criteria at any residence on privately-owned land.

Blasting occurred only between the hours of 7am and 6pm Monday to Saturday during the audit period. No blasting was carried out on Sundays or Public Holidays. No more than 3 blasts were fired per day and the maximum number of blasts fired during any week was nine, less than the maximum weekly blasting frequencies as specified in project approvals. No fume events were recorded leaving the site in accordance with protocols detailed in the HVO Blast Management Plan.

In accordance with PA 06\_0261, long term blast monitoring data has been reviewed to identify any trends in the monitoring data over the life of the project. Both ground vibration and overpressure monitoring results have remained generally consistent since monitoring commenced, with no increasing trends developing in the data. Notably in 2021 and 2022 there were no exceedances of 115 dB(L) air blast overpressure criteria.

## 4.5.5 Surface Water Monitoring

### 4.5.5.1 South Pit EIS Predictions

The South Pit EIS estimated an 'instantaneous' water quality for Electrical Conductivity of 5,700  $\mu$ S/cm as an upper limit. Instantaneous water quality is a simple estimate obtained by dividing the total salt available by the maximum amount of possible void water. Electrical Conductivity measurements at Lake James were recorded over the audit period as follows:

- 2,187 µS/cm during 2019
- 1,333 µS/cm during 2020
- 3,497 µS/cm during 2021
- 3,869 µS/cm during 2022

These results were all below, or in line with predicted values.

The South Pit EIS estimated average runoff water quality from undisturbed catchments to be 400 mg/L for TSS and 615  $\mu$ S/cm for EC. Sampling during rain events during the audit period indicated the following:

Comleroi Creek, South of Cheshunt Pit was sampled during rain events across the audit period with the following results:

- Two events in 2019 resulting in a TSS of 17 mg/L and EC of 129 µS/cm
- Five events during 2020 resulting in an average TSS of 22 mg/L and EC of 110 µS/cm
- Four events in 2021 resulting in an average TSS of 14 mg/L and EC of 121.5  $\mu\text{S/cm}$
- Five events in 2022 resulting in an average TSS of 15 mg/L and EC of 125 μS/cm

These results demonstrate runoff water from undisturbed catchments in the HVO South area is of better quality than that which was predicted in the EIS.

### 4.5.5.2 Carrington Pit EIS Predictions

The long term mine water quality for Carrington is discussed in the Carrington Mine Environmental Impact Statement (ERM 1999). The EIS estimated an "instantaneous" water quality for Electrical Conductivity of 7,050  $\mu$ S/cm.

Dewatering from Carrington is a mixture of surface runoff from overburden emplacements, coal mining areas and seepage from the coal seams and alluvium. Water is directed to Dam 9N and into Dam 11N. The average EC and TSS in Dam 11N during the audit period was:

- 2,551 µS/cm and 6 mg/L respectively in 2019, and is considered broadly representative of mine water quality for Carrington.
- 1,315 µS/cm and 1.8 mg/L respectively in 2020, this is lower than normal and influenced by increased rainfall runoff and inputs from the Hunter River.
- 2,917 µS/cm and 23.1 mg/L respectively in 2021, this is lower than normal and influenced by increased rainfall runoff.

The Carrington EIS states that runoff from undisturbed catchments within the Carrington Pit will be directed around the mine via contour banks or surface drains to discharge where possible into natural creeks. The salinity of the runoff water was predicted to be approximately 615  $\mu$ S/cm. Runoff from rehabilitated lands was initially predicted to have higher TSS, with levels approaching pre-mining conditions after several years. Water quality monitoring for the Carrington Billabong during the audit period was as follows:

- Dry during the rain event monitoring rounds in 2019 with no samples collected.
- Dry during the rain event monitoring rounds in 2020 with no samples collected.
- Dry during three rain event monitoring rounds in 2021 with the site unable to be accessed safely following one event following a large rain event, subsequently no samples were able to be collected.

The catchment area has changed significantly since the EIS predictions were made with a levee now in place between rehabilitated mine areas and Carrington Billabong.

### 4.5.5.3 West Pit EIS Predictions

The West Pit EIS included water quality criteria in the local catchment area. Emu Creek (NSW2), Farrells Creek (combined upstream and downstream monitoring sites), Davis Creek and Parnells Creek Dam were sampled during the audit period with the following results:

- During 2019, Emu Creek recorded pH7 which is slightly lower than EIS predictions and the Electrical conductivity was 120 µS/cm, indicating fresher than predicted EC results. The pH and EC at Farrells Creek (combined upstream and downstream monitoring sites) averaged 6.9 and 191 µS/cm respectively during the review period, were also slightly lower than EIS predictions. The pH and EC for the sample taken at Davis Creek 7.3 and 266 µS/cm respectively during the review period, slightly lower than EIS predictions. Parnell's Dam (W3) measured an average EC of 4,227 µS/cm in 2019, within the prediction.
- During 2020, Emu Creek was sampled five times, with average pH 7.7, which is within the EIS predictions and the Electrical conductivity was 196 µS/cm, indicating fresher than predicted EC results. The pH and EC at Farrells Creek (combined upstream and downstream monitoring sites) averaged 7.5 and 1,021 µS/cm respectively during the review period; these results were within the EIS predictions. Davis creek (where such water quality would be measured for this comparison) was reported as dry during the rain event monitoring rounds in 2020 with no samples collected. Parnell's Dam (W3) measured an average EC of 2,969 µS/cm in 2020, within the prediction.
- During 2021, Emu Creek (NSW2) was sampled four times during with average pH 7.4 pH, which is within the EIS predictions, and the Electrical conductivity was 127 µS/cm, indicating fresher than predicted EC results. The pH and EC at Farrells Creek (combined upstream and downstream monitoring sites) averaged 7.6 pH and 1,239 µS/cm respectively during the review period; these results were within the EIS predictions. Davis creek (where such water quality would be measured for this comparison) was sampled once during 2021 with a pH of 7.7 and EC of 823. Parnell's Creek Dam (W3) measured an average EC of 4,042 µS/cm in 2021, within the prediction.
- During 2022, Emu Creek (NSW2) recorded an average pH of 7.4 and an average EC of 149 µS/cm, both lower than the predicted results. The pH and EC at Farrells Creek (combined upstream and downstream monitoring sites) averaged 7.9 and 903.1 µS/cm respectively during the review period, were also slightly lower than EIS predictions. The average pH and EC for Davis Creek (NSW3) were 7.8 and 653 µS/cm respectively during the review period, in the lower range and slightly lower than EIS predictions. Parnell's Dam (W3) measured an average EC of 3,374 µS/cm in 2022, within the prediction.

### 4.5.5.4 Performance relating to HRSTS Discharges

HVO participates in the Hunter River Salinity Trading Scheme (HRSTS), allowing it to discharge to the Hunter River via three licensed discharge points, including Dam 11N, Dam 15S (Lak James) and Dam 9W (Parnells Dam). Discharges can only take place subject to the schemes regulations.

No water was discharged off site during 2019 and 2020 via the Hunter River Salinity Trading Scheme (HRSTS). 3,083 ML of water was discharged off site during 2021 via the Hunter River Salinity Trading Scheme (HRSTS). One incident was reported due to a total suspended solids (TSS) result above the 100percentile concentration limit of 120 mg/L in a grab sample collected on 24 March 2021. A total of 6623 ML of water was discharged during 2022 in accordance with the HRSTS.

Specific findings with respect to compliance against approval conditions and specific discharge events are included in the audit checklists in Appendix B.

### 4.5.6 Groundwater Management

Comparison of groundwater management results and long-term trend analysis is included in the annual review provided by HVO.

The current annual report during the audit period provides the following summary of long-term trends identified for each monitoring dataset:

- The EC, pH and SWL trends for 2017 to 2022 for Carrington Broonie Seam groundwater bores were generally consistent with historical ranges with some minor variation noted with pH and SWL results.
- The EC, pH and SWL trends for 2017 to 2022 for Carrington Alluvium groundwater bores were generally consistent with historical trends. New triggers have been developed following an independent review of the groundwater network and better represent current conditions and monitoring in the area. These have been included in the revised Water Management Plan pending approval.
- The EC, pH and SWL trends for 2017 to 2022 for groundwater bores in the Carrington Interburden were generally consistent with historical trends. Bore 4036C was dry and therefore samples were unable to be collected during 2022.
- Water quality results in the Carrington West Alluvium were generally consistent with historical trends. Bore CGW49 intersects alluvium within the western limb of the paleochannel. Historical readings show that bore CGW49 has recorded pH ranging between 6.6 and 8.1. Review of pH readings remained fairly stable and within historical levels. The results show no adverse impacts due to mining.
- Water quality results foir the Carrington West Wing Flood Plain were generally consistent with historical trends. pH levels for GW-106 were slightly below the lower pH trigger for Q1 to Q3 2022. This bore has been removed in the revised Version 3.4 of the Water Management Plan that has been submitted to DPE for approval.
- Electrical Conductivity, pH and SWL trends for Cheshunt/North Pit Alluvium and Cheshunt Interburden 2017 to 2022 were generally consistent with historical trends. Hobdens Well is screened within alluvium, located between the Hunter River and Cheshunt Pit. Historical readings show that Hobdens Well has recorded pH ranging between 7.1 and 8.2. Review of pH readings indicated levels fluctuated slightly, but within historical levels over 2022. The results show no adverse impacts due to mining.
- The pH, EC and SWL trends for Cheshunt Mt Arthur 2017 to 2022 were generally consistent with historical trends except for pH. Based on historical data, pH results from all three bores have been gradually trending downward since July 2011. The groundwater level measured at the bores has typically been within or below the screened section of bores BZ4A(2) and BZ3- 3 (pH – 5<sup>th</sup> Percentile). Purging/sample collection within bore BZ2A(1) and BZ3-3 may induce localised groundwater drawdown to within the screened section. This may be the cause of the reducing pH measured at these bores. The updated draft WMP includes amendments to the Cheshunt - Mt Arthur seam groundwater monitoring,
- The pH, EC and SWL trends for Cheshunt Piercefield for 2017 to 2022 were generally consistent with historical trends.
- The pH, EC and SWL trends for Lemington South Alluvium for 2017 to 2022 were generally consistent with historical trends.
- The pH, EC and SWL trends for Lemington South Arrowfield for 2017 to 2022 were generally consistent with historical trends.
- The pH, EC and SWL trends for Lemington South Bowfield 2017 to 2022 were generally considered to be consistent with historical trends with the exception of triggers exceeded in 4 samples in 2022. The 2022 trigger value exceedances are not considered to reflect a mining related impact. Historical

monitoring data from July 2011–December 2022 shows that EC values have exceeded the trigger value at bores B631(BFS), D010(GM) and C130(WDH) for approximately 10 years. Therefore, the EC trigger value for the Lemington South - Bowfield Seam, Glen Munro Seam and Woodlands Hill Seam is not considered appropriate to assess mining activity induced groundwater impacts. The WMP (HVO 2021) has been updated to reflect this observation and the assignment of trigger values has been removed for bores B631(BFS) and D010(GM). The draft WMP includes a revised upper EC trigger value for all Woodlands Hill seam bores, including C130(WDH), to 20,900  $\mu$ S/cm. However, future monitoring results may still exceed this trigger value and therefore may not be suitable for C130(WDH). pH trigger values are no longer assigned to B631(BFS) in the updated draft WMP. In addition, the upper pH trigger value has been increased to 8.0 (from 7.9) for all other Bowfield Seam bores (in the Lemington South area).

- The pH, EC and SWL trends for Lemington South Interburden 2017 to 2022 are considered consistent with historical concentrations. All of the EC measurements in the period 2011-2022 have exceeded the trigger value of 11,408 µS/cm. Therefore, the EC trigger value for the Lemington South Interburden is not considered appropriate to assess the potential impact of approved mining activity on groundwater at this bore location. EC values were consistently reported between 20,000 and 22,000 µS/cm from 2011 to 2017 and followed an increasing trend from 2018 to early 2020 reaching a maximum of 32,400 µS/cm in February 2020 as reported in previous annual groundwater reviews. A downward trend has been observed since early 2020, which coincides with a period of increased rainfall following the recent drought. In the updated draft WMP (HVO 2021), C130(ALL) has been reassigned to Lemington South Overburden, and the EC trigger value is proposed to increase to 23,500 µS/cm.
- The pH, EC and SWL trends for Lemington South Woodlands Hill, Glen Munro, North Pit Spoil, West Pit Alluvium and Carrington West Wing Bayswater for 2017 to 2022 were generally consistent with historical trends.

Specific findings with respect to compliance against approval conditions are included in the audit checklists in Appendix B.

### 4.6 Assessment of Water Management Structures

DPE specifically requested a review of water management structures on site in their auditor endorsement letter dated 28 August 2022. During the site inspection, water management structures across the site were inspected to assess the water type (clean/sediment/ saline) and connectivity of the dams. The water management infrastructure with the highest potential to create an uncontrolled discharge offsite was the focus of these inspections. The assessment was made against Figure 2, 3, 4, 5, 6, 7 and 8 of the Water Management Plan that was most recently submitted to the Department for approval at the time of the audit (Version 3.4 document number HVOOC-748212775-3).

Based on observations made during the site inspection, the figures and schematic appeared consistent with the inclusion of the most recently constructed and operational dams (Dam 21W and 28W). It was noted that there was a new sediment dam under construction as part of the expansion area around the Wilton Pit which was not included in the most recent WMP. This highlights the need for ongoing review of the Water Management Plan to reflect current site conditions.

The HVO North Pit Water Schematic stated the HRSTS discharge from Dam 11N is 'inactive' which is not the case. A missing link between Dam 35S and the Hunter River on the HVO South Pit Water Schematic was also identified. It is recommended Figures 2-8 of the WMP (Version 3.4) are updated following an internal review by HVO to identify any updates required in addition to those stated above.

A number of dams contained a sign at the main entry point which included identification of the dam, including the name and the type of dam (i.e. mine water, sediment dam, saline dam). This is considered good practice and is recommended to continue to be rolled out for both new and existing dams.

In order to assist with management of the complex water management system, it is recommended that larger scale plans around areas of key infrastructure areas such as the Rail Load Out Facilities, Workshop and CHPP areas are included in the WMP. These areas contain a complex system of drains, culverts, sumps, pits, dams, pipes and pumps which are not included on the water infrastructure plans (Figures 2-5 inclusive). These networks are critical for water management and should be detailed within the Water Management Plan.

The Water Management Plan does not include the location of clean water diversions as required under S3 C27 (DA450-10-2003). It is recommended that a plan is developed to illustrate the clean water diversions.

Many of the dams included depth markers (including spillway and maximum operating level signs), along with the recently installed automatic water level monitoring systems. The pipe burst detection system infrastructure was also observed on water transfer pipes. These systems will greatly improve water management by:

- Providing reassurance to all stakeholders that the majority off offsite discharges will be able to be identified and reported on by HVO
- Providing improved data for HVO to update their water balance and gain a better understanding of water volumes across the site.
- Enabling informed decisions to be made by HVO personnel to manage water levels and reduce the chances of off-site discharges.

Specific findings in respect to compliance against approval conditions, and recommendations are included in the audit checklists in Appendix B.

## 4.7 Community Consultation Committee

HVO has a range of communication methods in place which enables it to share information with the local community. These methods include:

- The Community Consultative Committee (CCC).
- Direct engagement with nearby landholders.
- The HVO Public Website (https://www.hvo.com.au/contact/).
- Distribution of Community Newsletters.

HVO utilise the established Community Consultative Committee (CCC) which meets quarterly to satisfy the requirements of Schedule 5, Condition 8 of PA 06\_0261 and Schedule 5, Condition 6 of DA 450-10-2003.

## 5 STATUS OF 2019 IEA RECOMMENDATIONS

The IEA conducted a reviewed against the recommendations made in the 2019 IEA conducted by Hansen Bailey Pty Ltd. The findings from this review have been provided in **Appendix E.** 

## 6 AUDIT FINDINGS

## 6.1 Identified Non-Compliances and Recommendations

### 6.1.1 PA 06\_0261

Non-Compliances identified against PA 06\_0261 have been summarised in **Table 9** below. Further audit commentary and evidence is provided against each condition in the PA 06\_0261 Audit Checklist provided in **Appendix B**.

#### Table 9 Non-compliances against PA 06\_0261

Condition Ref	Requirement	Independent Audit Finding	Recommendation
S2 C2	Terms of Approval The Applicant must carry out the development generally in accordance with the: 1. EA; 2. statement of commitments; 3. EA (Mod1); 4. EA (Mod 2); 5. EA (Mod 3); 6. EA (Mod 3); 7. EA (Mod 5); 8. Modification Report (MOD 6); 9. Modification Report (MOD 7); and development layout.	<ul> <li>HVO has generally carried out the project in accordance with the EA, statement of commitments, and conditions of the approval during the audit period.</li> <li>There have been a number of non- conformances with the following conditions of the approval during the audit period:</li> <li>Schedule 3 Condition 2 – Noise Impact</li> <li>Schedule 3 Condition 7 – Airblast overpressure</li> <li>Schedule 3 Condition 19 – Air Quality</li> <li>Criteria</li> <li>Schedule 3 Condition 27 – Water Management Plan</li> </ul> Mod 6 – November 2021 Mod 6 included the establishment of a modular Ammonium Nitrate Emulsion (ANE) Plant. This ANE plant has been established and was reviewed during the audit. Mod 7 – May 2022 This modification is to enable the transfer and temporary storage of water into the existing	No further action required.

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Condition Ref	Requirement					Independent Audit Finding	Recommendation
						Lemington Underground Mine void, and extraction and use of this water at MTW and HVO. At the time of the audit works associated with Mod 7 have not occurred.	
S2 C2A	The Applicant must carry out the de conditions of this consent.	velopme	nt in accore	dance with	the	Refer S2 C2	Refer S2 C2
S3 C2	Noise Impact Assessment Criteria The Applicant must ensure that the noise generated by the development does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land, or on more than 25% of any privately- owned land. Table 2: Noise impact assessment criteria dB(A)					<ul> <li>December 2019</li> <li>No exceedance of relevant criteria noted for December 2019.</li> <li>2020</li> <li>No exceedance of relevant criteria noted.</li> <li>2021</li> </ul>	No further action required
	Land Number / Receiver	Day	Evening	Night	Night	Measured noise levels exceeded the LA1,1minute	
	Hunter Valley Gliding Club (when in use)	LAeg(15 minute) 55	LAog(15 minute) 55	LAca(15 minute) 55	LA1(1 minuto)	<ul> <li>Criteria (45 dB) at Jerrys Plains East by 10 dB on</li> <li>22/07/2021 (time 32:16) with a result of 55</li> <li>LA1,1minute. This has been attributed to impact</li> </ul>	
	7- Stapleton (Cheshunt East)	41	41	41	45		
	10 – Moses (Wandewoi)	37	37	37	45		
	Maison Dieu residences	- 71		* ***		– noise from a dragline.	
	16 – Algie 32 – Algie (Curlewis)	42	42	42	45	In response follow up monitoring was performed with five additional 1-minute measurements taken	
	5 – Bowman, 47 – Moxey, 61 – Shearer and all other land on Shearer's Lane	41	41	41	45	on the night and additional measurement taken the following week. Follow up measurements were	
	34 – Ernst	40	40	40	45	compliant. EPA and DPIE were notified of the	
	50 – Nelson 24 – Clifton and Edwards and residences located within 250 metres of this residence, not otherwise listed in this table	40	40	40	45	initial exceedance and provided with an exceedance report. A review of Monthly Environmental Monitoring reports notes Table 9 of the 2021 July report for the LA1,1minute results have miss labelled the	
	Maison Dieu residences within 1 kilometre of Shearers Lane, not otherwise listed in this table	39	39	39	45		
	127* - Riley	37	37	37	45	column "HVO South LAeq dB" It should read	
	All other Maison Dieu residences	35	35	35	45	"LA1,1minute". However, this has been observed	
	Jerrys Plains Road residences					throughout the monthly reports, it's recommended this is updated appropriately.	
						<b>2022</b> Jerrys Plains East and Jerrys Plains Village	
						received a 2 dB tonality penalty on 20/07/2022. The monthly report doesn't elaborate on why there wasn't an exceedance, or whether this may have	
						been attributed to other sources. It is	

Requirement					Independent Audit Finding	Recommendation
Land Number / Receiver	Day LAcq(15 minute)	Evening Lacq(15 minute)	Night LAcq(15 minute)	Night Lat(1 minute)	recommended that in future this is clarified in the	
36 - Smith (ex Garland)	40	40	40	45	monthly report to avoid confusion.	
4 – Muller 31 – Cooper (Kilburnie) 310* – Northoote 312* – Carmody 463* – Carter	39	39	39	45		
3 – Elisnore 317* – Gee	38	38	38	45		
434* - Murphy	37	37	37	45		
436* – Skinner 321* – Haves	36	36	36	45		
All Jerrys Plains Road residences, not	35	35	35	45		
otherwise listed in this table Warkworth residences						
38 - Henderson	48	48	48	45		
23 - Hawkes (Springwood)	43	43	43	45		
45 – Kelly and all other privately-owned land in Warkworth village	43	43	43	45		
All other privately-owned land	35	35	35	45		
However, if the Applicant has a w landowner of the land listed in Tal been forwarded to the Departmen the noise limits in Table 2 in acco	ble 2, and a it and EPA,	copy of th then the A	is agreeme pplicant m	ent has ay exceed		
<ul> <li>landowner of the land listed in Tall been forwarded to the Department the noise limits in Table 2 in accoragreement.</li> <li>Notes:</li> <li>Noise impacts at HVCG are to be residential facilities and/or clubho applicable during times of use that</li> <li>The receiver references are as de which are as described in EA (Mo</li> <li>Noise generated by the developm relevant requirements and exemp conditions) of the NSW Industrial</li> <li>The noise limits in Table 2 are to a requirements set out in Appendix</li> </ul>	ble 2, and a at and EPA, rdance with assessed in use. Noise in t have been i escribed in the d 5), and as ent must be tions (includi Noise Policy be applied in 4A.	copy of th then the A the negoti the immedia pact assess notified by F e EA, excep shown in Ap measured ir ng certain n (2000, or its accordance	is agreeme applicant m ated noise ate vicinity o sment limits IVGC to the t those with opendix 4. a accordance teteorologics a latest versi with the lim	ent has ay exceed f its are only Applicant. an asterisk e with the al on). itations and		
<ul> <li>landowner of the land listed in Tall been forwarded to the Department the noise limits in Table 2 in accoagreement.</li> <li>Notes:</li> <li>Noise impacts at HVCG are to be residential facilities and/or clubbo applicable during times of use that</li> <li>The receiver references are as dewhich are as described in EA (Mo</li> <li>Noise generated by the developm relevant requirements and exemp conditions) of the NSW Industrial</li> <li>The noise limits in Table 2 are to be a set of the the the the the the the the the the</li></ul>	ble 2, and a at and EPA, rdance with assessed in use. Noise im t have been to be applied in 45, 310, 312	copy of th then the A the negoti pact assess notified by H e EA, excep shown in Ap measured in ng certain n (2000, or its accordance	is agreeme applicant m ated noise ate vicinity o sment limits IVGC to the t those with opendix 4. a accordance teteorologics a latest versi with the lim	ent has ay exceed f its are only Applicant. an asterisk e with the al on). itations and		No further action required

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Condition Ref	Requirement		Independent Audit Finding	Recommendation
	owner of the relevant resid agreement has been forwa	Allowable exceedance 5% of the total number of blasts over a period of 12 months 0% has a written negotiated blast agreement with the dence on privately-owned land, and a copy of this arded to the Department and EPA, then the e airblast overpressure level in Table 6 in	<ul> <li>This event was notified, and subsequently a show cause notice was issued by DPIE. HVO provided a response to this notice, and have subsequently implemented a range of improvements to preblasting checks to prevent reoccurrence, including:</li> <li>Disciplinary process with shotfirer who failed to follow the HVO Shotfiring Activities Procedure;</li> <li>Requirement to use Blastlogic (or similar) software to assess wavefront reinforcement impacts prior to each blast; and</li> <li>Review and update drill and blast QA/QC processes and record keeping procedures.</li> <li>A review of the actions following the incident determined that mitigation measures developed are sufficient.</li> <li>Interviews with site personnel demonstrated a well-established pre-blasting procedure and checklists to predict and mitigate potential impacts. Review of blast data following this event demonstrate all blasts have been compliant with the criteria. There were additional exceedances of the 115dBL Peak criterion, however, events occurred less than 5% of all blasts in each year.</li> </ul>	
S3 C19	mitigation measures are e generated by the develop assessment criteria listed	e that all reasonable and feasible avoidance and employed so that particulate matter emissions ment do not exceed the air quality impact in Table 8 at any residence on privately-owned iding Club (when in use) or on more than 25	During the audit period a significant number of exceedances of the short term (24hr) PM10 criteria were recorded due to deemed extraordinary events influenced by a combination of ongoing drought conditions in 2019 and 2020, regional dust events and smoke from bushfires which significantly affected the Hunter Valley. Each of these exceedances were reported to DPIE and were noted to have been affected by an extraordinary event and therefore, as per the consent conditions, the criteria were not deemed to be applicable.	No further action required.

Condition Ref	Requirement			Independent Audit Finding	Recommendation
	Pollutant         Averaging period         Criterion           Annual         **° 25 µg/m³		These events also contributed to exceedances of the long term (annual average) criteria in some instances, however annual averages have been		
	Particulate matter < 10 µm (PMio)	24 hour	* 50 µg/m <sup>3</sup>	adjusted to exclude these events as per consent conditions.	
	Particulate matter < 2.5 µm (PM <sub>2.6</sub> )	Annual 24 hour	* 25 µg/m <sup>a</sup>	Where exceedances were noted outside of these deemed extraordinary events, these were	
	<ul> <li>Total suspended particulate (TSP) matter</li> <li>Notes:</li> <li>Air quality impacts at HVGC are to residential facilities and/or clubho times of use that have been notifie</li> <li>a Total impact (i.e. incremental in</li> </ul>	use. Air quality limit ed by HVGC to the .	s are only applicable during Applicant.	reported to DPIE and investigated to determine the contribution to these incidents by HVO in accordance with the compliance protocol outlined in the HVO Air Quality Management Plan. Following investigation, one non-compliance was	
	<ul> <li>development plus background con- b Incremental impact (i.e. increm development on its own).</li> <li>c Excludes extraordinary events storms, fire incidents or any other However, if the Applicant has a w any landowner or HVGC to excee copy of this agreement has been then the Applicant may exceed th with the negotiated air quality agree</li> </ul>	nental increase in co such as bushfires, activity agreed by t ritten negotiated a d the air quality li forwarded to the e air quality limits	prescribed burning, dust be Planning Secretary. air quality agreement with mits in Table 8 and a Department and EPA,	noted against consent conditions in each of PA 06_02161 and DA 450-10-2003. The non- compliance with respect to this condition was a PM10 exceedance at the Knodlers Lane HVAS on 28 July 2021.	
3 C27	<ul> <li>Water Management Plan</li> <li>The Applicant must prepare a Wathe Planning Secretary. This Plan</li> <li>1. be prepared in consultation will expert whose appointment has Secretary;</li> <li>2. be submitted to the Planning Sthis consent or otherwise agree</li> <li>3. include:</li> <li>a site water balance, which ind water supply, on site water us transfers, investigates and deat the development and a method inflow into the Lemington under</li> </ul>	must: th DPE Water by s been approved Secretary for appr red by the Plannir cludes details of s e and manageme scribes measures dology to quantify	a suitably qualified by the Planning roval within 6 months of ng Secretary; and sources and security of ant and off-site water to minimise water use by the annual groundwater	Water Management Plan Version: 3.0 Effective: 27/7/2018 Approved by Megan Dawson A/Director Resource Assessments on 16/10/2018. Uncontrolled version 3.4 also sighted which has been issued to the Secretary and is awaiting approval. This version provides more up to date information reflecting management practices currently undertaken on site. Unless noted otherwise, comments below are based on the approved 2018 version 3.0.	Version 3.4 of the WMP has been issued to the secretary and is waiting approval. Review the contents of the WMP to reflect the audit findings when next updated.

Condition Ref	R	equirement	Independent Audit Finding	Recommendation
	•	water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased; an erosion and sediment control plan for surface works on the site that is	Item A – Appendix A of the Water Management Plan (WMP) contains a letter from the Secretary confirming the appointment of Andrew Hodge as	
	•	consistent with the requirements of the Managing Urban Stormwater: Soils and Construction Manual (Landcom 2004, or its latest version);	the author. Appendix B contain letters from DPI Water and EPA showing consultation has been undertaken.	
	•	a program for review of groundwater modelling that includes assessment of the effect of short and long-term changes to groundwater quality and mobilisation of salts;	Item B – Not-relevant to this audit period	
	•	<ul> <li>a surface water monitoring program that includes:</li> <li>detailed baseline data of surface water flows and quality in the watercourses that could be affected by the development, including the Hunter River and Wollombi Brook;</li> <li>a detailed description of the surface water management system;</li> </ul>	Item C – Site Water balance included in Section 6 of the WMP, details sources and security of water supply, on site water use and management. The WMP details how the reliance on external water use is minimised through the priority use of captured rainfall runoff from mine disturbance	
		<ul> <li>details of water licensing requirements for all water storages;</li> <li>details of licensed discharge points and limits;</li> <li>detailed design objectives and performance measures for erosion</li> </ul>	areas and groundwater inflow to voids. The WMP does not contain a methodology to quantify annual groundwater inflow into the Lemington	
		<ul> <li>and sediment control works, water storages, water diversions, sediment dams, emplacement areas, backfilled voids and the final void;</li> <li>surface water impact assessment criteria, including trigger levels for investigating potentially adverse surface water impacts of the</li> </ul>	Underground Workings. Section 7.3.2 contains a brief overview of Erosion and Sediment Control. It states that a site-specific ESC Plan is developed under the Ground Disturbance Permit system. Observed example	
		<ul> <li>development;</li> <li>a program to monitor potentially adverse impacts of the development on surface water flows and quality, flooding, stream and riparian vegetation health, including monitoring controlled and uncontrolled discharges and seepage/leachate from the site; and</li> </ul>	for a drill pad. The Surface Water Monitoring Program is detailed in Appendix C of the WMP. Baseline water quality data is contained in Section 7.2 and water access licence details are contained within Section 5.7. Section 5.8 details the licenced discharge points.	
		<ul> <li>a plan to respond to any exceedances of the performance criteria or surface water impact assessment criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development;</li> </ul>	Design objectives and performance measures are provided in Section 7.3.2 for ESC works, Section	
	•	<ul> <li>a groundwater monitoring program that includes:</li> <li>additional baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, which could be affected by the development;</li> </ul>	5.9 and 9.3 for water storages, Section 5.5 and 7.3 for diversions, Section 7.4.3 for emplacement areas and backfilled voids and Section 7.4.1 for final voids.	
		<ul> <li>groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts of the development;</li> </ul>	Surface Water Impact Criteria are detailed in Table 2 of WMP Appendix C. Section 9 and Appendix C details the program to monitor potentially adverse impacts on surface	
		<ul> <li>a program to monitor:</li> <li>groundwater inflows to the open cut mining operations;</li> </ul>	water quality, controlled and uncontrolled discharges and seepage/leachate from the site.	

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Condition Ref	Requirement	Independent Audit Finding	Recommendation
	<ul> <li>impacts of the development on the region's aquifers, any groundwater bores, and surrounding watercourses, and in particular, the Hunter River and Wollombi Brook and adjacent alluvium; and</li> <li>impacts of the development on groundwater dependent ecosystems, riparian vegetation and River Red Gum populations; and</li> <li>a plan to respond to any exceedances of the groundwater impact assessment criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development; and</li> <li>a program to periodically update and validate the water balance and groundwater model for the development and compare monitoring results with modelled predictions, unless otherwise agreed by the Planning Secretary.</li> <li>The Applicant must implement the Water Management Plan as approved by the Planning Secretary.</li> </ul>	The Plan to respond to the exceedances is contained in Section 9.5	
S5 C1C	Updating & Staging Strategies, Plans or Programs To ensure that strategies, plans or programs required under this consent and which have been approved by the Planning Secretary are updated on a regular basis, and that they incorporate any appropriate additional measures or amendments to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Planning Secretary. With the agreement of the Planning Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis. The Planning Secretary may approve a revised strategy, plan or program required under this consent, or the staged submission of any of these documents, at any time. With the agreement of the Planning Secretary, the Applicant may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent, including waiving the requirements in condition 15 of Schedule 2. While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the	Annual reports during the audit period identify status of management plans, indicating regular revisions and submission of management plans. Version control on the cover page of some documents saved on the HVO website does not always reflect the current approved version. These should be reviewed and updated. Evidence of consultation and approval of revised management plans should be included in current versions.	Ensure that management plans are reviewed and integrated as required, and that current versions are maintained on the website.

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Condition Ref	Requirement	Independent Audit Finding	Recommendation
	relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.		

### 6.1.2 DA 450-10-2003

Non-Compliances identified against DA 450-10-2003 have been summarised in **Table 9** below. Further audit commentary and evidence is provided against each condition in the DA 450-10-2003 Audit Checklist provided in **Appendix B**.

#### Table 10 Non-compliances against DA 450-10-2003

Condition R Ref	Requirement	Independent Audit Finding	Recommendation
	<ul> <li>The Applicant must carry out the development generally in accordance with he:</li> <li>a. DA 450-10-2003;</li> <li>b. EIS titled <i>Hunter Valley Operations – West Pit Extension</i> and Minor Modifications, volumes 1 –4, dated October 2003, and prepared by Environmental Resources Management Australia;</li> <li>c. the section 96(1A) modification application for the Hunter Valley Loading Point, dated 30 June 2005, and prepared by Matrix Consulting;</li> <li>d. <i>Carrington Pit Extended Statement of Environmental Effects</i> volumes 1 &amp; 2, dated October 2005, and prepared by Environmental Resources Management Australia;</li> <li>e. <i>Carrington Pit Extension Response to Submissions Report</i>, dated May 2006, and prepared by Environmental Resources Management Australia;</li> <li>f. Summary of Commitments for Carrington Pit as Extended, dated 28 May 2006 and prepared by the Applicant;</li> <li>g. <i>Carrington West Wing Environmental</i> Assessment dated 1 October 2010, <i>Carrington West Wing Response to Submissions</i> dated 21 December 2010, <i>Carrington West Wing Response to Submissions</i> dated 21 December 2010, <i>Carrington West Wing Response to Submissions</i> dated 21 December 2010, <i>Carrington West Wing Response to Submissions</i> dated 1 Assessment dated 10 June 2011, <i>Carrington West Wing Statement of Commitments</i> dated 4 March 2013;</li> <li>h. <i>HVO North – Fine Reject Emplacement Modification Environmental Assessment</i> dated June 2013 and <i>HVO North – Fine Reject</i></li> </ul>	<ul> <li>HVO has generally carried out the project in accordance with the EA, statement of commitments, and conditions of the approval during the audit period.</li> <li>There have been a number of non- conformances with the following conditions of the approval during the audit period:</li> <li>Schedule 3 Condition 4A – Air Quality</li> <li>Schedule 3 Condition 20 – Pollution of Waters</li> <li>Schedule 3 Condition 21 – Discharge Limits</li> <li>Schedule 3 Condition 27 – Water Management Plan</li> </ul>	No further action required.

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Condition Ref	Requirement	Independent Audit Finding	Recommendation
	<ul> <li>Emplacement Modification Response to Submissions dated August 2013;</li> <li>i. modification application DA 450-10-2003 Modification 5 and accompanying environmental assessment entitled Hunter Valley Operations North Modification 5 HVLP Sediment Basin and HVO North Communication Towers Environmental Assessment and dated November 2016;</li> <li>j. modification application DA 450-10-2003 Modification 6 and accompanying Environmental Assessment entitled Hunter Valley North Operations Modification 6 Environmental Assessment Report dated November 2016 and Hunter Valley North Operations Modification 6 Environmental Assessment Report dated November 2016 and Hunter Valley North Operations Modification 6 Response to Submissions dated December 2016 and January 2017; and</li> <li>modification application DA 450-10-2003 Modification 7 to Hunter Valley Operations North development consent (DA 450-10-2003) to amend historical boundary errors and update the Schedule of Lands dated June 2017.</li> </ul>		
S2 C2A	The Applicant must carry out the development in accordance with the conditions of this consent.	Refer S2 C2	Refer S2 C2
S3 C4A	Air Quality Criteria Except for the air quality affected land in Table 1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not exceed the criteria listed in Tables 2, 3 or 4 at any residence on privately-owned land or on more than 25 percent of any privately-owned land. In this condition 'reasonable and feasible avoidance and mitigation measures' includes, but is not limited to, the operational requirements in Condition 5 of Schedule 4 and the requirements in Conditions 5 and 6 of Schedule 4 to develop and implement a real-time air quality management system that ensures effective operational responses to the risks of exceedance of the criteria.	<b>PM10 Dust Exceedance Cheshunt East HVAS – 12</b> <b>September 2021</b> The Cheshunt East High Volume Air Sampler (HVAS) exceeded the HVO North PM10 24-hour air quality criteria on 12 September 2021 recording 63.4µg/m <sup>3</sup> against a criteria of 50 µg/m <sup>3</sup> . The data was sent to an external consultant for investigation which found HVO's contribution was only 31.2 µg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise and air quality agreements with private landholders. Following this incident a monitoring and alarm system has been established utilising the North CHPP TEOM to warn of conditions that may contribute to potential exceedances for this HVAS. This allows targeted	No further action required.

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ndition f	Requirement				Independent Audit Finding	Recommendation
	Table 2: Long term criter	ria for particulate matt	er		response to mitigate air quality impacts based on real	
	Pollutant		Averaging Period	d Criterion	time monitoring data.	
	Total suspended parti	iculate (TSP) matter	Annual	a 90 µg/m <sup>3</sup>		
	Particulate matter < 1	0 µm (PM10)	Annual	a 30 µg/m <sup>3</sup>		
	Table 3: Short term crite	rion for particulate ma	itter			
	Pollutant		Averaging Period	d Criterion		
	Particulate matter < 10 μm (PM <sub>10</sub> ) Table 4: Long term criteria for deposited dust		24 hour	a 50 µg/m <sup>3</sup>		
			and the second second			
	Pollutant	Averaging Peri	od Maximum increase in deposited dust level			
	<sup>c</sup> Deposited dust	Annual	b 2 g/m²/month	a 4 g/m <sup>2</sup> /month		
	<ul> <li>d Excludes extraordil</li> </ul>		shfires, prescribed burning, dus	ards Australia, AS/NZS mination of Particulate Matter - st storms, sea fog, fire incidents,		
27		st ensure that th the noise impact	e noise generated by	/ the development present in Table 9 at	Measured noise levels exceeded the LA1,1minute criteria (46 dB) at Jerrys Plains East by 9 dB on 22/07/2021 (time 32:16) with a result of 55 LA1,1minute. This has been attributed to impact noise from a dragline. In response follow up monitoring was performed with five additional 1-minute measurements taken on the night and additional measurement taken the following week. Follow up measurements were compliant. EPA (sighted letter 23 July 2021) and DPIE (sighted letter 30 July 2021) were notified of the initial exceedance and	

Requirement			Independent Audit Finding	Recommendatio
 Table 9: Noise imp	act assess	ment criteria dB(A)		
Day/Evening/Night		Land Number		
LAeq(15 minute)	LAI			
	minute)			
40	46	4 – Muller (from year 1 to year 7) 7 – Stapleton Jerrys Plains Village – represented by residence locations 13 and 14 on Figure 24, volume 4 of the EIS (years 20 & 21). 1 – Hayes (years 20 & 21) 18 – Bennet (years 20 & 21) 51 – Nicholls (years 20 & 21) 52 – Old – (years 20 & 21)		
39	46	2 – Skinner		
		3 – Elisnore 11 – Fisher 19 – Biralee Feeds 31 – Cooper 36 – Garland 54 – Skinner		
38	46	1 – Hayes (from year 1 to year 19)		
		18 – Bennet (from year 1 to year 19)		
		51 – Nicholls (from year 1 to year 19) 52 – Old (from year 1 to year 19)		
36	46	4 – Muller (from year 8 to year 21)		
35	46	All other residential or sensitive receptors, excluding the receptors listed in condition 1 above.		
Notes:				
<ol> <li>The years referring operating are delayed of EIS for a parting adjusted in acclocation of act the EIS, will be condition 5).</li> </ol>	ions as r accele cular ye cordanc ual mini e indica	in Table 9 are to be considered as the position of set out in the EIS for that year. If mining operations rated from the planned location as shown in the ar, then the noise assessment criteria will be with the location of actual mining operations. The ng operations in relation to locations predicted in ted in the Annual Review (see schedule 6,		
<ol> <li>The years refermining operating are delayed on EIS for a parting adjusted in acclocation of act the EIS, will be condition 5).</li> <li>The noise limit extension and coal haulage in River.</li> </ol>	ions as r accele cular ye cordand ual mini e indica ts in Ta ts in Ta all Hun dentified	set out in the EIS for that year. If mining operations rated from the planned location as shown in the ar, then the noise assessment criteria will be with the location of actual mining operations. The ing operations in relation to locations predicted in ted in the Annual Review (see schedule 6, ble 9 are for the noise contribution of the West Pit ter Valley Operations north of the Hunter River and d in the EIS from the south side of the Hunter		
<ol> <li>The years refermining operating are delayed on EIS for a parting adjusted in accondition of act the EIS, will be condition 5).</li> <li>The noise limit extension and coal haulage in River.</li> <li>Noise from the within the resimmetres of a dw metres from the rest from the r</li></ol>	ions as r accele cular ye cordanc ual mini e indica ts in Tai all Hun dentifier e develo dential l velling ( ne boun	set out in the EIS for that year. If mining operations rated from the planned location as shown in the ar, then the noise assessment criteria will be we with the location of actual mining operations. The ing operations in relation to locations predicted in ted in the Annual Review (see schedule 6, ble 9 are for the noise contribution of the West Pit ter Valley Operations north of the Hunter River and	e t	
<ol> <li>The years referring operating are delayed on EIS for a partial adjusted in accondition of act the EIS, will be condition 5).</li> <li>The noise limit extension and coal haulage in River.</li> <li>Noise from the within the resimmetres of a dw metres from the minute) noise</li> </ol>	ions as r accele cular ye cordanc ual mini e indica ts in Tai t all Hun dentifie e develc dential l velling ( ne boun limits in	set out in the EIS for that year. If mining operations rated from the planned location as shown in the ar, then the noise assessment criteria will be we with the location of actual mining operations. The ing operations in relation to locations predicted in ted in the Annual Review (see schedule 6, ble 9 are for the noise contribution of the West Pit ter Valley Operations north of the Hunter River and d in the EIS from the south side of the Hunter opment is to be measured at the most affected point boundary, or at the most affected point within 30 rural situations) where the dwelling is more than 30 dary, to determine compliance with the LAeq(15	e t	

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Condition Ref	Requirement	Independent Audit Finding	Recommendation
	<ul> <li>noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise levels where applicable.</li> <li>8. Noise from the development is to be measured at 1 metre from the dwelling façade to determine compliance with the LA1(1 minute) noise limits in the above table.</li> <li>The noise limits in Table 9 are to be applied in accordance with the limitations and requirements set out in Appendix 3.</li> </ul>		
S3 C20	<b>Pollution of Waters</b> Except as may be expressly provided by an EPA licence, the Applicant must comply with section 120 of the <i>Protection of the Environment Operations Act</i> <i>1997</i> during the carrying out of the development.	environmental monitoring report from January 2022 until	No further action required.
		2021 Annual Review detailed the TSS exceedance during a discharge under the HRSTS from Dam 9W (Parnells Dam) on 24 March 2021. A sample collected returned a TSS value of 266mg/L, above the allowable upper limit of 120mg/L under EPL640. On review of the incident report dated 30th April 2022 prepared by HVO, the investigations undertaken following the discharge events drew the conclusion that no environmental harm occurred. The continuous turbidity monitoring undertaken during the discharge event did not show any signs of increased sediment loads within the released water at 10am on 24th March 2021 when the manual sample was collected for TSS analysis. The cause of the elevated reading could not be determined. The report stated that the Hunter River was in flood flow at the time of the incident and that the water within the River was more turbid than the water in Parnells Dam based on visual observations.	
		Discharge from mine water dam 15N commenced on 8th March 2022. The incident report dated 21st March 2022 stated that the site received over 141mm of rainfall. This period was later declared a natural disaster with widespread floods in the region. As a result an email from the EPA was cited stating that there was no need for licences to report pollution events as a result of the	

Condition Ref	Requirement	Independent Audit Finding	Recommendation
		flooding. It is noted that there is currently a Pollution Reduction Program in place under EPL640 that includes increasing the capacity of Dam 15N to contain the 24hr, 100yr ARI event. During the site audit inspection in December 2022, HVO environmental staff stated that the geotechnical investigations had been recently completed with detailed design due to commence in early 2023. A discharge from mine water dam 32N in Bayswater Creek commenced on 28th March 2022 following a long period of above average. The incident report prepared by HVO dated 8th April 2022 stated that no environmental harm was caused with TSS readings below 10mg/L, EC levels lower in the dam compared to the Creek and a more neutral pH in the dam compared to the Creek. Dam 32N is part of upgrade works to occur at the Hunter Valley load point under a pollution reduction program in EPL640 which will include a dewatering pump being installed. Works are	
		Another discharge from mine water Dam 15N commenced on 6th July 2022. The incident report prepared by HVO dated 13th July 2022 stated that 161.6mm was recorded at site from 2-6 July 2022. The report stated that based on water quality samples collected and analysed, the spill was deemed to not cause environmental harm.	
		It is noted that there were also the following uncontrolled discharges from sediment dams across the northern operations area:	
		- Dam 2N – 23rd March 2021: Sighted Incident report prepared by HVO dated 9th April 2021 stating that following 107.4mm of rainfall recorded from 19-23rd March 2021, Dam 2N spilled into Farrells Creek. The amount of rainfall received was above Blue Book design rainfall of 57.2mm. It was deemed that no environment harm occurred and an email sighted from EPA received 15th	

Condition Ref	Requirement			Independent Audit Finding	Recommendation
				April 2021 stated no further action would be taken on this occasion.	
				- Dam 2N – 8th March 2022: During flooding natural disaster.	
				- Dam 2N – 4th July 2022: Incident report prepared by HVO dated 11th July 2022 stated that 161.6mm was recorded at site from 2-6 July 2022 exceeding design rainfall event. Based on water quality monitoring, the discharge was claimed to not create environmental harm.	
S3 C21	the Environment Opera Regulation 2002 (or any Applicant must: 9. not discharge more at HVO north of the	tions (Hunter River y subsequent version than 237 ML/day fr Hunter River; harges from license 7: Units of measure pH mg/litre	n EPA licence or the Protection of Salinity Trading Scheme) on of the Regulation), the om the licensed discharge points ed discharge points comply with 100 percentile concentration limit $6.5 \le pH \le 9.5$ NFR $\le 120$	<ul> <li>HRSTS TSS exceedance – 23 March 2021</li> <li>Parnells Dam exceeded discharge limits for Total Suspended Solids (TSS) during HRSTS discharge on 24 March. The sample returned a TSS of 266 mg/L vs EPL limit of 120mg/L. Due to Flood Flow in the Hunter River at the time there was no potential for environmental harm. An investigation was undertaken however a cause was not able to be confirmed. TSS samples taken up to and after the 24 March were well below the limit. Continuous Turbidity monitoring was occurring and did not indicate an increasing trend. Notified to DPE and EPA with an incident report.</li> <li>On 20<sup>th</sup> March 2021 Inaccurate flow reading occurred due to the weir plate not being removed on Parnells Dam. This was detailed in the Annual Return to the EPA.</li> </ul>	No further action required.
S3 C27	mine to the satisfaction consultation with DPI W experienced persons w	pare a Water Mana of the Secretary. T /ater and the EPA b hose appointment l ed to the Secretary d. This plan must in e that:	has been approved by the by the end of September 2013	Water Management Plan Version: 3.0 Effective: 27/7/2018 Approved by Irene Zinger Manager Regulatory Operations – Metro Crown Lands and Water on 6/12/2017. Uncontrolled version 3.4 also sighted which has been issued to the Secretary and is awaiting approval. This	Version 3.4 of the WMP has been issued to the secretary and is waiting approval. Review the contents of the WMP to reflect the audit findings when next updated.

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Condition Ref	Requirement	Independent Audit Finding	Recommendation
	<ul> <li>sources and security of water supply, including contingency planning for future reporting periods;</li> <li>water use on site;</li> <li>water management on site, including details of water sharing between neighbouring mining operations;</li> <li>any off-site water transfers and discharges;</li> <li>reporting procedures, including comparisons of the site water balance for each calendar year; and</li> <li>describes the measures that would be implemented to minimise clean water use on site;</li> <li>12. a Surface Water Management Plan, that includes:</li> <li>detailed baseline data on surface water flows and quality in the waterbodies that could be affected by the development;</li> <li>a detailed description of the water management system on site, including the:         <ul> <li>clean water diversion systems and their final positioning;</li> <li>erosion and sediment controls; and</li> <li>water storages;</li> </ul> </li> <li>detailed plans, including design objectives and performance criteria, for:         <ul> <li>design and management of the evaporative sink;</li> <li>design and management of any tailings dams;</li> <li>ensuring the stability of high walls adjacent to low permeability barriers;</li> <li>establishment of drainage lines on the rehabilitated areas of the site; and</li> <li>control of any potential water pollution from the rehabilitated areas of the site;</li> </ul> </li> <li>performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the development:             <ul> <li>the water management system;</li> <li>the stability of high walls adjacent to low permeability barriers;</li> <li>surface water quality of the Hunter River; and</li> <li>stream and riparian vegetation health of the Hunter River;</li> <td><ul> <li>version provides more up to date information reflecting management practices currently undertaken on site. Unless noted otherwise, comments below are based on the approved 2018 version 3.0.</li> <li>Item A – Appendix A of the Water Management Plan (WMP) contains a letter from the Secretary confirming the appointment of Andrew Hodge as the author. Appendix B contain letters from DPI Water and EPA showing consultation has been undertaken.</li> <li>Item B – Not-relevant to this audit period</li> <li>Item C – Site Water balance included in Section 6 of the WMP, details sources and security of water supply, on site water use and management. The WMP details how the reliance on external water use is minimised through the priority use of captured rainfall runoff from mine disturbance areas and groundwater inflow to voids. The WMP does not contain a methodology to quantify annual groundwater inflow into the Lemington Underground Workings.</li> <li>Section 7.3.2 contains a brief overview of Erosion and Sediment Control. It states that a site-specific ESC Plan is developed under the Ground Disturbance Permit system. Observed example for a drill pad.</li> <li>The Surface Water Monitoring Program is detailed in Appendix C of the WMP. Baseline water quality data is contained in Section 7.2 and water access licence details are contained within Section 5.7. Section 5.8 details the licenced discharge points.</li> <li>Design objectives and performance measures are provided in Section 7.4.3 for emplacement areas and backfilled voids and Section 7.4.1 for final voids.</li> <li>Surface Water Impact Criteria are detailed in Table 2 of WMP Appendix C.</li> <li>Section 9 and Appendix C details the program to monitor potentially adverse impacts on surface water quality,</li> </ul></td><td></td></ul></li></ul>	<ul> <li>version provides more up to date information reflecting management practices currently undertaken on site. Unless noted otherwise, comments below are based on the approved 2018 version 3.0.</li> <li>Item A – Appendix A of the Water Management Plan (WMP) contains a letter from the Secretary confirming the appointment of Andrew Hodge as the author. Appendix B contain letters from DPI Water and EPA showing consultation has been undertaken.</li> <li>Item B – Not-relevant to this audit period</li> <li>Item C – Site Water balance included in Section 6 of the WMP, details sources and security of water supply, on site water use and management. The WMP details how the reliance on external water use is minimised through the priority use of captured rainfall runoff from mine disturbance areas and groundwater inflow to voids. The WMP does not contain a methodology to quantify annual groundwater inflow into the Lemington Underground Workings.</li> <li>Section 7.3.2 contains a brief overview of Erosion and Sediment Control. It states that a site-specific ESC Plan is developed under the Ground Disturbance Permit system. Observed example for a drill pad.</li> <li>The Surface Water Monitoring Program is detailed in Appendix C of the WMP. Baseline water quality data is contained in Section 7.2 and water access licence details are contained within Section 5.7. Section 5.8 details the licenced discharge points.</li> <li>Design objectives and performance measures are provided in Section 7.4.3 for emplacement areas and backfilled voids and Section 7.4.1 for final voids.</li> <li>Surface Water Impact Criteria are detailed in Table 2 of WMP Appendix C.</li> <li>Section 9 and Appendix C details the program to monitor potentially adverse impacts on surface water quality,</li> </ul>	

n Requ	uirement	Independent Audit Finding	Recommen
13. a (	<ul> <li>and mitigate and/or offset any adverse surface water impacts of the development.</li> <li>Groundwater Management Plan, which includes:</li> <li>detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development;</li> <li>groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</li> <li>a program to monitor: <ul> <li>groundwater inflows to the open cut mining operations;</li> <li>the impacts of the development on:</li> <li>the alluvial aquifers, including additional groundwater monitoring bores as required by DPI Water;</li> <li>the effectiveness of the low permeability barrier;</li> <li>base flows to the Hunter River;</li> <li>any groundwater bores on privately-owned land that could be affected by the development; and</li> <li>groundwater dependent ecosystems, including the River Red Gum Floodplain Woodland EEC located in the Hunter River alluvium;</li> </ul> </li> <li>the seepage/leachate from water storages, backfilled voids and the final void;</li> <li>a program to validate and recalibrate (if necessary) the groundwater model for the development, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and</li> </ul>	<ul> <li>controlled and uncontrolled discharges and seepage/leachate from the site.</li> <li>The Plan to respond to the exceedances is contained in Section 9.5.</li> <li>The WMP should be updated to include the following: <ol> <li>Update the WMP with the required methodology to quantify the annual groundwater inflow into the Lemington underground mine workings during the period water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased.</li> <li>Update the WMP to include a program to monitor potentially adverse impacts of the development on flooding, surface water flows, stream and riparian vegetation health</li> <li>Update the WMP to include latest details of how the mine is managing water including the recently installed dam level monitoring and pipe burst detection systems.</li> <li>Update the WMP to include a program to potentialls</li> <li>Update the WMP to include a program to pipe burst detection systems.</li> </ol> </li> </ul>	

Condition Ref	Requirement	Independent Audit Finding	Recommendation
S5 C3	<ul> <li>Updating &amp; Staging Submission of Strategies, Plans or Programs To ensure the strategies, plans or programs under this consent are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis. With the agreement of the Secretary, the Applicant may revise any strategy, plan or program approved under this consent without undertaking consultation with all parties nominated under the applicable conditions in this consent. Notes: <ul> <li>While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the existing operations associated with the development are covered by suitable strategies, plans or programs at all times.</li> <li>If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.</li> </ul></li></ul>	Refer to PA 06_0261 Sch 5 Cond 1C	Refer to PA 06_0261 Sch 5 Cond 1C

### 6.1.3 EPL640

Non-Compliances identified against EPL640 have been summarised in **Table 12** below. Further audit commentary and evidence is provided against each condition in the EPL640 Audit Checklist provided in **Appendix B**.

Table 11         Non-compliances against EPL640	
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Condition Requirement Ref		Independent Audit Finding	Recommendation
L2.1	For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	HRSTS TSS exceedance – 23 March 2021 Parnells Dam exceeded discharge limits for Total Suspended Solids (TSS) during HRSTS discharge on 24 March. The sample returned a TSS of 266 mg/L vs EPL limit of 120mg/L. Due to Flood Flow in the Hunter River at the time there was no	No further action required.

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Condition Ref	Requirement					Independent Audit Finding	Recommendation
						potential for environmental harm. An investigation was undertaken however a cause was not able to be confirmed. TSS samples taken up to and after the 24 March were well below the limit. Continuous Turbidity monitoring was occurring and did not indicate an increasing trend. Notified to DPE and EPA with an incident report.	
L5.1		in the table below.			One LA1,1min exceedance (22 July 2020) from dragline at EPA ID 41. Dragline shut down and	No further action required	
	Location	Day LAeq(15min)	Evening LAeq(15min)	Night LAeq(15min)	Night LA1(1min)	progressively restarted while measurements	
	EPA Point 36 in NMG 1A			41	46	taken. Follow-up monitoring was below the criteria with five additional 1-minute measurements on the night and additional measurements taken the following week with no exceedances recorded. EPA and DPE notified. Constitutes non- compliance with EPL.	
	EPA Point 37 in NMG 1B			40	46		
	EPA Point 38 in NMG 1C			39	46		
	EPA Point 39 in NMG 2			37	46		
	EPA Point 40 in NMG 3			39	46		
	EPA Point 41 in NMG 4			39	46		
	EPA Point 42 in NMG 5			40	46		
	EPA Point 43 ini NMG 6			40	46		
	Residence 160 - Bowman in NMG 1A	41	41	41	45		

Condition Re Ref	quirement					Independent Audit Finding	Recommendation
	Residence 256 - Moxey in NMG 1A	41	41	41	45		
	Residence 161 - Shearer in NMG 1A	41	41	41	45		
	Residence 162, 163, 258, 260 & 261 on Shearers Lane in NMG 1A	41	41	41	45		
	Residence 121 - Ernst in NMG 1B	40	40	40	45		
	Residence 123 - Nelson in NMG 1B	40	40	40	45		
	Residence 120 - Clifton and Edwards in NMG 1B and residences within 250m of this residence, not otherwise listed in this table	40	40	40	45		
	Maison Dieu residences 244, 245,246 & 247 in NMG 1C within 1km if Shearers Lane, not otherwise listed in this table	39	39	39	45		
	Residence 127 - Riley in NMG 2	37	37	37	45		
	All other Maison Dieu residences not listed in this table	35	35	35	45		
	Residence 323 - Bennett in NMG 4	40	40	40	46		
	Residence 322 - Nichols in NMG 4	40	40	40	46		
	Residence 308 - Cooper in NMG 4	39	39	39	46		
	Residence 310 - Northcote in NMG 4	39	39	39	45		
	Residence 311 - Elisnore in NMG 4	39	39	39	46		
	Residence 317 - Gee in NMG 4	39	39	39	46		
	Residence 434 - Murphy in NMG 4	39	39	39	46		
	Residence 436 - Skinner in NMG 4	39	39	39	46		
	Residence 321 - Hayes in NMG 4	40	40	40	46		

Condition Ref	Requirement				Independent Audit Finding	Recommendation	
	Jerrys Plains Village and Jerrys Plains West residences 399, 379, 376, 378, 380-383, 387-409, 411, 413-415, 419-423, 362 - 375, 377, 384, 385, 417, 418, 424, 354, 339-353, 355-361, 324, 328, 329, 331-333, 335-338, 326, 327, 330, 437 & 438	40	40	40	46		
	All Jerrys Plains Road residences not otherwise listed in this table	35	35	35	46		
	All other privately owned land in Warkworth Village	43	43	43	45		
	All other privately owned land	35	35	35	45		

### 6.1.4 Mining and Exploration Leases

There were no non-compliances identified or recorded during the audit period for the Mining Leases assessed.

## 6.2 Summary of Opportunities for Improvement

**Table 12** below outlines the opportunities for improvement (OFI) identified during the audit. The OFIs detailed below are based around continuous improvement opportunities identified during the audit and do not represent immediate non-compliance issues.

Table 12	Opportur	nities for Imp	rovement	
OFI Ref	Approval	Condition Ref	Context	Opportunities for Improvement
OFI 01	PA 06_0261	S2 C15	Where required, management plans and other documents generally include revision details and records of consultation. While the matters raised, resolution of these matters and details of any disagreement are addressed within these documents, it is recommended that clearer reference to consultation matters raised, and resolution (or disagreement) on these matters could be included in a table within relevant documents to more clearly demonstrate the outcomes of consultation.	It is recommended that management plans, and other necessary documents include a table itemising the matters raised during consultation with identified parties, and description of the resolution of these matters.
OFI 02	PA 06_0261 DA 450-10- 2003	S3 C2 S3 C7	Measured noise levels exceeded the LA1,1minute criteria (45 dB) at Jerrys Plains East by 10 dB on 22/07/2021 (time 32:16) with a result of 55 LA1,1minute. This has been attributed to impact noise from a dragline. In response follow up monitoring was performed with five additional 1-minute measurements taken on the night and additional measurement taken the following week. Follow up measurements were compliant. EPA and DPIE were notified of the initial exceedance and provided with an exceedance report. A review of Monthly Environmental Monitoring reports notes Table 9 of the 2021 July report for the LA1,1minute results have miss labelled the column " <b>HVO</b> <b>South LAeq dB</b> " It should read "LA1,1minute". However, this has been observed throughout the monthly reports, it's recommended this is updated appropriately.	Reference in Table 9 of the Monthly Environmental Monitoring Reports should be updated to reference LA1, 1-minute criteria
OFI 03	PA 06_0261 DA 450-10- 2003	S3 C2	Jerrys Plains East and Jerrys Plains Village received a 2 dB tonality penalty on 20/07/2022. The monthly report doesn't elaborate on why there wasn't an exceedance, or whether this may have been attributed to other sources. It is recommended that in future this is clarified in the monthly report to avoid confusion.	Where a tonality penalty has been applied, the monthly report should include discussion and clarification on whether this constitutes an exceedance or is attributable to other sources.
OFI 04	PA 06_0261	S3 C15	When visited on 7 December 2022, the website link to Blasting Schedule published on HVO "Contact" page ( <u>https://www.hvo.com.au/contact/</u> ) opened the blasting schedule document for 15 October to 21 October 2022. Blasting schedule on "Contact" page should be updated with current blast schedule. Noted current blasting schedule provided in the HVO Document Library.	Ensure that the blasting schedule on the HVO website is maintained.
OFI 05	PA 06_0261 DA 450-10- 2003	S3 C18 S3 C19	The Blast Management Plan, Section 1, Table 1 to Table 3 contains inconsistent references to where commitments are addressed.	Recommend updating Section 1, Table 1 to Table 3 of the BMP to ensure correct references in column 3 ("Section of BMP which addresses this requirement", "Where Commitment is addressed", "Where Condition is addressed").

REPORT **Condition Context** OFI **Opportunities for Improvement** Approval Ref Ref PA **OFI 06** S3 C19 During the site inspection it was noted that dust management measures were It is recommended that operators are provided with 06 0261 generally well implemented across the site, including the use of real time refresher training to ensure awareness of these monitoring to respond when elevated results are identified. Proactive measures TARPs and to ensure more proactive management of S3 C4A as outlined in the dust management TARP should be reinforced to assist in wheel generated and plant-generated dust. DA 450-10mitigating air quality impacts. 2003 PA **OFI 07** S3 C27 During the audit inspection, Dam 37S had an eroded batter being caused via Repair the eroded batter to Dam 37S or redirect flow to 06 0261 runoff from the access track. It is recommended that this should be repaired, or the existing stabilised entries. Sediment should then be flow redirected to the existing stabilised entries. Sediment should then be removed removed from the basin to restore capacity. from the basin to restore capacity. **OFI 08** PA S3 C58 During the inspection, generally good practices were noted for the storage and Ensure that liquid and waste containers are stored in 06 0261 handling of dangerous goods and hazardous substances. Some waste appropriately bunded locations, have lids fitted and/or containers, while stored on bunded pallets, were observed with no lids fitted. Lids are stored undercover to limit additional generation of should be fitted to minimise the influx of water and potential generation of spills. contaminated liquid. An 20L oil container was observed during the site inspection without secondary containment adjacent to the Hunter River crossing roadway. This was identified by site E&C personnel and immediately removed to a bunded storage area. **OFI 09** DA 450-10-S3 C10 Reference to superseded AS1055 is included in the Noise Management Plan. Recommend updating Section 8.1.1, Table 8-1 to 2003 reference AS1055-2018 (supersedes AS1055-1997), and include reference to NSW EPA Approved methods for the measurement and analysis of environmental noise in NSW, 2022. **OFI 10** DA 450-10-S3 C27 Repair the inlet to Dam 5N to stop ongoing Given the size of Dam 5N and the fact that it reports to Dam 2N, potential to 2003 increase Dam 5N capacity via lowering the base of the dam. This will reduce the sedimentation, remove sediment from the dam, and probability of Dam 2N from overtopping in future events following the reported confirm the capacity of Dam 5N and Dam 2N meets spills during the audit period. industry guidelines. It is noted that Dam 5N contained a significant amount of sediment as a result of an eroding inlet adjacent the pump when inspected during the audit site inspection. Recommend that the inlet be repaired to stop ongoing sedimentation. remove sediment from the dam, and confirm the capacity of the dam meets industry auidelines.

OFI Ref	Approval	Condition Ref	Context	Opportunities for Improvement
OFI 11	EPL 640		front of the discharge pipe during the audit site inspection. This pool contained	It is recommended that the area is stabilised (i.e. rock/concrete) to prevent released water from creating erosion and becoming turbid once leaving the outlet pipe.
OFI 12	EPL 640		It was noted that signage and delineation of areas in the southern bioremediation area did not clearly identify locations or cells for storage of soil undergoing bioremediation. The Carrington bioremediation area includes clear identification of storage areas to manage receipt, ongoing treatment and clearance of impacted soils.	It is recommended that the southern bioremediation area is reviewed and updated to ensure clear identification and separation of treatment cells.

# 7 LIMITATIONS OF IEA REPORT

In preparing this IEA report, RPS has assessed all activities appropriate and necessary to evaluate the environmental status of the site and operations undertaken within the audit period. RPS has addressed all technical matters which might reasonably be considered to be relevant to such an assessment conducted to standards which apply in NSW. Based on observations of the site, interviews with appropriate staff and a review of available documentation, it is RPS's opinion that the potential critical environmental issues associated with the site and operations are those discussed in this report. However, RPS can only advise on the basis of the information available to them and therefore cannot dismiss absolutely the possibility that parts of the site, or adjacent properties, may give rise to additional issues. The conclusions presented in this report are professional opinions based solely upon RPS's visual observations of the site and the immediate site vicinity, and review of available documentation, interviews and conversations with personnel knowledgeable about the site and other available information, as referenced in this report. These conclusions are intended exclusively for the purposes stated herein, at the site listed, and for the project indicated.

Opinions presented in this report apply to the site's conditions and features as they existed at the time of RPS' site inspections on 28 – 30 November 2022 and 6 December 2022, and those areas accessible. They necessarily cannot apply to conditions and features which RPS is unaware of and has not had the opportunity to evaluate.

This report does not, and does not purport to, give legal advice on the actual or potential environmental liabilities of any individual or organisation, or to draw conclusions as to whether any circumstances constitute a breach of relevant legislation.



Department of Planning and Environment



Andrew Speechly Manager Environment and Community Hunter Valley Operations Wonnarua Country

By email only: <a href="mailto:andrew.speechly@hvo.com.au">andrew.speechly@hvo.com.au</a>

28/08/2022

Dear Mr Speechly

#### Hunter Valley Operations DA450-10-2003 and MP06\_0261 2022 IEA audit team endorsement request

Reference is made to your request, DA450-10-2003-PA-66, for the Secretary's endorsement of suitably qualified, experienced and independent persons to prepare the 2022 Independent Environmental Audit (IEA) of Hunter Valley Operations (HVO), submitted as required by Schedule 5, Condition 10 of DA450-10-2003 as modified and Schedule 5, Condition 5 pf MP06\_0261 as modified (the consents), to the Department of Planning and Environment (the department) on 11 August 2022.

The department has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Planning Secretary endorses the following audit team:

- Mr Ian Richardson Lead Auditor and Air Quality Specialist
- Mr Sam Mitchell Auditor and Backup Lead Auditor
- Mr Clayton Richards Rehabilitation Specialist
- Mr Oliver Muller Noise Specialist
- Mr Dean Jarvis Surface Water Specialist
- Ms Kat Hutton Ground Water Specialist

Please ensure this correspondence is appended to the IEA Report.

The IEA must be prepared, undertaken, and finalised in accordance with the conditions of the consents and the department's *Independent Audit Post Approval Requirements* (2020). Failure to meet these requirements will require revision and resubmission. Further, in accordance with Schedule 5, Condition 10 and Schedule 5, Condition 5 of the consents the Planning Secretary requires that in undertaking the IEA, the auditors:

- Consult with the following agencies prior to the site inspection, with all matters raised to be clearly tabulated and addressed in the IEA report:
  - o NSW Department of Planning and Environment
  - o NSW Department of Regional NSW, Mining, Exploration and Geoscience

Department of Planning and Environment



- NSW Department of Planning, Biodiversity Conservation Division
- o NSW Department of Planning, Water Division
- NSW Environmental Protection Authority
- o NSW Resources Regulator
- Singleton Council
- HVO Community Consultative Committee
- Only use the compliance status descriptors "compliant", "non-compliant" or "not triggered". The terms "partial compliance", "partial non-compliance", "not verified" or other similar terms are not to be used.
- Recommends actions to address each non-compliance identified and any additional opportunities for improvement.

The IEA report, together with HVO's responses to any recommendations contained in the report, must be submitted within 12 weeks commencing the audit (the last inspection date) as required by Schedule 5, Condition 11 and Schedule 5, Condition 6 of the consents, or as otherwise agreed by the Planning Secretary.

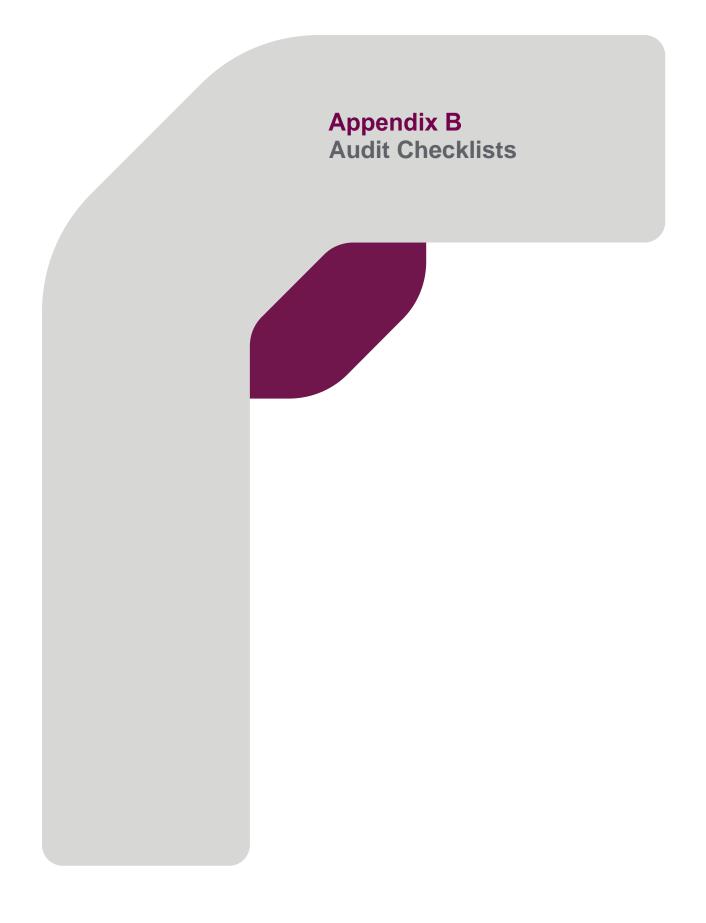
Finally, in accordance with Schedule 2, Condition 4 of the consents, the Planning Secretary requires that the Surface Water Specialist carries out an assessment of current water management structures on site to confirm compliance with the approved Water Management Plan, and to provide any recommendations to improve environmental performance.

Should you wish to discuss the matter further, please contact Joel Curran, Senior Compliance Officer on 02 4904 2702 or <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a>.

Yours sincerely

Benjamin Harrison Director Compliance

As nominee of the Planning Secretary



# B.1 PA06\_02161



# PA\_06\_0261 MOD 7 AUDIT CHECKLIST – HVO IEA 2022

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Cond No.	. Condition	Comments & Evidence	Audit Findings	Recommendations
SCHEE	DULE 2 – ADMINISTRATIVE CONDITIONS			
S2 C1	<b>Obligation to Minimise Harm to the Environment</b> The Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	HVO were observed to have implemented all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development during the audit period.	Compliant	
S2 C2	Terms of Approval The Applicant must carry out the development generally in accordance with the: a. EA; b. statement of commitments; c. EA (Mod1); d. EA (Mod 2); e. EA (Mod 3); f. EA (Mod 4); g. EA (Mod 5); h. Modification Report (MOD 6); i. Modification Report (MOD 7); and j. development layout.	<ul> <li>HVO has generally carried out the project in accordance with the EA, statement of commitments, and conditions of the approval during the audit period.</li> <li>There have been a number of nonconformances with the following conditions of the approval during the audit period:</li> <li>Schedule 3 Condition 2 – Noise Impact</li> <li>Schedule 3 Condition 7 – Airblast overpressure</li> <li>Schedule 3 Condition 19 – Air QualityCriteria</li> <li>Schedule 3 Condition 27 – Water Management Plan</li> </ul> Mod 6 – November 2021 Mod 6 included the establishment of a modular Ammonium Nitrate Emulsion (ANE) Plant. This ANE plant has been established and was reviewed during the audit. Mod 7 – May 2022 This modification is to enable the transfer and temporary storage of water into the existing Lemington	Non-compliant	No further action required.

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		Underground Mine void, and extraction and use of this water at MTW and HVO. At the time of the audit works associated with Mod 7 have not occurred.		
S2 C2A	The Applicant must carry out the development in accordance with the conditions of this consent.	Refer S2 C2	Non-compliant	Refer S2 C2
S2 C3	If there is any inconsistency between the documents listed in condition 2, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.	Noted. There was no evidence during the audit that the latest version of documentation did not take precedence over the older versions when inconsistencies existed.	Compliant	
S2 C4	<ul> <li>The Applicant must comply with any reasonable and feasible requirement/s of the Planning Secretary arising from the Department's assessment of:</li> <li>a. any reports, plans, programs, strategies or correspondence that are submitted in accordance with this consent; and</li> <li>b. the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence.</li> </ul>	HVO was observed to be complying with all reasonable requirement/s from the Secretary arising from reports, strategies, plans, programs, reviews, audits or correspondence and has implemented any required actions or measures.	Compliant	
S2 C5	Limits on Approval Mining operations may take place for a period of 21 years from the date of this consent. Note: Under this consent, the Applicant is required to rehabilitate the site and carry out any additional undertakings to the satisfaction of both the Planning Secretary and the Resources Regulator. Consequently this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and those additional undertakings have been carried out satisfactorily.	Mining is still within the limits of this approval and can take place until 24 March 2030.	Compliant	
S2 C6	The Applicant must not extract more than 20 million tonnes of ROM coal a year from the site.	<ul> <li>HVO has not extracted more than 20Mt of ROM coal during the audit period:</li> <li>2019 - 10.8Mt</li> <li>2020 - 10.23Mt</li> <li>2021 - 9.87Mt</li> <li>2022 - 11.67Mt forecast</li> </ul>	Compliant	
S2 C7	Management Plans/Monitoring Programs	Deleted	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Deleted			
S2 C8	The Applicant must ensure that monitoring programs, management plans and the Environmental Management Strategy, as in existence at the date of this consent in December 2008, continue to be implemented (to the satisfaction of the Planning Secretary) until replaced by monitoring programs and management plans approved in accordance with the conditions of this consent.	Management plans have been superseded and re-approved several times since 2008. This condition is no longer applicable.	Not triggered	
S2 C9	Surrender of Consents	Completed (Refer to 2016 IEA).	Not triggered	
	Within 12 months of the date of this consent, the Applicant must surrender all existing development consents and existing use rights associated with HVO South's mining operations and related facilities in accordance with clause 97 of the <i>EP&amp;A Regulation</i> .			
S2 C9A	Deleted	Deleted	Not triggered	
S2 C10	<ul> <li>Structural Adequacy The Applicant must ensure that all new building and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and any additional requirements of SA NSW. Notes: <ul> <li>Under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.</li> <li>Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of the development.</li> <li>Under section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain SA NSW's approval before subdividing or constructing any improvements in a Mine Subsidence District.</li> </ul></li></ul>	The only new structures constructed were for the ANE Plant. The ANE Plant was approved under Mod 6, and is of modular construction, designed with appropriate layout and separation to mitigate potential risks.	Compliant	
S2 C11	<b>Demolition</b> The Applicant must ensure that all demolition work is carried out in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures,</i> or its latest version.	The Orica Cheshunt facility was demolished during the period August to November 2022. The notice of demolition to SafeWork NSW dated 1 August 2022 was observed, indicating the use of a licenced demolition contractor for the demolition of this facility. Project close out report dated 11 November 2022 was also reviewed, indicating successful completion of	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		these works in accordance with AS2601.		
S2 C12	Operation of Plant and Equipment	Plant and equipment used onsite was	Compliant	
	The Applicant must ensure that all plant and equipment used on site is: a. maintained in a proper and efficient condition; and b. operated in a proper and efficient manner.	generally observed to be maintained and operated in a proper and efficient manner. Monthly inspections of key areas onsite are conducted by the E&C team to ensure plant and equipment is being maintained and operated in a proper and efficient manner, including but not limited to, workshops, construction areas, hydrocarbon and waste handling and storage areas. The site has a management system/schedule in place incorporating Maintenance Plans and Work Orders through SAP.		
S2 C13	<b>Development Contributions</b> Within 12 months from the date of this consent (unless otherwise agreed by the Planning Secretary), the Applicant must enter into an agreement with Singleton Council to provide development contributions to Council for the development, in accordance with Division 6 of Part 4 of the EP&A Act. If the Applicant and Council cannot agree on the level or composition of the development contributions, then either party may refer the matter to the Planning Secretary for resolution.	VPA Completed (verified within 2013 IEA). Original approval with Singleton Council dated 15/3/10 which does not require any ongoing payments.	Not triggered	
S2 C14	<b>Dispute Resolution</b> In the event that the Applicant and the Council or a Government agency, other than the Department, cannot agree on the specification or requirements of this consent, the matter shall be referred by either party to the Planning Secretary for resolution, whose determination of the disagreement shall be final and binding on the parties.	Not triggered during the audit period.	Not triggered	
S2 C15	<ul> <li>Evidence of Consultation</li> <li>Where conditions of this consent require a document to be prepared in consultation with an identified party, the Applicant must:</li> <li>a. consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and</li> </ul>	Where required, management plans and other documents generally include revision details and records of consultation. While the matters raised, resolution of these matters and details of any disagreement are addressed	Compliant	OFI – It is recommended that management plans, and other necessary documents include a table itemising the matters raised during consultation with identified parties, and

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>b. provide details of the consultation undertaker</li> <li>a description of how matters raised by those resolved to the satisfaction of both the Applic consulted; and</li> <li>details of any disagreement remaining betwe and the Applicant and how the Applicant has not resolved.</li> </ul>	consulted have been ant and the party en the party consulted	within these documents, it is recommended that clearer reference to consultation matters raised, and resolution (or disagreement) on these matters could be included in a table within relevant documents to more clearly demonstrate the outcomes of consultation.		description of the resolution of these matters.
S2 C16	<b>Compliance</b> The Applicant must ensure that all employees, c contractors are made aware of, and instructed to conditions of this consent relevant to activities th the development.	The site familiarisation induction materials and HVO New Starter presentation were viewed during the audit. These include specific reference to environment and community obligations for employees, contractors and sub-contractors.	Compliant		
SCHED	ULE 3 – SPECIFIC ENVIRONMENTA	AL CONDITIONS	•		•
S3 C1	Acquisition Upon Request Upon receiving a written request for acquisition f listed in Table 1, the Applicant must acquire the the procedures in condition 7-9 of schedule 4. Table 1: Land subject to acquisition upon request	land in accordance with	No requests for acquisitions within audit period. All land is mine owned. Previous Audit recommendation was to update Table 1 in next modification. This Audit notes that has not occurred during MOD 7.	Not triggered	
	16 - Algie 32 - Algie (Curlewis) Keys (vacant land - Lot 2 DP 770905 and Lot 84 DP 753792)	38 - Henderson 45 - Kelly			
	<ul> <li>Notes:</li> <li>The land numbers are as described in the EA, exc which is as described in EA (Mod 5), and as shown</li> <li>Land numbers 16, 32, 38, 45 and Keys are now m.</li> <li>Keys vacant lots are now consolidated as a single</li> <li>Land number 45 is referenced as 77 in EA (Mod 5), required to acquire land number 45 if the owner of voluntary land acquisition rights under the planning or Warkworth Mine.</li> </ul>				

Cond No.	Condition					Comments & Evidence	Audit Findings	Recommendations
IOISE								
	Condition         Noise Impact Assessment Criter         The Applicant must ensure that the         does not exceed the noise impact a         residence on privately-owned land,         owned land.         Table 2: Noise impact assessment criteria dB(A)         Land Number / Receiver         Hunter Valley Gliding Club (when in use)         7- Stapleton (Cheshunt East)         10 – Moses (Wandewoi)         Maison Dieu residences         16 – Algie         32 – Algie (Curlewis)         5 – Bowman, 47 – Moxey, 61 – Shearer         and all other land on Shearer's Lane         34 – Ernst         50 – Nelson         24 – Clifton and Edwards and residences         located within 250 metres of this residence,         not otherwise listed in this table         Maison Dieu residences within 1 kilometre         of Shearers Lane, not otherwise listed in         this table         127* – Riley         All other Maison Dieu residences         Jerrys Plains Road residences	e noise ger assessmer	nt criteria i	n Table 2 a	at any	Comments & Evidence         December 2019         No exceedance of relevant criteria noted for December 2019.         2020         No exceedance of relevant criteria noted.         2021         Measured noise levels exceeded the LA1,1minute criteria (45 dB) at Jerrys         Plains East by 10 dB on 22/07/2021         (time 32:16) with a result of 55         LA1,1minute. This has been attributed to impact noise from a dragline.         In response follow up monitoring was performed with five additional 1-minute measurements taken on the night and additional measurement taken the following week. Follow up measurements were compliant. EPA and DPIE were notified of the initial exceedance and provided with an exceedance report.         A review of Monthly Environmental Monitoring reports notes Table 9 of the 2021 July report for the LA1,1minute results have miss labelled the column "HVO South LAeq dB" It should read "LA1,1minute". However, this has been observed throughout the monthly reports, it's recommended this is updated appropriately.	Audit Findings	Recommendations OFI – Reference in Table 9 of the Monthly Environmental Monitoring Reports should be updated to reference LA1, 1- minute criteria OFI – Where a tonality penalty has been applied, the monthly report should include discussic and clarification on whether thi constitutes an exceedance or i attributable to other sources.

					Comments & Evidence	Audit Findings	Recommendations
Land Number / Receiver	Day Lacg(15 minute)	Evening LAcq(15 minute)	Night LAcg(15 minute)	Night Lat(1 minute)	doesn't elaborate on why there wasn't an exceedance, or whether this may		
36 - Smith (ex Garland)	40	40	40	45	have been attributed to other sources. It		
4 – Muller					is recommended that in future this is		
31 – Cooper (Kilburnie) 310* – Northcote 312* – Carmody 463* – Carter	39	39	39	45	clarified in the monthly report to avoid confusion.		
3 - Elisnore 317* - Gee	38	38	38	45			
434* – Murphy 436* – Skinner	37	37	37	45			
321* - Hayes	36	36	36	45			
All Jerrys Plains Road residences, not otherwise listed in this table	35	35	35	45			
Warkworth residences	1.1.1	-					
38 - Henderson	48	48	48	45			
23 - Hawkes (Springwood)	43	43	43	45			
45 – Kelly and all other privately-owned land in Warkworth village	43	43	43	45			
All other privately-owned land	35	35	35	45			
has been forwarded to the Depart				III III AV			
<ul> <li>exceed the noise limits in Table 2 agreement.</li> <li>Notes:</li> <li>Noise impacts at HVCG are to be residential facilities and/or clubho applicable during times of use that Applicant.</li> </ul>	assessed in use. Noise im t have been i	the immedia pact assess notified by F	e negotiate ate vicinity c sment limits IVGC to the	ed noise of its are only			
agreement. Notes: Noise impacts at HVCG are to be residential facilities and/or clubho applicable during times of use that	assessed in use. Noise in t have been i escribed in the	the immedia pact asses notified by F	e negotiate ate vicinity c sment limits IVGC to the t those with	ed noise of its are only an			
<ul> <li>agreement.</li> <li>Notes:</li> <li>Noise impacts at HVCG are to be residential facilities and/or clubho applicable during times of use tha Applicant.</li> <li>The receiver references are as de</li> </ul>	assessed in use. Noise im t have been i escribed in the DEA (Mod 5), pent must be i tions (includii	the immedia pact asses notified by F e EA, excep and as sho measured in ng certain n	e negotiate ate vicinity c sment limits IVGC to the of those with own in Appen n accordanc neteorologic	ed noise of its are only an ndix 4. e with the al			
<ul> <li>agreement.</li> <li>Notes:</li> <li>Noise impacts at HVCG are to be residential facilities and/or clubho applicable during times of use that Applicant.</li> <li>The receiver references are as de asterisk which are as described in</li> <li>Noise generated by the developm relevant requirements and exemption</li> </ul>	assessed in use. Noise im t have been i escribed in the DEA (Mod 5), pent must be tions (includii Noise Policy be applied in	the immedia pact assess notified by F e EA, except and as sho measured in ng certain n (2000, or its	e negotiate ate vicinity c sment limits IVGC to the of those with hown in Appen n accordanc neteorologic s latest versi	ed noise of its are only an ndix 4. e with the al ion).			
<ul> <li>agreement. Notes:</li> <li>Noise impacts at HVCG are to be residential facilities and/or clubho applicable during times of use tha Applicant.</li> <li>The receiver references are as de asterisk which are as described in</li> <li>Noise generated by the developm relevant requirements and exemp conditions) of the NSW Industrial</li> <li>The noise limits in Table 2 are to</li> </ul>	assessed in use. Noise in t have been i escribed in the track (Mod 5), nent must be trions (includii Noise Policy be applied in ndix 4A.	the immedia pact assess notified by F e EA, except and as sho measured in ng certain n (2000, or its accordance	e negotiate ate vicinity c sment limits IVGC to the those with maccordanc neteorologic s latest versi e with the lin	ed noise of its are only an ndix 4. e with the al ion). nitations			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C4	Additional Noise Mitigation Measures         Upon receiving a written request from:         • an owner of land listed in Table 1 (unless the landowner has requested acquisition or where a negotiated noise agreement established under this consent is in place); or         • an owner of land listed in Table 4 (except where a negotiated noise agreement established under this consent is in place)         the Applicant must implement reasonable and feasible noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at any residence on the land in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2014), as amended, and proportionate to the level of predicted impact.         If within 3 months of receiving this request from the landowner, the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.         Within 3 months from the date of this consent, the Applicant must notify all applicable landowners that they are entitled to receive noise mitigation measures, to the satisfaction of the Planning Secretary.         Table 4: Land subject to additional noise mitigation upon request         7- Stapleton (Cheshunf East)         Mision Dieu residences         17 - Algie	No written request for additional noise mitigation measures were noted during the audit period.	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	34 - Ernst         50 - Nelson         24 - Clifton and Edwards and residences located within 250 metres of this residence, not otherwise listed in this table         Maison Dieu residences within 1 kilometre of Shearers Lane         Jernys Plains Road residences         36 - Smith (ex Garland)         3 - Elisnore, 4 - Muller, 31 - Cooper (Kilburnie)         310* - Northcote, 312* - Cannody, 317* - Gee and 463* - Carter         Warkworth residences         All privately-owned Warkworth residences			
	<ul> <li>Notes:</li> <li>The land numbers and receiver references are as described in the EA, except those with an asterisk which are as described in EA (Mod 5), and as shown in Appendix 4.</li> <li>Land numbers 4, 7, 17, 24, 36, 310, 312 and 463 are now mine-owned.</li> </ul>			
S3 C5	<ul> <li>Operating Conditions The Applicant must: <ul> <li>a. take all reasonable steps to minimise construction, operational, low frequency, road and on-site rail noise of the development;</li> <li>b. take all reasonable steps to minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4); </li> <li>c. operate a comprehensive noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent; </li> <li>d. carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and</li> <li>e. regularly assess the noise monitoring data, and modify or stop operations on the site to comply with the relevant conditions of this consent, to the satisfaction of the Planning Secretary.</li> </ul></li></ul>	<ul> <li>Section 7 of the NMP (HAVOC-1797567310-4028) describes the noise mitigation measures to be applied to minimise noise emissions.</li> <li>a) Discussions with HVO representatives identified measures implemented including continued roll out of noise suppression packages on plant and equipment, annual sound power testing, use of real-time noise monitors, and initial and ongoing training including site induction.</li> <li>b) Section 7.1.3.1 of the NMP describes procedure for meteorological forecasting, which is used to as a proactive tool to manage noise impacts during noise enhancing conditions. Section 7.1.3.2 of the NMP provides a risk / response matrix to codify operational responses to</li> </ul>	Compliant	

Cond No.	Condition	Cor	nments & Evidence	Audit Findings	Recommendations
			varying levels of risk from weather conditions. Section 6.2.3 of the Annual Environmental Review (2019, 2020, 2021) details real time noise management including hours of equipment downtime. Section 7.1.3 and Section 7.1.4 of the NMP describe proactive and reactive noise mitigation measures, including predictive meteorological forecasting (Section 7.1.3.1) and real-time monitoring (Section 7.1.4.2). Discussed forecasting system with HVO staff (Tech Services and Environmental Services). Sighted example of daily forecast email sent to operations staff. Section 8 of the NMP describes the attended noise monitoring program. Monthly noise monitoring results are published in Annual Environmental Review and attended monitoring reports. Section 7.1.4.4 of the NMP details the real time noise alarm process in response to environmental alarms.		

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
S3 C6	<ul> <li>Noise Management Plan</li> <li>The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: <ul> <li>a. be submitted to the Planning Secretary for approval within 3 months of the determination of Modification 5, unless otherwise agreed by the Planning Secretary;</li> <li>b. be prepared in consultation with the EPA by a suitably qualified and experienced person/s;</li> <li>c. describe the measures to be implemented to ensure:</li> <li>compliance with the noise criteria and operating conditions in this consent;</li> <li>best practice management is being employed; and</li> <li>the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;</li> <li>d. describe the noise management system in detail; and</li> <li>e. include a monitoring program that:</li> <li>uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;</li> <li>includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time;</li> <li>adequately supports the noise management system; and</li> <li>includes a protocol for identifying noise incidents and notifying the Department and relevant stakeholders of any such incident; and</li> <li>f. include a protocol that has been prepared in consultation with the owners of nearby mines to minimise cumulative noise impacts.</li> </ul> </li> </ul>	<ul> <li>Noise Management Plan</li> <li>Version: 3.5</li> <li>Date 10/12/2021</li> <li>Approved on 16/12/2021 by Stephen</li> <li>O'Donoghue as nominee of the</li> <li>Secretary.</li> <li>During the audit period the NMP was revised to provide additional information to DPE (Rev 3.3 and 3.4).</li> <li>On 26 March 2018 correspondence was forwarded to the EPA inviting consultation on this NMP. On 18 June 2018, the EPA advised HVO in writing that the EPA does not require HVO to consult with it regarding the development of plans required under planning consents including this Noise Management Plan.</li> <li>a) Correspondence with DPIE (dated 16 December 2021) demonstrates that the Department has reviewed and approved the NMP.</li> <li>b) Section 7 of the NMP describes the noise management measures to be implemented to ensure compliance with the noise criteria and operation conditions of the consent. Section 5.4 defines best management practices and</li> </ul>	Compliant

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		<ul> <li>commits to the implementation of best management practice measures. Section 7.1.3.1 describes the predictive meteorological forecasting system to enable proactive management of noise emissions under noise enhancing conditions.</li> <li>c) Section 7 of the NMP describes in detail the proactive and reactive management measures.</li> <li>d) Section 7 and Section 8 of the NMP describe the real-time (Section 7.1.4.2) and attended (Section 8) monitoring to evaluate the performance of the development. Section 7.1.4.3 and Section 9.2 describes the validation of real-time monitoring locations and model validation. AERs provide comparison of attended and real-time monitoring for each reporting period. Section 8.2 of the NMP provides a protocol for evaluating compliance and Section 9.1.2 provides the externa reporting procedure following an incident.</li> </ul>		
	AND VIBRATION			
S3 C7	Airblast Overpressure Impact Assessment Criteria The Applicant must ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 6 at any residence on privately-owned land.	One exceedance event measured at 127.2dB Knodlers Lane (27 August 2020) – Investigation identified cause due to cratering of blast holes and wavefront reinforcement from inadequate stemming.	Non-compliant	Review of actions following incident determined that mitigation measures developed are sufficient. No further recommendations required.

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	Table 6: Airblast overpressure impact at         Airblast overpressure level         (dB(Lin Peak))         115         120         However, if the Applicant howner of the relevant resident this agreement has been for the second the s	Allowable exceedance 5% of the total number of blasts over a period of 12 months 0% mas a written negotiated blast agreement with the dence on privately-owned land, and a copy of forwarded to the Department and EPA, then the airblast overpressure level in Table 6 in	This event was notified, and subsequently a show cause notice was issued by DPIE. HVO provided a response to this notice, and have subsequently implemented a range of improvements to pre-blasting checks to prevent reoccurrence, including: - Disciplinary process with shotfirer who failed to follow the HVO Shotfiring Activities Procedure; - Requirement to use Blastlogic (or similar) software to assess wavefront reinforcement impacts prior to each blast; and - Review and update drill and blast QA/QC processes and record keeping procedures. Interviews with site personnel demonstrated a well-established pre- blasting procedure and checklists to predict and mitigate potential impacts. Review of blast data following this event demonstrate all blasts have been compliant with the criteria. There were additional exceedances of the 115dBL Peak criterion, however, events occurred less than 5% of all blasts in each year.		
S3 C8		t Assessment Criteria e that the ground vibration level from blasting at exceed the criteria in Table 7, at any residence	There have been no exceedances of the ground vibration impact assessment criteria during the audit period.	Compliant	

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	Table 7: Ground vibration impact assessment criteria				
	Peak particle velocity (mm/s)         Allowable exceedance           5         5% of the total number of blasts over a period of 12 months.				
	10	0%			
	including EPA's Assessing However, if the Applica owner of the relevant re this agreement has bee	easured in accordance with applicable guidelines, g Vibration: A Technical Guideline (2006). In thas a written negotiated blast agreement with the esidence on privately-owned land, and a copy of en forwarded to the Department and EPA, then the the ground vibration level in Table 7 in accordance eement.			
S3 C9	must ensure that groun	and the outbuildings at Archerfield, the Applicant d vibration peak particle velocity generated by the exceed 5 mm/s, or as otherwise approved by the	No blasting has been undertaken in the Glider Pit or Lemington Pit during the audit period. Blasting data prior to the current audit period was observed demonstrating compliance with this criterion.	Not triggered	
S3 C10	Monday to Saturday inc	y carry out blasting on site between 7 am and 6 pm clusive. No blasting is allowed on Sundays, public r time without the written approval of the Planning	Blasting data for the site was reviewed and demonstrated that all blasts were conducted during the approved periods. Blasts only between 7am to 6pm Monday to Saturday. No blasting on Sundays or public holidays.	Compliant	
S3 C11	<ul> <li>blasting practice to:</li> <li>a. protect the safety of livestock;</li> <li>b. minimise the dust a development;</li> <li>c. minimise the freque and use all reasona periods;</li> <li>d. use all reasonable of</li> </ul>	ns on site, the Applicant must implement best f people, property, public infrastructure, and nd fume emissions from blasting at the ncy and duration of any road closures for blasting, ble efforts to avoid road closures during peak traffic efforts to co-ordinate the timing of blasting at the mines to minimise cumulative blasting impacts;	<ul> <li>a) Section 5.2 of the Blast Management Plan Version 3.3 (3 April 2019) defines the best management practice principles underpinning the BMP. Section 6 of the BMP describes the blast management controls to protect safety of people and livestock, public or private infrastructure and dust and fume. Tech Services demonstrated the pre-blast environmental checklist to manage blasting impacts. Included a check of all blast monitors,</li> </ul>	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	e. carry out regular blast monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Planning Secretary.	<ul> <li>meteorological conditions, blast parameters.</li> <li>b) Appendix B of the BMP provides a Blast Fume Management Plan to demonstrate how emissions would be minimised.</li> <li>c) Pre-blast modelling undertaken to predict potential impact including need for road closures.</li> <li>d) Confirmed with Tech Services daily email provided to all nearby mines to notify of intent to blast. Correspondence with Ravensworth Mine over 2-way radio over timing of blasts.</li> <li>e) Tech Services provided details on notification to public. EM explained that the Hunter Valley Blasting Hotline is updated prior to each blast. SMS notification (sighted example) sent to distribution list prior to blast.</li> </ul>		
S3 C12	<ul> <li>The Applicant may carry out a maximum of:</li> <li>a. 3 blasts a day; and</li> <li>b. 15 blasts a week,</li> <li>on the site.</li> <li>This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.</li> <li><i>Notes:</i></li> <li>For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.</li> <li>For the avoidance of doubt, should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast.</li> </ul>	There have been no more than three blasts per day and a maximum of nine blasts per week during the audit period.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C13	<ul> <li>The Applicant must not undertake blasting on the site within 500 metres of any public road or any land outside the site not owned by the Applicant, unless the Applicant has:</li> <li>a. a written agreement with the owner/s of the relevant public road or land to allow blasting to be carried out closer to the public road or land, and the Applicant has advised the Department in writing of the terms of this agreement; or</li> <li>b. demonstrated, to the satisfaction of the Planning Secretary, that the blasting can be carried out closer to the public road or land without compromising the safety of people or livestock or damaging the road or other buildings and structures, and updated the Blast Management Plan to include specific mitigation measures to be implemented while blasting is being carried out within 500 metres of the road or land.</li> </ul>	<ul> <li>a. Section 6.7 of the BMP describes the requirements for approval from Singleton Council and Transport for NSW for road closures where blasting is to occur within 500m of a public road. Sighted letters from Singleton Council (24 June 2019, 29 June 2022) providing consent for the purpose of road closures for blasting. Sighted Blasting Co- operation Deed with Cumnock No.1 Colliery, ICRA Cumnock and Ravensworth Operations (17 October 2016). Sighted Blasting Deed with United Collieries (24 July 2020).</li> <li>Sighted Temporary blasting agreement letters to UWJV dated 28 April 2020 and 29 June 2020.</li> <li>b. Section 6.2 and Section 6.7 of the BMP detail the procedure in the event of blasting occurring within 500m of non-HVO land.</li> </ul>	Compliant	
S3 C14	Deleted		Noted	
S3 C15	<ul> <li>Public Notice</li> <li>During mining operations on site, the Applicant must:</li> <li>a. notify the landowner/occupier of any residence within 2 kilometres of the mining area who registers an interest in being notified about the blasting schedule at the mine, or any other landowner nominated by the Planning Secretary;</li> <li>b. operate a blasting hotline, or alternate system agreed to by the Planning Secretary, to enable the public to get up-to-date information on the blasting schedule at the development;</li> <li>c. advertise the blasting hotline number in a local newspaper at least 4 times each year; and</li> </ul>	<ul> <li>Discussed Public Notice procedure with Tech Services.</li> <li>a) Viewed example of text message that is distributed to registered stakeholders.</li> <li>b) Blasting Hotline phone number listed on HVO website. Informed that Hunter Valley Blasting Hotline updated prior to all blasts to provide up to date information.</li> <li>c) Sighted invoices from Rural Press Pty Ltd that confirms</li> </ul>	Compliant	OFI - When visited on 7 December 2022, the website link to Blasting Schedule published on HVO "Contact" page ( <u>https://www.hvo.com.au/contact</u> /) opened the blasting schedule document for 15 October to 21 October 2022. Blasting schedule on "Contact" page should be updated with current blast schedule.

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>d. publish an up-to-date blasting schedule on its website</li> <li>e. to the satisfaction of the Planning Secretary.</li> </ul>	<ul> <li>advertisement runs weekly.</li> <li>Sighted four advertisements for 2021 and 2022 published in the Singleton Argus for road closures due to blasting. Blasting Hotline phone number included at bottom of advertisement.</li> <li>d) Viewed HVO website 7/12/22, which provides the 24/7 HVO hotline, blasting schedule and SMS blast notification service. The current blasting schedule for the period 3 December to 9 December 2022 is provided in the HVO Document Library.</li> </ul>		Noted current blasting schedule provided in the HVO Document Library.
S3 C16	<ul> <li>Property Inspections</li> <li>At least 3 months prior to blasting within 2 kilometres of any privately- owned land, or any other landowner nominated by the Planning Secretary, the Applicant must advise applicable landowners that they are entitled to a structural property inspection.</li> <li>If the Applicant receives a written request for a structural property inspection from the landowner, the Applicant must within 2 months of receiving this request and prior to blasting within 2 kilometres of the property:</li> <li>a. commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to inspect the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and</li> <li>b. give the landowner a copy of the property inspection report.</li> <li>Note: This condition does not operate so as to prevent blasting within the first 3 months of this consent as consents applying to the site contain similar provisions for the inspection or residences potentially affected by blasting operations.</li> </ul>	Viewed HVO blasting radius map 'Blasting zones +2km.jpg', which identifies that there are no additional landowners within the 2km blasting radius. As established in the 2019 IEA, HVO has a mitigation agreement with the Hunter Valley Gliding Club (5/02/13). There have been no written requests for a property inspection to establish baseline conditions in the audit period.	Not triggered	
S3 C17	<b>Property Investigations</b> If any landowner of privately-owned land within 2 kilometres of blasting operations, or any other landowner nominated by the Planning Secretary, claims that buildings and/or structures on his/her land have been damaged	On 10 May 2021, Hunter Valley Operations (HVO) received a request to commission a blasting investigation to determine if blasting activities at HVO have caused building damage to	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	as a result of blasting at the development, the Applicant must within 3 months of receiving this claim:	property located at 20 Shearers Lane in Maison Dieu.		
	<ul> <li>a. commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to investigate the claim; and</li> <li>b. give the landowner a copy of the property investigation report.</li> <li>If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damages to the satisfaction of the Planning Secretary.</li> <li>If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution.</li> <li>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent person, or the Applicant or the neither party may refer the matter to the Planning Secretary for resolution.</li> </ul>	On the 14 May 2021, HVO advised of four companies who were suitably qualified and able to undertake a blasting investigation at their residence. Subsequently Lyndsay and Dynan were selected by the landowner and approved by DPIE to undertake a property investigation. This property investigation was undertaken in September 2021 and concluded that the property damage was not caused by blast vibration or air overpressure. A copy of this report was provided to the landowner in accordance with the requirements of this condition.		
S3 C18	Blast Management Plan	Blast Management Plan	Compliant	OFI - Recommend updating
	<ul> <li>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</li> <li>a. be submitted to the Planning Secretary for approval within 3 months of the determination of Modification 5, unless otherwise agreed by the Planning Secretary;</li> <li>b. be prepared in consultation with the EPA by a suitably qualified and experienced person/s;</li> <li>c. describe the measures to be implemented to ensure compliance with the blasting criteria and conditions of this consent;</li> <li>d. include a Road Closure Management Plan for any blasting within 500 metres of a public road, that has been prepared in consultation with relevant roads authorities and includes provisions for:</li> <li>minimising the duration of closures, both on a per event basis and weekly basis;</li> <li>avoiding peak traffic periods as far as reasonable; and</li> <li>co-ordinating with nearby mines to minimise the cumulative effect of road closures;</li> </ul>	<ul> <li>Version: 3.3</li> <li>Date 28/03/2019</li> <li>a) Appendix G of the BMP provides a letter from DP&amp;E confirming approval (Approved on 3/4/2019 by Jessie Evans as nominee of the Secretary).</li> <li>b) Appendix F of the BMP describes the blast management controls to ensure compliance with blasting criteria.</li> <li>d) Appendix C of the BMP provides the Road Closure Management Plan Golden Highway (Jerrys Plain Road) (HVOOC-</li> </ul>	Compilant	Section 1, Table 1 to Table 3 to ensure correct references in column 3 ("Section of BMP which addresses this requirement", "Where Commitment is addressed", "Where Condition is addressed".

Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>e. propose and justify any agree public or private infrastructure</li> <li>f. include a monitoring program compliance with the relevant of The Applicant must implement the the Planning Secretary.</li> </ul>	in the vicinity of the for evaluating and re conditions of this cor	site (if relevant); and eporting on nsent.	<ul> <li>1797567310-2159 Version 1.0 7/01/2019) and HVO Road Closure Management Plan Lemington Road 1 July 2018 – 3 June 2019.</li> <li>e) Section 4.2.2 of the BMP details the impact assessment criteria for public infrastructure.</li> <li>f) Appendix D of the BMP provides the Blast Monitoring Programme to evaluate performance.</li> </ul>		
AIR QUA	LITY					
S3 C19	mitigation measures are employed so that particulate matter emissions generated by the development do not exceed the air quality impact assessment criteria listed in Table 8 at any residence on privately-owned land, the Hunter Valley Gliding Club (when in use) or on more than 25 percent of privately-owned land.		During the audit period a significant number of exceedances of the short term (24hr) PM10 criteria were recorded. A large portion of these events were influenced by a combination of ongoing drought conditions in 2019 and 2020, regional dust events and smoke from bushfires	6		
	Pollutant	Averaging period	Criterion	which significantly affected the Hunter	r	
	Particulate matter < 10 µm (PM io)	Annual 24 hour	».° 25 µg/m <sup>3</sup> # 50 µg/m <sup>3</sup>	Valley. Each of these exceedances were reported to DPIE and were note to have been affected by an		
	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	× ° 8 µg/m³	extraordinary event and therefore, as per the consent conditions, the criteri	a	
	Particulate matter < 2.5 pm (PW25)	24 hour	<sup>6</sup> 25 µg/m <sup>3</sup>	were not deemed to be applicable.	^ 	
	Total suspended particulate (TSP) matter	Annual	a,≈90 µg/m³	These events also contributed to exceedances of the long term (annua		
	<ul> <li>Notes:</li> <li>Air quality impacts at HVGC are to be assessed in the immediate vicinity of its residential facilities and/or clubhouse. Air quality limits are only applicable during times of use that have been notified by HVGC to the Applicant.</li> <li>a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).</li> <li>b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).</li> </ul>		average) criteria in some instances, however annual averages have been adjusted to exclude these events as per consent conditions.			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>c Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.</li> <li>However, if the Applicant has a written negotiated air quality agreement with any landowner or HVGC to exceed the air quality limits in Table 8 and a copy of this agreement has been forwarded to the Department and EPA, then the Applicant may exceed the air quality limits in Table 8 in accordance with the negotiated air quality agreement.</li> </ul>	investigated to determine the contribution to these incidents by HVO in accordance with the compliance protocol outlined in the HVO Air Quality Management Plan. Following investigation, one non- compliance was noted against consent conditions in each of PA 06_02161 and DA 450-10-2003. The non-compliance with respect to this condition was a PM10 exceedance at the Knodlers Lane HVAS on 28 July 2021.		
S3 C20	Deleted		Noted	
S3 C21	<ul> <li>Additional Air Quality Impact Mitigation Measures</li> <li>Upon receiving a written request from: <ul> <li>an owner of land listed in Table 1 (unless the landowner has requested acquisition); or</li> <li>an owner of land listed in Table 14</li> </ul> </li> <li>the Applicant must implement reasonable and feasible air quality impact mitigation measures (such as air conditioning, first flush drinking water collection systems etc) at any residence on the land, in consultation with the landowner. These measures must be consistent with the measures outlined in the <i>Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development</i> (NSW Government, 2014), as amended, and proportionate to the level of predicted impact.</li> <li>However, if the Applicant has an air quality agreement with the owner of any land listed in Table 1 or Table 14 and a copy of this agreement has been forwarded to the Department and EPA, then the Applicant does not have to implement such measures.</li> <li>If within 3 months of receiving this request from the landowner, the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.</li> </ul>	No written requests for additional air quality impact mitigation measures were observed for the audit period.	Not triggered	

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	Within 3 months of the date of this consent, the Applicant must notify all applicable landowners that they are entitled to receive air quality impact mitigation measures, to the satisfaction of the Planning Secretary.				
	7 - Stapleton (Cheshunt East)	34 – Ernst			
	24 – Clifton and Edwards and residences located within 250 metres of this residence.	50 - Nelson			
	471* – Bowman	56 – Edwards			
	Notes:				
	<ul> <li>The land numbers are as described ir which is as described in EA (Mod 5), a</li> </ul>	n the EA, except the one with an asterisk and as shown in Appendix 4.			
	• Land number 7 and 24 are now mine-	owned.			
S3 C21A	Mine-owned Land		For the PM10 air quality exceedance of	Compliant	
	<ul> <li>exceedances in accordance with Schedule 4 of this consent;</li> <li>b. the tenant of any land owned by t tenancy agreement without penal reasonable notice;</li> <li>c. air quality monitoring is regularly landowner (if the residence is own</li> </ul>	t any occupied residence on mine- another mining company) unless: esidence is owned by another mining ny health risks associated with such the notification requirements under he Applicant can terminate their ty at any time, subject to giving undertaken to inform the tenant and hed by another mining company) of	28 July 2021, copies of notification letters to residents, inclusive of the NSW Health fact sheet "Mine Dust and You" were sighted during the audit.		
	an appropriate format for a medic	the residence; and nted to the tenant and landowner in al practitioner to assist the tenant and cisions on the health risks associated			
S3 C22	Operating Conditions		The site operates a predictive	Compliant	
	<ul> <li>The Applicant must:</li> <li>a. take all reasonable steps to minin combustion, greenhouse gas and emissions of the development;</li> <li>b. minimise any visible off-site air po- development;</li> </ul>	dust (including PM10 and PM2.5)	meteorological forecasting system and a real time monitoring network to enable proactive management of air quality where adverse conditions are forecast, and to ensure timely response where alert levels are		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	c. minimise to the greatest extent practicable, the extent of potential dust generating surfaces exposed on the site at any given point in time;	exceeded with respect to air quality or meteorological parameters.		
	d. operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;	Interviews with environment and dispatch staff indicated awareness of air quality triggers and responses when incidents are raised.		
	<ul> <li>carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent;</li> </ul>	Cumulative impacts are considered through quarterly inter-mine meetings		
	<li>f. regularly assess the air quality monitoring data, and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent;</li>	with other nearby operations, including Integra Underground, Mount Owen Glendell, Ashton, Ravensworth and		
	<ul> <li>g. minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note c to Table 8 above); and</li> </ul>	Rixs Creek.		
	<ul> <li>use all reasonable efforts to co-ordinate air quality management on the site with the air quality management at nearby mines to minimise cumulative air quality impacts,</li> </ul>			
	to the satisfaction of the Planning Secretary.			
S3 C23	Air Quality Management Plan	Air Quality and Greenhouse Gas	Compliant	
	The Applicant must prepare an Air Quality Management Plan for the	Management Plan		
	development to the satisfaction of the Planning Secretary. This plan must: a. be submitted to the Planning Secretary for approval within 3 months of	Document Number: HVOOC- 1797567310-2595		
	the determination of Modification 5, unless otherwise agreed by the	Version: 2.0		
	Planning Secretary;	Effective: 12/09/2019		
	<li>b. be prepared in consultation with the EPA by a suitably qualified and experienced person/s;</li>	a) Appendix C of the AQGGMP		
	c. describe the measures to be implemented to ensure:	provides a letter from DP&E		
	<ul> <li>compliance with the air quality criteria and operating conditions in this consent;</li> </ul>	confirming approval (Approved on 06/09/2019 by Howard Reed as		
	<ul> <li>best practice management is being employed; and</li> </ul>	nominee of the Secretary).		
	<ul> <li>the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li> </ul>	<ul> <li>b) Appendix A of the AQGGMP demonstrates the initial consultation with the EPA.</li> </ul>		
	<ul><li>d. describe the air quality management system in detail; and</li><li>e. include an air quality monitoring program that:</li></ul>	<ul> <li>c) Section 6 of the AQGGMP describes the air quality</li> </ul>		

Cond No.	Condition	Comments & Evidence	Audit Findings R	Recommendations
	<ul> <li>uses monitors to evaluate the performance of the development against the air quality criteria in this consent and to guide day to day planning of operations;</li> <li>adequately supports the air quality management system; and</li> <li>a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents;</li> <li>f. include a protocol that has been prepared in consultation with the owners of nearby mines to minimise cumulative air quality impacts. The Applicant must implement the Air Quality Management Plan as approved by the Planning Secretary.</li> </ul>	<ul> <li>management controls to ensure compliance with criteria.</li> <li>d) Section 8 and 9 of the AQGGMP details the air quality monitoring program and compliance protocols. The compliance protocols include consideration of cumulative air quality impacts.</li> <li>HVO implements a number of design and operational controls to limit air quality impacts for the project and are outlined in the AQMP. These were observed to be implemented during the audit period through review of reports, interviews with dispatch personnel and following the site inspection. Evidence was sighted that predictive meteorological forecasting and real-time air quality monitoring data is used by dispatch and site personnel to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures. This included daily emails to relevant personnel, which provides daily forecasts of site specific weather conditions. These forecasts are discussed at pre-shift meetings and, in the event of adverse weather</li> <li>Real time air quality monitoring is undertaken, with alarm levels and TARPs to ensure proactive air quality management. A risk/response matrix is</li> </ul>		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		included in the AQGGMP, and awareness and application of this approach was observed in interviews with dispatch personnel during the site inspection. During the site inspection, there were regular observations made where wheel generated dust was observed above wheel height, and the height of the tray of haul trucks, exceeding the visible dust triggers in the Air Quality TARP. While it is noted that these instances of wheel generated dust did not appear to result in visible dust impacts outside the pit, It is recommended that operators are provided with refresher training to ensure awareness of these TARPs and to ensure more proactive management of wheel generated and plant- generated dust.		
METEORO	OLOGICAL MONITORING			
S3 C24	During the life of the development, the Applicant must ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the <i>Approved Methods for Sampling and Analysis of</i> <i>Air Pollutants in New South Wales</i> guideline.	The site operates a real time meteorological station. Records of monthly maintenance inspections were observed during the audit.	Compliant	
SURFACE	AND GROUND WATER			
S3 C25	<b>Discharge Limits</b> The Applicant must only discharge mine water from the site in accordance with the provisions of an EPL, section 120 of the <i>Protection of the</i>	Sighted 2019, 2020, 2021 Annual Returns and monthly environmental monitoring report from January 2022 until August 2022.	Compliant	OFI - During the audit inspection, Dam 37S had an eroded batter being caused via runoff from the access track. It is recommended that this should be

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Environment Operations Act 1997 or the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.	There were exceedances during the audit period, but they apply to the northern operations (DA450-10-2003) It is noted that there were uncontrolled discharges from both Dam 39S and Dam 39S commencing on 8 <sup>th</sup> March 2022 and 6 <sup>th</sup> July 2022. These dams are sediment dams and do not collect mine water. Both events were following large rainfall totals (>140mm) in excess of their design capacity (57.2mm) under the Blue Book guidelines. The March spill coincided with the regional flooding natural disaster. The July event was deemed to not cause environmental harm based on water quality samples collected and analysed.		repaired, or flow redirected to the existing stabilised entries. Sediment should then be removed from the basin to restore capacity.
S3 C26	<ul> <li>Protection of Watercourses</li> <li>The Applicant must: <ul> <li>a. ensure mining operations do not interfere with the stability of the Hunter River, Wollombi Brook and creek lines located outside the area of mining operations;</li> <li>b. to the south of the Hunter River, retain a buffer zone of 150 metres, or less if agreed by the Planning Secretary following consultation with DPE Water, from the edge of open cut pits and the high bank of the Hunter River and its connected alluvium, excepting the area of the site adjacent to the Hobden Gully levee;</li> <li>c. ensure negligible environmental consequences to the Hunter River alluvial aquifer and the Wollombi Brook alluvial aquifer beyond those predicted for the development; and</li> <li>d. during water transfers into the Lemington underground mine workings, retain a maximum fill level of 30m AHD in the Lemington underground mine workings of the Hunter River alluvial and the Lemington underground mine workings fill level, whichever gives the greater vertical separation.</li> </ul> </li> </ul>	Item A. – Sighted the 2021 and 2022 Stream Health and Stability Reports. 3 sites monitored on the Hunter River and 2 sites monitored on Wollombi Brook with no changes identified between the two rounds of monitoring. Item B. – Sighted letter from DPIE confirming approval to mine within 150m dated 15/1/14. Based on aerial photography review, no additional mining has occurred within 150m of the Hunter River high bank during the audit period. Item C & D – Review of monthly and Annual Environmental Reviews, Annual Groundwater Reviews and Mod 5 groundwater modelling report indicate no gaps in compliance these conditions.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C26A	Water Supply           The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.           The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.           Note:         Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development. The Applicant must surrender sufficient water entitlements upon cessation of rehabilitation activities to ensure that post closure water take impacts are sufficiently accounted for.	Total site water balance reviewed in Annual Environmental Review for 2019, 2020 and 2021 show a positive net water position and detail water take, all which fall below entitlements. HVO South Modification 5 Groundwater Study predicted using a numerical groundwater model that HVO has sufficient water licences to account for the modified project and that groundwater impacts would be acceptable. All years reported a net increase of water storage. Due to recent La Nina climatic conditions, no fresh water has been pumped from the Hunter River during 2021. Water has been released from site under EPL640 and HRSTS regulations during 2021 and 2022. The WMP (2018) Section 6.2/6.3 details water security including available transfers from other mines or from the Hunter River under licence.	Compliant	
S3 C26B	<b>Compensatory Water Supply</b> The Applicant must provide compensatory water supply to any landowner of privately-owned land whose rightful water supply is adversely and directly impacted (other than an impact that is negligible) as a result of the development, in consultation with DPE Water, and to the satisfaction of the Planning Secretary. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent, in quality and volume, to the loss attributable to the development. Equivalent water supply should be	Circumstances which may trigger a requirement to provide a compensatory water supply were not identified during the reporting period.	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.			
	If the Applicant and the landowner cannot agree on whether the loss of water is/ is not attributable to the development or the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.			
	If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant must provide compensation, to the satisfaction of the Planning Secretary. Notes:			
	<ul> <li>The Water Management Plan (see condition 27 below) is required to include trigger levels for investigating potentially adverse impacts on water supplies.</li> </ul>			
	• The burden of proof that any loss of surface water or groundwater access is not due to the development rests with the Applicant.			
S3 C26C	Water Transfers	Water transfer volumes are presented	Compliant	
	The Applicant may receive water from, and transfer water to, neighbouring mines including HVO North, Warkworth/ Mt Thorley and Wambo mines.	in the water balance section of the annual review. Mine water has been transferred to Liddell Coal during the audit period.		
S3 C27	Water Management Plan	Latest version submitted for approval:	Non-compliant	Version 3.4 of the WMP has
	<ul> <li>The Applicant must prepare a Water Management Plan to the satisfaction of the Planning Secretary. This Plan must:</li> <li>a. be prepared in consultation with DPE Water by a suitably qualified expert whose appointment has been approved by the Planning Secretary;</li> <li>b. be submitted to the Planning Secretary for approval within 6 months of this consent or otherwise agreed by the Planning Secretary; and</li> <li>c. include:</li> <li>a site water balance, which includes details of sources and security of water supply, on site water use and management and off-site water transfers, investigates and describes measures to minimise water use by the development and a methodology to quantify the annual groundwater inflow into the Lemington underground mine workings during the period water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased;</li> </ul>	23/11/2022 Version 3.0 of the WMP was approved on 16/10/2018 by Megan Dawson as nominee of the Secretary, and is included on the HVO website. Subsequent to this approval, a number of updates and minor amendments have been made to incorporate additional monitoring, response to audits and annual reviews and on feedback from DPE. Version 3.4 has been submitted to DPE for approval following the approval of PA 06_0261 Mod 6. Uncontrolled version 3.4 also sighted which has been issued to the Secretary and is awaiting approval.		been issued to the secretary and is waiting approval. Review the contents of the WMP to reflect the audit findings when next updated.

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>an erosion and sediment control plan for surface works on the site that is consistent with the requirements of the Managing Urban Stormwater: Soils and Construction Manual (Landcom 2004, or its latest version);</li> <li>a program for review of groundwater modelling that includes assessment of the effect of short and long-term changes to groundwater quality and mobilisation of salts;</li> </ul>	This version provides more up to date information reflecting management practices currently undertaken on site. Unless noted otherwise, comments below are based on the approved 2018 version 3.0.		
	<ul> <li>a surface water monitoring program that includes: <ul> <li>detailed baseline data of surface water flows and quality in the watercourses that could be affected by the development, including the Hunter River and Wollombi Brook;</li> <li>a detailed description of the surface water management system;</li> <li>details of water licensing requirements for all water storages;</li> <li>detailed design objectives and performance measures for erosion and sediment control works, water storages, water diversions, sediment dams, emplacement areas, backfilled voids and the final void;</li> <li>surface water impact assessment criteria, including trigger levels for investigating potentially adverse surface water impacts of the development;</li> <li>a program to monitor potentially adverse impacts of the development on surface water flows and quality, flooding, stream and riparian vegetation health, including monitoring controlled and uncontrolled discharges and seepage/leachate from the site; and</li> <li>a plan to respond to any exceedances of the performance criteria or surface water impact assessment criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development;</li> <li>a groundwater monitoring program that includes:</li> <li>additional baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, which could be affected by the development;</li> <li>groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts of the development;</li> </ul> </li> </ul>	Item A – Appendix A of the Water Management Plan (WMP) contains a letter from the Secretary confirming the appointment of Andrew Hodge as the author. Appendix B contain letters from DPI Water and EPA showing consultation has been undertaken. Item B – Not-relevant to this audit period Item C – Site Water balance included in Section 6 of the WMP, details sources and security of water supply, on site water use and management. The WMP details how the reliance on external water use is minimised through the priority use of captured rainfall runoff from mine disturbance areas and groundwater inflow to voids. The WMP does not contain a methodology to quantify annual groundwater inflow into the Lemington Underground Workings. Section 7.3.2 contains a brief overview of Erosion and Sediment Control. It states that a site-specific ESC Plan is developed under the Ground Disturbance Permit system. Observed example for a drill pad. The Surface Water Monitoring Program is detailed in Appendix C of the WMP. Baseline water quality data		
	<ul> <li>groundwater inflows to the open cut mining operations;</li> </ul>	is contained in Section 7.2 and water		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>impacts of the development on the region's aquifers, any groundwater bores, and surrounding watercourses, and in particular, the Hunter River and Wollombi Brook and adjacent alluvium; and</li> <li>impacts of the development on groundwater dependent ecosystems, riparian vegetation and River Red Gum populations; and</li> <li>a plan to respond to any exceedances of the groundwater impact assessment criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development; and</li> <li>a program to periodically update and validate the water balance and groundwater model for the development and compare monitoring results with modelled predictions, unless otherwise agreed by the Planning Secretary.</li> <li>The Applicant must implement the Water Management Plan as approved by the Planning Secretary.</li> </ul>	access licence details are contained within Section 5.7. Section 5.8 details the licenced discharge points. Design objectives and performance measures are provided in Section 7.3.2 for ESC works, Section 5.9 and 9.3 for water storages, Section 5.5 and 7.3 for diversions, Section 7.4.3 for emplacement areas and backfilled voids and Section 7.4.1 for final voids. Surface Water Impact Criteria are detailed in Table 2 of WMP Appendix C. Section 9 and Appendix C details the program to monitor potentially adverse impacts on surface water quality, controlled and uncontrolled discharges and seepage/leachate from the site. The Plan to respond to the exceedances is contained in Section 9.5.		
		<ul> <li>The WMP should be updated to include the following:</li> <li>1. Update the WMP with the required methodology to quantify the annual groundwater inflow into the Lemington underground mine workings during the period water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased.</li> <li>2. Update the WMP to include a program to monitor potentially adverse impacts of the</li> </ul>		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		<ul> <li>development on flooding, surface water flows, stream and riparian vegetation health</li> <li>3. Update the WMP to include latest details of how the mine is managing water including the recently installed dam level monitoring and pipe burst detection systems.</li> <li>4. Update the WMP with the latest water balance model details</li> <li>5. Update the WMP to include a program to periodically update and validate the water balance model for the development and compare monitoring results with modelled predictions</li> </ul>		
S3 C28	<ul> <li>Groundwater Impacts Report</li> <li>The Applicant must provide an annual report of alluvial and hard rock buffer groundwater levels. This report must: <ul> <li>a. be provided to DPE Water and the Department in the Annual Review each year following the reporting period;</li> <li>b. include interpreted drawdown levels resulting from existing and/or ongoing mining operations of the development; and</li> <li>c. account for any drawdown loss of alluvial groundwater or river flows to the satisfaction of the Planning Secretary.</li> </ul> </li> </ul>	2019, 2020 and 2021 Annual Groundwater Review Appended to the Annual Environmental Review	Compliant	
S3 C28A	The Applicant must design and construct Lake James (as described in the documents listed in condition 2(c) of schedule 2) to the satisfaction of the DSC. The final dam design, as submitted to DSC, must be accompanied by a detailed assessment of the potential operational and environmental risks associated with the dam.	Not triggered under this audit period (previously occurred). Viewed Table B1 of the 2016 IEA which states that the 2014 IEA confirmed that as constructed plans were sighted. Viewed the current WMP which confirms that the redesigned Lake James is currently in operation.	Not triggered	

Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
REHABILI	TATION AND LANDSCAPE					
S3 C29	The Applicant must impleme in the Warkworth Mine EIS, conceptually in Appendix 5, <i>Table 15: Summary of the Biodiversity</i> Area Goulbum River Biodiversity Area Note: This 140 ha of vegetation to the 1, 063 ha of vegetation to biodiversity offset strategy may Mine.	summarised in Table 15 be to the satisfaction of the PI Offset Strategy Difset Type Existing vegetation to be enhanced (Narrow leaved ironbark woodland) in the Goulburn River Biodive obe offset on this property for	elow and shown anning Secretary. <u>Minimum Size</u> (hectares) 140 rsity Area is additional Warkworth Mine. The	Goulburn River Management Plan Version: 2 Date effective: 7 December 2017 This Management Plan is the framework for the protection and management of a 1,066-hectare offset area under a legally binding conservation mechanism to satisfy conditions of Warkworth Mining Limited's Commonwealth approval (EPBC 2002/629) and NSW approval (NSW SSD-6464), and the 140-hectare offset area to satisfy conditions of the Hunter Valley Operations NSW approval (NSW PA 06-0261). Figure 2 – indicates the location of	Compliant	
S3 C29A	Long Term Security Offset By the end of June 2018, un the Applicant must secure th an in perpetuity conservation Planning Secretary, such as <i>Parks and Wildlife Act 1974.</i> <i>Species Conservation Act 1</i> Conservation Agreement un by incorporating the land int by NPWS). This conservation similar mechanism required	nless the Planning Secretar ne offset area identified in o n mechanism to the satisfa s a Conservation Agreemen BioBanking Agreement ur 995, Biobanking Stewardsh nder the <i>Biodiversity Conse</i> to the Goulburn River Natio on mechanism may be com	condition 29 under ction of the int under the National inder the Threatened hip Agreement or rvation Act 2016 or nal Park (if agreed	HVO offset area An extension for the establishment of an in-perpetuity conservation agreement to address this condition has previously been submitted each year since 2018. The most recent was made in a letter to DPIE dated 6 April 2022. A response to this letter from the Department on 20 May 2022 was noted, indicating that as this request is closely tied to the Warkworth consent (SSD6464) modification currently being assessed, and as such this task should be withdrawn pending the determination of that modification.		
S3 C29B	Offsets for Warkworth Min The Applicant must not under within the Southern Biodiver	ertake any mining operatior		A desktop review of the MOP confirmed that no mining operations or development within the Southern	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	indicated on the plan in Appendix 10, other than any conservation-related activity under an approved Biodiversity Management Plan under either this consent or similar plan required for Warkworth Mine, or the development and use of water management infrastructure (including existing infrastructure) as described in the Modification Report (Mod 7). Note: The Southern Biodiversity Area and Northern Biodiversity Area form part of the biodiversity offset strategy for Warkworth Mine.	Biodiversity Area or Northern Biodiversity Area as indicated on the plan in Appendix 10 during the audit period.		
S3 C30	<ul> <li>River Red Gum Restoration Strategy</li> <li>Within 12 months of the date of this consent, or otherwise agreed by the Planning Secretary, the Applicant must review, revise and provide a timetable for the implementation of the HVO River Red Gum Strategy for the Hunter River and Wollombi Brook river red gum populations (as shown in Appendix 8), in consultation with DPE Water and BCD, and to the satisfaction of the Planning Secretary. This strategy must be prepared by suitably qualified expert/s, and must include: <ul> <li>a. the conservation and restoration objectives for the river red gum populations;</li> <li>b. a description of the short, medium and long term measures that would be implemented to conserve and restore the river red gum populations (including measures to address matters which affect the long term health and sustainability of the river red gums such as surface and ground water supply, and controlling weeds, livestock and feral animals); and</li> <li>c. detailed assessment and completion criteria for the conservation and restoration of the river red gum populations.</li> </ul> </li> </ul>	The River Red Gum Rehabilitation and Restoration Strategy (RRGRRS) describes baseline and subsequent surveys (2007 and 2008) along with future monitoring including year 3 (2010), year 5 (2012) and year 10 (2017) monitoring which predates the scope of this audit. The Integrated Biodiversity Management Plan references the RRGRRS and proposes management measures for these areas. The RRGRRS was most recently updated 19/05/2022. Site inspections, and monitoring included in the Annual Reviews, indicate that management of these areas has been improved, although recent conditions have contributed to increased weed growth which requires ongoing management. Inspection of the Carrington Billabong during the site inspection (refer Plate 51, 52, 54 and 60) indicated fencing and current weed management activities to manage these areas.	Compliant	
S3 C31	Hunter Lowland Red Gum Forest The Applicant must protect all stands of the Hunter Lowland Red Gum Forest (also identified as Hunter Floodplain Red Gum Woodland Complex in the EA) endangered ecological community within the site, and adjacent lands under the control of the Applicant, as shown in Appendix 8, to the satisfaction of the Planning Secretary.	Observed protection of these areas on site.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C32	Habitat Management Areas Deleted	Deleted		
S3 C33	Strategic Study Contribution If, during the development, the Department or the BCD commissions a strategic study into the regional vegetation corridor stretching from the Wollemi National Park to the Barrington Tops National Park, then the Applicant must contribute a reasonable amount, up to \$10,000, towards the completion of this study.	No evidence was observed that a study was commissioned during the audit period.	Not triggered	
S3 C33A	<ul> <li>Biodiversity Management Plan</li> <li>The Applicant must prepare a Biodiversity Management Plan to the satisfaction of the Planning Secretary. This plan must: <ul> <li>a. be submitted to the Planning Secretary for approval within 3 months of the determination of Modification 5, unless otherwise agreed by the Planning Secretary;</li> <li>b. be prepared in consultation with the BCD by a suitably qualified and experienced person/s;</li> <li>c. describe the short, medium, and long term measures to be undertaken to manage the remnant vegetation and fauna habitat on the site and implement the Biodiversity Offset Strategy (see condition 29);</li> <li>d. describe the measures to be undertaken to avoid the Southern Biodiversity Area or Northern Biodiversity Area located within the site (see condition 29B);</li> <li>e. incorporate the River Red Gum Strategy (see condition 30);</li> <li>f. describe the measures to be undertaken to protect the Hunter Lowland Red Gum Forest endangered ecological community (see condition 31);</li> <li>g. include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and include triggers for remedial action, where these performance or completion criteria are not met;</li> <li>h. include a detailed description of the measures to be implemented on the site and in the biodiversity area/s for:</li> <li>protecting vegetation and fauna habitat outside the approved disturbance area on the site;</li> <li>enhancing the quality of existing vegetation, vegetation connectivity and fauna habitat on the site and in the offset areas;</li> <li>minimising clearing and avoid unnecessary disturbance;</li> </ul> </li> </ul>	Hunter Valley Operations – Integrated Biodiversity Management Plan Version: 1.0 Effective 25/06/2018 Approved by DPE on 2/8/2018 Sighted during inspection. It is noted that the IBMP was re-submitted in October 2022, however DPE are yet to provide an approval letter for this version. Annual ecological monitoring reports were observed during the site inspection, and these reports consider compliance with Biodiversity Management Plan requirements including biodiversity offsets, vegetation clearance, management activities, ecological monitoring results and pest and weed management activities.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings R	Recommendations
	<ul> <li>maximising the salvage of resources within the approved disturbance area for beneficial reuse;</li> </ul>			
	<ul> <li>collecting and propagate seed;</li> </ul>			
	<ul> <li>utilising vegetation for visual screening of the site;</li> </ul>			
	<ul> <li>minimising the impacts on fauna on site, including undertaking pre- clearance surveys;</li> </ul>			
	<ul> <li>managing salinity;</li> </ul>			
	<ul> <li>controlling weeds and feral pests;</li> </ul>			
	controlling erosion;			
	<ul> <li>managing grazing and agriculture on the site;</li> </ul>			
	<ul> <li>controlling access; and</li> </ul>			
	<ul> <li>manage bushfire hazards;</li> </ul>			
	i. be integrated with rehabilitation for the site;			
	<li>include a seasonally-based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance and completion criteria, and any progressive improvements that could be implemented to improve biodiversity outcomes;</li>			
	<ul> <li>monitor and report on the impacts of the development on groundwater dependent ecosystems and riparian vegetation consistent with the Groundwater Monitoring Program, and identify trigger levels for the remediation of any material impacts to these ecosystems;</li> </ul>			
	<ol> <li>identify the potential risks to the successful implementation of the Biodiversity Offset Strategy, and include a description of the contingency measures to be implemented to mitigate against these risks; and</li> </ol>			
	<ul> <li>m. include details of who would be responsible for monitoring, reviewing, and implementing the plan.</li> </ul>			
	The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.			
	Note: Management measures relating to the Biodiversity Offset Strategy may be addressed via equivalent measures required as part of the long term security arrangement under condition 29A.			
S3 C34	Progressive Rehabilitation	Annual Review shows rehabilitation	Compliant	
	The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be	progressing in line with/ahead of the MOP. Areas prepped for rehabilitation		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone	listed in AR also, and areas seeded/prepped.		
	to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.	Confirmed with site inspection.		
	Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.			
S3 C35	<b>Rehabilitation Objectives</b> The Applicant must rehabilitate the site in accordance with the provisions under the <i>Mining Act 1992</i> and must be generally consistent with the proposed rehabilitation activities described in the documents listed in condition 2 of Schedule 2 (and shown conceptually in the figure in Appendix 6), and comply with the objectives in Table 16.	Noted. On track to completion, per the rehabilitation reporting in AR and confirmed during site inspection.	Not triggered	

Condition		Comments & Evidence	Audit Findings	Recommendations
Table 16: Rehabilitation Objectives				
Feature				
All areas of the site affected by the development	Safe, stable and non-polluting     Fit for the intended post-mining land use/s			
Areas proposed for native ecosystem re-establishment	<ul> <li>Establish self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area</li> </ul>			
Areas proposed for agricultural land	<ul> <li>Establish/restore grassland areas to support sustainable agricultural activities</li> <li>Achieve the nominated land capability classification</li> </ul>			
Final Landform	<ul> <li>Stable and sustainable for the intended post-mining land use/s</li> <li>Integrated with surrounding natural landforms</li> <li>Incorporate micro-relief and drainage lines that are consistent with surrounding topography, to the greatest extent practicable</li> <li>Maximise surface water drainage to the natural environment (excluding final void catchment)</li> <li>Protect and maintain, to the greatest extent practicable, existing views of the Wollemi National Park and associated escarpments for residences of Maison Dieu</li> </ul>			
Final void	<ul> <li>Designed as long term groundwater sink to maximise ground water flows across backfilled pits to the final void</li> <li>Minimise to the greatest extent practicable:         <ul> <li>the size and depth of final voids;</li> <li>the drainage catchment of final voids;</li> <li>any high wall instability risk; and</li> <li>the risk of flood interaction</li> </ul> </li> </ul>			
Surface infrastructure of the development	Decommissioned and removed, unless the Resources Regulator agrees otherwise			
Rehabilitation materials	<ul> <li>Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and used as rehabilitation resources, to the greatest extent practicable</li> </ul>			
Water quality	<ul> <li>Water retained on the site is fit for the intended post-mining land use/s</li> <li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li> </ul>			
Community	Ensure public safety     Minimise adverse socio-economic effects associated with mine closure			
site; however, they do no undertaken to landforms	t require any additional earthmoving works to be that have been constructed under previous			
Rehabilitation Manager	nent Plan	The RMP addresses the conditions	Compliant	
The Applicant must prepa development in accordan and carry out the develop	are a Rehabilitation Management Plan for the ice with the provisions under the <i>Mining Act 1992,</i> ment in accordance with this plan. This plan	as follows: (a) Section 12.1 (b) Section 4.3		
	Table 16: Rehabilitation Objectives         Feature         All areas of the site affected         by the development         Areas proposed for native         ecosystem re-establishment         Areas proposed for agricultural land         Final Landform         Final void         Surface infrastructure of the development         Rehabilitation materials         Water quality         Community         Note: The rehabilitation c site; however, they do not undertaken to landforms approvals or prior to the agricultant must prepare development in accordar and carry out the development in accordar	Table 16: Rehabilitation Objectives           Feature         Objective           All areas of the site affected by the development         • Safe, stable and non-polluting • Fit for the intended post-mining land use/s           Areas proposed for nagricultural land         • Establish self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area agricultural land           Areas proposed for agricultural land         • Establish/restore grassland areas to support sustainable agricultural activities           Areas proposed for agricultural land         • Stable and sustainable for the intended post-mining land use/s • Integrated with surrounding natural landforms           Final Landform         • Stable and sustainable for the intended post-mining land use/s • Integrated with surrounding topography, to the greatest extent practicable • Maximise surface water drainage lines that are consistent with surrounding topography, to the greatest extent practicable, existing views of the Wollemi National Park and associated escarpments for residences of Maison Dieu           Final void         • Designed as long term groundwater sink to maximise ground water flows across backfilled pits to the final void • Minimise to the greatest extent practicable: • the drainage catchment of final voids; • and high stability in sk; and • the risk of flood interaction           Surface infrastructure of the development         • Decommissioned and removed, unless the Resources Regulator agrees otherwise           Rehabilitation materials         • Materials from areas disturbed under this consent (including toposils, substrates and seeds) are to be recovere	Table 16. Rehabilitation Objectives       Objective         All areas of the site affected by the development       • Safe, stable and non-colluting • Fit for the intended post-mining land usels         Areas proposed for adve- ecosystem re-stablehment       • Establish estimative woodland ecosystems - characteristic of vegetation communities found in the local area agricultural land         Final Landform       • Establish here normated land capatily classification         Final Landform       • Establish with surrounding the popularity. Is the greatest extent practicable with surrounding topopularity. Is the greatest extent practicable • Macmane surface water drange lines that are consistent with surrounding topopularity. Is the greatest extent practicable • Macmane surface water drange lines that are consistent with surrounding topopularity. Is the greatest extent practicable • Macmane surface water drange lines that are consistent water flow across backfilled pits to the final void • Ended water flow across backfilled pits to the final void • Ended water flow across backfilled pits to the final void • Integrated waters backfilled pits to the final void • Integrate and depth of final voids • - In the size and depth of final voids • - In the size of additional discles are to backfilled water top accectable         Burdace intrastructure of the development       • Materials from areas disturbed under the consent (including of the dave schedulid backs) are to be recovered manopol and fill or aquite ecody and inpairin vegetatest extent practicable         Water quality       • Materials from areas disturbed under previous approvals or prior to the approval of Modification 5.         Rehabilitation Management Plan development in accordance wi	Table 16: Rehabilitation Objective:       Objective         Pailor and of the site affected by the development       • Sale, stable and non-polating • Pit for the interfaced polarity and subth         Arrans proceed for affect ecospletin treatabilitation of the interfaced polarity and subth       • Establish addition commandle for all in the local area of the development         Prind Landtorn       • Sale stable and non-polating of another procession       • Establish addition commandle for all in the local area and the spreaded of the site and the sum of applaing classification • Achieve the nontreade bio support stable of the instantial band to main land to defit • Integrated with sumounding topograph, to the greatest scient practicable, examing • For one and monotoget the nature advective practicable area • Bohome the nontreade local area • Achieve and the sumounding topograph, to the greatest scient practicable, examing • For one advector of Mason Dave         Final Landtorn       • Despred as the nature advector final costs • Interfamore of the action the stable of the nature advector final costs • Interfamore address of Mason Dave         Final void       • Despred as the nature advector final costs • Interfamore address of Mason Dave         Final void       • Despred as the stabilization common water stabilization common water stabilization • The risk of floor advector • Interfamore address of the stabilization common water stabilization • Despred as the stabilization common water stabilization for macro, the water * Stabilization advector • Interfamore advector • Interfamore advector • Interfamore advector • Interfamore advector • Interfamore advector • Interfamore advector • Despreadvector • Despreadvector • Interfamore advector • Interfamore adv

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	<ul> <li>b. be prepared in consultation with the Department, DPE Water, and Council by a suitably qualified and experienced person/s;</li> <li>c. be submitted for approval within 3 months of the determination of Modification 5, unless otherwise approved by the Planning Secretary;</li> <li>d. be prepared in accordance with any relevant Resources Regulator Guideline;</li> <li>e. describe how the rehabilitation of the site would achieve the objectives identified in Table 16 and be integrated with the measures in the Biodiversity Management Plan;</li> <li>f. include detailed performance and completion criteria for evaluating the performance of progressive and final rehabilitation and include triggers for remedial action, where these performance or completion criteria are not met;</li> <li>g. describe the measures to be implemented to meet the performance and completion criteria, to ensure compliance with the relevant conditions of this consent and to address all aspects of rehabilitation including mine closure, final landform (including the final void), final land use/s, and water management in the final landform;</li> <li>g. include procedures for the use of interim stabilisation and temporary vegetation strategies, where reasonable to minimise exposed areas;</li> <li>h. include a program to monitor, independently audit and report on the effectiveness of the rehabilitation measures, and progress against the performance and completion criteria;</li> <li>i. identify the potential risks to the successful implementation of rehabilitation, and include a description of the contingency measures to be implemented to mitigate against these risks; and</li> <li>j. include details of who would be responsible for monitoring, reviewing, and implementing the plan.</li> </ul>	<ul> <li>(d) Section 1.0</li> <li>(e) Section 4.1</li> <li>(f) Sections 4.2, 10.2</li> <li>(g) Sections 6.0, 7.0 Section 6.2.3.6</li> <li>(h) Section 8.0, 9.0</li> <li>(i) Section 3.0</li> <li>(j) Section 11.3</li> </ul>	
S3 C37	Deleted		
S3 C38	Deleted		
S3 C39	<b>Conservation and Biodiversity Offset Implementation Bond</b> By the end of March 2013, the Applicant must lodge a conservation bond with the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond must be determined by:	Observed correspondence to DPE from Deutsche Bank AG in December 2016 confirming the conservation bond was lodged prior to this audit period.	Compliant

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	a. calculating the full cost of implementing the offset strategy (other than land acquisition costs); and			
	b. employing a suitably qualified quantity surveyor to verify the calculated costs.			
	The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to the lodgement of the bond.			
	The conservation bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following:			
	a. any update or revision to the Biodiversity Management Plan;			
	<ul> <li>b. the completion of an Independent Environmental Audit in which recommendations relating to the implementation of the Biodiversity Offset Strategy have been made; or</li> </ul>			
	c. in response to a request by the Planning Secretary.			
	If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond.			
	If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.			
	With the agreement of the Planning Secretary, this bond may be combined with rehabilitation security deposit administered by the Resources Regulator, and may be combined with bonds in respect of offsets required for Warkworth Mine.			
ABORIGIN	IAL HERITAGE			
S3 C40	Aboriginal Heritage Management Plan The Applicant must prepare an Aboriginal Heritage Management Plan for	HVO South Aboriginal Heritage Management Plan	Compliant	
	the development to the satisfaction of the Planning Secretary. The Plan must:	Document Number: HVOOC- 1797567310-3087		
	a. be prepared in consultation with Heritage NSW and the Aboriginal community;	Status: Approved Version: 1.0		
	b. be submitted to the Planning Secretary for approval within 12 months of this consent or as otherwise agreed by the Planning Secretary; and	Effective: 09/02/2020 Approved on 19/12/2019 by Matthew		
	c. include:	Sprott as nominee of the Secretary.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>measures to be taken to avoid impacts to Aboriginal cultural heritage values at all stages of the development. If impacts are unavoidable, mitigation measures are to be negotiated with the Aboriginal community;</li> <li>a program for the recording, salvage and surface collection of Aboriginal objects/sites within the site;</li> <li>a program for the conservation of the other Aboriginal objects/sites within the site, including measures to secure, analyse and record the objects/sites;</li> <li>definition of restricted access zones to protect Sites 26-44, 47-58, 84-100, 102-104 and 107-109 from disturbance;</li> <li>measures to ensure potential impacts to Sites 26-44, 47-58 and 107-109 by the proposed rail spur and loop are avoided;</li> <li>measures to provide for the controlled collection of Sites 1-24, 59-79, 80-83, 101 and 105-106, where avoidance of impacts by planned mining and infrastructure activities is not possible;</li> <li>provision for a long term 'keeping place' and care and control plan for any Aboriginal objects recovered from the site;</li> <li>provisions for Aboriginal cultural heritage awareness training for all HVO South employees, and as a component of mine site inductions for contractors working at HVO South;</li> <li>a description of the ongoing consultation and involvement of the Aboriginal community in the conservation and management of the Aboriginal cultural heritage of the objects/sites; and</li> <li>a protocol for the regular review of the Plan's effectiveness. The Applicant must implement the Aboriginal Heritage Management Plan as approved by the Planning Secretary.</li> <li><i>Notes:</i></li> <li><i>The Aboriginal cultural heritage sites and site numbers referenced in this condition are provided in Section 12 and Annex M of the EA</i>.</li> </ul>	A regular program of compliance inspections is in place for the site, and compliance audit inspection reports prepared by Arrow Heritage for 2021 and 2022 were observed during the site inspection. Site inspection confirmed identification, security and fencing of these areas and artefact storage as indicated in Plates 50, 57, 58 and 59.		
TRANSPO	RT AND UTILITIES	l		·
S3 C41	Monitoring of Coal Transport	Coal transport data is included in	Compliant	
	The Applicant must keep records of the amount of coal transported from the site each year, and include these records in the Annual Review.	Section 4.1.1 of the annual review		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C42	<b>Coal Haulage Limits</b> The Applicant must not transport coal from the development by public roads, unless otherwise approved by the Planning Secretary.	Coal transport data is included in Section 4.1.1 of the annual review	Compliant	
S3 C43	<ul> <li>Relocation of Comleroi Road</li> <li>The Applicant must: <ul> <li>a. prior to construction, consult with all road users and Council about the proposed road works and their timing;</li> <li>b. develop and implement procedures for road closures and diversions to be undertaken during the construction of the relocated road; and</li> <li>c. construct the relocated section of the road</li> <li>to the satisfaction of Council.</li> </ul> </li> </ul>	Not triggered during the audit period	Not triggered	
S3 C44	Jerry Plains Road Heavy Equipment Crossing Prior to the relocation of any heavy equipment, to of from the development, that would require Jerrys Plains Road to be closed to public traffic, the Applicant must obtain approval for each planned road closure from TfNSW and then undertake each transfer of equipment across Jerrys Plains Road in accordance with any approval obtained from TfNSW for this purpose.	Not triggered during the audit period	Not triggered	
S3 C45	<b>Coal Conveyor to HVO North</b> The Applicant must design and construct the conveyor to HVO North to the satisfaction of the Resources Regulator and DPE Water. A copy of all final documentation must be provided to the Planning Secretary within 6 months of the completion of its construction.	Not triggered during the audit period	Not triggered	
S3 C46	Deleted		Noted	
S3 C47	<ul> <li>Hunter Valley Gliding Club Co-operative Limited</li> <li>While HVGC continues to use its facilities within the site, the Applicant must maintain an agreement with HVGC to address the potential impact of the mine on the use and operation of HVGC's facilities, including the potential impacts to the flight paths from dragline operations. This agreement must take into consideration the impacts of the dragline position on: <ul> <li>useable length of the runway;</li> <li>interference with flight paths; and</li> <li>guidelines of the Civil Aviation Safety Authority.</li> </ul> </li> <li>Note: This condition shall cease to operate if both parties agree to terminate the agreement and the need for an agreement.</li> </ul>	The Concession and Mitigation Agreement 5/2/13 between Coal and Allied and the HVGC remains in place.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C48	The Applicant must not conduct any activity associated with the development above the obstacle limitation surface (OLS) as shown in Figure 2.3 of the <i>HVO South Coal Project Response to Submissions Report (July 2008)</i> unless agreed with HVGC.	No activities during the audit period.	Not triggered	
S3 C49	<ul> <li>The Applicant must develop an Amenity Management Plan for HVGC's facilities within the site. This Plan must: <ul> <li>a. be prepared in consultation with HVGC;</li> <li>b. be submitted to the Planning Secretary for approval 6 months prior to the commencement of mining in the Riverview South East Extension Area, or otherwise agreed by the Planning Secretary;</li> <li>c. include a risk assessment to identify those circumstances most likely to generate impacts from mining operations on gliding activities and use of the club's residential facilities;</li> <li>d. include details of any proposed modifications to the HVO South mine plan to mitigate the potential impacts identified in the risk assessment required under paragraph (c);</li> <li>e. identify and implement management measures for mining activities to ensure that air safety impacts are minimised and the OLS limits in condition 48 are adhered to;</li> <li>f. identify and implement management measures for mining activities to ensure that air quality and noise emissions meet respective impact assessment criteria;</li> <li>g. include a program to monitor and report on the effectiveness of the mine plan modifications required under paragraph (d) and the management measures for prior notification of potentially disruptive activities at either HVO South or the HVGC site and procedures for notifying HVGC of any exceedances of the relevant impact assessment criteria and/or OLS limits at HVO South, to the satisfaction of the Planning Secretary.</li> <li>If the Applicant and HVGC cannot agree on the level or composition of the Amenity Management plan, then either party may refer the matter to the Planning Secretary.</li> </ul> </li> </ul>	Amenity Management Plan Hunter Valley Gliding Club October 2012 Final V8.0 No mining has occurred in South Lemington Pit 2 during the audit period.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	The Amenity Management Plan, must be reviewed in consultation with HVGC and if necessary updated, prior to the commencement of mining in South Lemington Pit 2.		
VISUAL A	MENITY		
S3 C50	<ul> <li>Lighting Emissions</li> <li>The Applicant must: <ul> <li>a. ensure no external lights shine above the horizontal;</li> <li>b. ensure that all external lighting associated with the development complies with Australia Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version, and</li> <li>c. take all practicable measures to mitigate off-site lighting impacts from the development</li> <li>to the satisfaction of the Planning Secretary.</li> </ul> </li> </ul>	Lighting Review conducted October 2022. No recommendations for improvement.	Compliant
S3 C51	<ul> <li>Visual Impact Mitigation</li> <li>Within 12 months of this consent, or otherwise agreed by the Planning Secretary, the Applicant must prepare a visual impact mitigation report for the development to the satisfaction of the Planning Secretary. This report must: <ul> <li>a. be prepared in consultation with Council;</li> <li>b. identify the privately-owned residences and public roads that are likely to experience significant additional visual impacts from the development during its operation; and</li> <li>c. describe (in general terms) the mitigation measures that could be implemented to reduce the visibility of the mine from these residences and roads.</li> </ul> </li> </ul>	Completed. Verified within previous audit (2016 IEA)	Not triggered
S3 C52	Within 3 months of the Planning Secretary approving this report, the Applicant must advise all owners of residences identified in the report that they are entitled to mitigation measures to reduce the visibility of the mine from their properties and reach agreement with Council about mitigation measures (if any) to be implemented for public roads. If the Applicant and Council cannot agree about these measures, the matter must be referred by either party to the Planning Secretary for resolution. <i>Note: The additional visual impact mitigation measures must be aimed at reducing the visibility of the mine from significantly affected residences and do not necessarily require measures to reduce visibility of the mine from other locations on the affected properties. The additional visual impact mitigation measures do not necessarily have to include measures on the affected property itself (i.e. the additional</i>	As per Sch 3 Cond 51 above.	Not triggered

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	measures may consist of measures outside the affected property boundary that provide an effective reduction in visual impacts).			
GREENHC	OUSE & ENERGY EFFICIENCY			
S3 C53	The Applicant must implement all reasonable and feasible measures to minimise greenhouse gas emissions from the development to the satisfaction of the Planning Secretary.	Total greenhouse gas emissions are reported in the Annual Reviews and have shown a decline since the previous audit. Initiatives to reduce fuel usage emissions and electricity consumption are offsetting some increase in fugitive emissions due to the exposure of deeper coal seams. HVO is registered as a Safeguard facility and therefore also has a Safeguard baseline. Emissions above the baseline for that year need to be offset by retiring Australian Carbon credit Units (ACCUs). HVO was below the baseline during the audit period and also below EIS predictions as reported in Annual Reviews.	Compliant	
S3 C54	Deleted			
WASTE				
S3 C55	<ul> <li>The Applicant must:</li> <li>a. monitor the amount of waste generated by the development;</li> <li>b. investigate ways to reuse, recycle or minimise this waste;</li> <li>c. implement reasonable and feasible measures to minimise this waste;</li> <li>d. ensure irrigation of treated wastewater is undertaken in accordance with EPA's <i>Environmental Guideline for the Utilisation of Treated Effluent</i>; and</li> <li>e. report on waste management and minimisation in the Annual Review to the satisfaction of the Planning Secretary.</li> </ul>	The generation of waste is tracked and reported in the annual reviews, demonstrating ongoing commitment to recycling of wastes where possible. There is no irrigation of treated wastewater undertaken on the site.	Compliant	
S3 C56	Within 12 months of this consent or otherwise agreed by the Planning Secretary, the Applicant must install and operate a wastewater treatment system with adequate capacity to treat wastewater loads from the Lemington workshop and facilities, to the satisfaction of EPA.	Wastewater treatment system installed in 2011 and verified in 2014 IEA.	Not triggered	

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
S3 C57	<ul> <li>Except as expressly permitted in a lic Environment Operations Act 1997 or Operations Amendment (Scheduled 2008, waste must not be:</li> <li>a. received at the development site disposal; or</li> <li>b. disposed of at the development s</li> </ul>	by the Protection of the Environment Activities and Waste) Regulation for storage, treatment, processing or	The generation of waste is tracked and reported in the annual reviews, and waste receipts for offsite disposal were observed during the site inspeciton. No other wastes were received on site for disposal during the audit period.	Compliant	
HAZARDS					
S3 C58	<ul> <li>Dangerous Goods</li> <li>On-site manufacturing, storage and h Hazardous Substances must be under a. NOHSC National Code of Practic Workplace Dangerous Goods (20)</li> <li>b. NSW Code of Practice for Manage the Workplace (2019); and</li> <li>c. the requirements of relevant Auster The storage and handling of flamm. Note: Explosives and explosive precursor the requirements of the Resources Regulation</li> </ul>	ertaken in accordance with: e for Storage and Handling of 01); ing Risks of Hazardous Chemicals in ralian Standards, particularly AS1940: mable and combustible liquids. s must be managed in accordance with	Liquids were noted to be adequately bunded, with mobile bunded trolleys available for transporting liquids.	Compliant	OFI – Potential for waste chemical containers to have lids fitted, or to be stored undercover to limit additional generation of contaminated liquid.
S3 C58A	Unless otherwise agreed by the Plan dangerous goods and hazardous ma Emulsion Plant, as described in the M exceed the quantities provided in Tak stored at Location A and Location B of Table 17: Location A Dangerous Goods Storage ANE Tanks AN Transit Bin Stack of HDAN UN 1942 Diesel Tanks (Class 1 Combustible Liquid) Sodium Nitrate (Class 5.1) Gassing Solution (Class 5.1) Thiourea (Class 9) Acetic Acid (Class 8) ANSOL (Class 5.1)	terials for the Ammonium Nitrate Adification Report (MOD 6), must not ble 17 and Table 18 and must not be	<ul> <li>Location A has been decommissioned, so the quantities in Table 17 are no longer applicable.</li> <li>The ANE plant has been designed with consideration of controls for separation of dangerous goods and maintenance of storage volumes in accordance with these requirements. The site inspection confirmed the following storages: <ul> <li>ANE Storage tanks 1 and 2 with capacity of 70T each</li> <li>ANT Transit Bin with labelled capacity of 90,000kg</li> <li>HDAN Bag Storage Area ~20T</li> <li>Diesel tank storage with maximum capacity of 65,000L</li> </ul> </li> </ul>	Compliant	

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	Table 18: Location B Dangerous Goods Storage		- Sodium Nitrate stored in 20kg		
	ANE Tanks	2x 70 Tonne Tanks	bags on pallets – approximately		
	AN Transit Bin	96 Tonne Bin	3000kg		
	Stack of HDAN UN 1942	1x 100 t Stack	- Thiourea pallet storage area		
	Diesel Tanks (Class 1 Combustible Liquid)	74,000 Litres	observed with approximately		
	Sodium Nitrate (Class 5.1)	5,000 kg	3000kg of bagged storage		
	Gassing Solution (Class 5.1)	10, 000 Litres	- Acetic Acid storage area held 3 IBC's of approximately 3000kg		
	Thiourea (Class 9)	5, 000 kilograms	- ANSOL storage consists of 2 x		
	Acetic Acid (Class 8)	5, 000 kilograms	30,000L tanks.		
	ANSOL (Class 5.1)	80, 000 Litres			
S3 C58B	The Applicant may transfer ANE ma must not transfer ANE to other surro	nufactured on-site to HVO North but bunding mines.	Approximately 3.5kt ANE has been transferred to HVO North. No other transfers have occurred.	Compliant	
S3 C59	<ul> <li>Fire Control</li> <li>During the development, the Applica</li> <li>a. ensure that it maintains suitable site; and</li> <li>b. assist the rural Fire service and e possible if there is a fire on site.</li> </ul>	equipment to respond to any fires on	The site maintains an emergency response checklist for fire appliances on site.	Compliant	
S3 C60	The Applicant must ensure that it mather the site, in consultation with Council	aintains a Fire Management Plan for and the Rural Fire Service.	Bushfire Management Plan Document Number: HVOOC- 1797567310-41 Status: Approved Version: 4.0 Effective: 01/04/2020	Compliant	
SCHED	ULE 4 – ADDITIONAL PRO	CEDURES FOR AIR QUALIT	Y AND NOISE MANAGEMEN	NT	
NOTIFICA	TION OF LANDOWNERS				
S4 C1	the land listed in Table 1 in writing the	Applicant must notify the landowners of hat they have the right to require the y stage of the development (subject to	Completed (Verified in 2010 IEA)	Not triggered	
S4 C2	If the results of monitoring required i generated by the development are g		During the audit period a significant number of exceedances of the short	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	assessment criteria in Schedule 3, except where this is predicted in the documents listed in condition 2 of Schedule 2 or where a negotiated agreement has been entered into in relation to that impact, then the Applicant must, within 2 weeks of obtaining the monitoring results, notify the Planning Secretary, the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in Schedule 3.	term (24hr) PM10 criteria were recorded. A large portion of these events were influenced by a combination of ongoing drought conditions in 2019 and 2020, regional dust events and smoke from bushfires which significantly affected the Hunter Valley. Each of these exceedances were reported to DPIE and were noted to have been affected by an extraordinary event and therefore, as per the consent conditions, the criteria were not deemed to be applicable. These events also contributed to exceedances of the long term (annual average) criteria in some instances, however annual averages have been adjusted to exclude these events as per consent conditions. Where exceedances were noted outside of these extraordinary events, these were reported to DPIE and investigated to determine the contribution to these incidents by HVO in accordance with the compliance protocol outlined in the HVO Air Quality Management Plan. Following investigation, one non- compliance was noted against consent conditions in each of PA 06_02161 and DA 450-10-2003. The non-compliance with respect to this condition was a PM10 exceedance at the Knodlers Lane HVAS on 28 July 2021.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		For the PM10 air quality exceedance of 28 July 2021, copies of notification letters to residents, inclusive of the NSW Health fact sheet "Mine Dust and You" were sighted during the audit.		
S4 C3	If the results of monitoring required in Schedule 3 identify that impacts generated by the development are greater than the relevant air quality impact assessment criteria in Schedule 3, then the Applicant must send the relevant landowners and tenants (including tenants of mine owned properties) a copy of the NSW Health fact sheet entitled "Mine Dust and You" (and associated updates) in conjunction with the notification required in condition 2.	For the PM10 air quality exceedance of 28 July 2021, copies of notification letters to residents, inclusive of the NSW Health fact sheet "Mine Dust and You" were sighted during the audit.	Compliant	
INDEPEND	DENT REVIEW			
S4 C4	<ul> <li>If a landowner considers the development to be exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the development on his/her land.</li> <li>If the Planning Secretary is satisfied that an independent review is warranted, the Applicant must within 3 months of the Planning Secretary's decision: <ul> <li>a. consult with the landowner to determine his/her concerns;</li> <li>b. commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to conduct monitoring on the land, to:</li> <li>determine whether the development is complying with the relevant impact assessment criteria in Schedule 3; and</li> <li>identify the source(s) and scale of any impact on the land, and the development's contribution to this impact; and</li> </ul> </li> </ul>	An independent review of blasting impacts was requested as outlined in Schedule 3, Condition 17. This has been addressed in relation to that condition.	Not triggered	
S4 C5	If the independent review determines that the development is complying with the relevant impact assessment criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Planning Secretary.		Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	If the independent review determines that the development is not Not triggered complying with the relevant impact assessment criteria in Schedule 3, and that the development is primarily responsible for this non-compliance, then the Applicant must: a. implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria, and conduct further monitoring to determine whether these measures ensure compliance; or b. secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Planning Secretary. However, if the further monitoring referred to under paragraph (a) above determines that the development is complying with the relevant impact assessment criteria, the independent review determines that the development is not complying with the relevant land acquisition criteria in Schedule 3, and that the development is primarily responsible for this not complying with the relevant land acquisition criteria in Schedule 3, and that the development is primarily responsible for this non-compliance, then the Applicant must offer to acquire all or part of the landowner's land in accordance with the procedures in conditions 7-9 below, to the satisfaction of the Planning Secretary.			
S4 C6	<ul> <li>If the independent review determines that the relevant impact assessment criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for this non-compliance, then the Applicant shall, together with the relevant mine/s:</li> <li>a. implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the relevant impact assessment criteria are complied with, and conduct further monitoring to determine whether these measures ensure compliance; or</li> <li>b. secure a written agreement with the landowner and other relevant mines to allow exceedances of the relevant impact assessment criteria in Schedule 3,</li> <li>to the satisfaction of the Planning Secretary.</li> </ul>		Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Planning Secretary. If the independent review determines that the relevant land acquisition criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for this non-compliance, then the Applicant shall acquire all or part of the landowner's land on as equitable basis as possible with the relevant mine/s, in accordance with the procedures in conditions 7-9 below, to the satisfaction of the Planning Secretary.			
LAND AC	QUISITION			
S4 C7	<ul> <li>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant shall make a binding written offer to the landowner based on:</li> <li>a. the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the development the subject of the development application, having regard to the:</li> <li>existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of 'additional noise mitigation measures' in condition 21 of schedule 3, or 'additional visual impact mitigation measures' in condition 52 of schedule 3;</li> <li>b. the reasonable costs associated with:</li> <li>relocating within the Singleton or Muswellbrook local government areas, or to any other local government area determined by the Planning Secretary;</li> <li>obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and</li> <li>c. reasonable compensation for any disturbance caused by the land acquisition process.</li> <li>However, if following this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the</li> </ul>	No acquisition requests have been made during the audit period	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
Cond No.	<ul> <li>land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.</li> <li>Upon receiving such a request, the Planning Secretary shall request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to: <ul> <li>a. consider submissions from both parties;</li> <li>b. determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;</li> <li>c. prepare a detailed report setting out the reasons for any determination; and</li> <li>d. provide a copy of the report to both parties.</li> </ul> </li> <li>Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.</li> <li>However, if either party disputes the independent valuer's report, they may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above and the independent valuer's report. Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary shall determine a fair and reasonable acquisition price for the land, having regard to the matters referr</li></ul>	Comments & Evidence	Audit Findings	Recommendations
	Applicant's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.			
S4 C8	The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 7 above.		Not triggered	
S4 C9	If the Applicant and landowner agree that only part of the land must be acquired, then the Applicant must also pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where		Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	permissible), and registration of the plan at the Office of the Registrar- General.			
SCHED	ULE 5 – ENVIRONMENTAL MANAGEMENT, MONITOR	ING, AUDITING AND REPOR	TING	
ENVIRON	MENTAL MANAGEMENT			
S5 C1	<ul> <li>Environmental Management Strategy</li> <li>The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must: <ul> <li>a. be submitted to the Planning Secretary for approval within 6 months of this consent or otherwise agreed by the Planning Secretary;</li> <li>b. provide for the strategic context for the environmental management of the development;</li> <li>c. identify the statutory requirements that apply to the development;</li> <li>d. describe the procedures that would be implemented to:</li> <li>keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>receive, handle, respond to, and record complaints;</li> <li>resolve any disputes that may arise during the course of the development;</li> <li>respond to any non-compliance;</li> <li>manage cumulative impacts; and</li> <li>respond to emergencies;</li> <li>include:</li> <li>references to any strategies, plans and programs approved under this consent; and</li> <li>a description of and clear plan depicting all environmental monitoring to be carried out under this consent;</li> <li>describe how the various incident and approval reporting requirements of the development would be integrated into a single reporting system; and</li> </ul> </li> </ul>	Document Number: N/A Version: 4.0 Effective: 08/01/2019 The EMS was approved on 8/01/2019 by Howard Reed as nominee of the Secretary. The EMS was found to satisfy the relevant requirements of the current consents and has been prepared by suitably qualified and experienced person and was submitted to the Planning Secretary for approval. The EMS provides a range of procedures that are implemented to manage communication, complaints, incidents, and monitoring. Review of the communication, complaints, incidents registers found that HVO was implementing these procedures. The EMS references the various management plans for specific details for plans, programs, and monitoring requirements. During the site inspection and following review of associated management plans it was noted that HVO is satisfactorily implementing the EMS.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S5 C1A	Management Plan Requirements	Refer to Section 3 of the audit report	Compliant	
	The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:	for comment on Management Plans.		
	a. a summary of relevant background or baseline data;			
	b. a description of:			
	• the relevant statutory requirements (including any relevant approval, licence or lease conditions);			
	any relevant limits or performance measures/criteria; and			
	<ul> <li>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul>			
	<ul> <li>a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</li> </ul>			
	d. a program to monitor and report on the:			
	• impacts and environmental performance of the development; and			
	<ul> <li>effectiveness of any management measures (see paragraph (c) above);</li> </ul>			
	e. a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;			
	f. a program to investigate and implement ways to improve the environmental performance of the development over time;			
	g. a protocol for managing and reporting any:			
	• incidents;			
	complaints;			
	non-compliances with statutory requirements; and			
	<ul> <li>exceedances of the impact assessment criteria and/or performance criteria;</li> </ul>			
	h. a protocol for periodic review of the plan; and			
	i. a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	plan, a description of any revisions made and the date of the Planning Secretary's approval. Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.			
S5 C1B	<b>Combining Strategies, Plans or Programs</b> With the agreement of the Planning Secretary, the Applicant may combine any strategy, plan, program or Annual Review required by this consent with any similar strategy, plan, program or Annual Review required for HVO North and Warkworth/Mt Thorley mines or any other adjoining operation in common ownership or under common management.	Approved management plans are made publicly available on the HVO website (https://hvo.com.au/). A number of management plans cover both approvals for HVO North and HVO South whereas some management plans are specific to one approval.	Compliant	
S5 C1C	Updating & Staging Strategies, Plans or Programs To ensure that strategies, plans or programs required under this consent and which have been approved by the Planning Secretary are updated on a regular basis, and that they incorporate any appropriate additional measures or amendments to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Planning Secretary. With the agreement of the Planning Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis. The Planning Secretary may approve a revised strategy, plan or program required under this consent, or the staged submission of any of these documents, at any time. With the agreement of the Planning Secretary, the Applicant may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent, including waiving the requirements in condition 15 of Schedule 2. While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.	Annual reports during the audit period identify status of management plans, indicating regular revisions and submission of management plans. Version control on the cover page of some documents saved on the HVO website does not always reflect the current approved version. These should be reviewed and updated. Evidence of consultation and approval of revised management plans should be included in current versions.	Non-compliant	Ensure that management plans are reviewed and integrated as required, and that current versions are maintained on the website.
S5 C1D	Application of Existing Strategies, Plans or Programs	Noted	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	The Applicant must continue to apply existing management strategies, plans or monitoring programs approved prior to the approval of Modification 5, until the approval of a similar plan, strategy or program following the approval of Modification 5.			
REPORTIN	NG			
S5 C2	Incident Notification The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	A review of incident reports identified that incidents and non-compliances have been notified.	Compliant	
S5 C3	Non-Compliance Notification Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	A review of incident reports identified that incidents and non-compliances have been notified.	Compliant	
S5 C4	<ul> <li>Annual Review</li> <li>By the end of March each year, the Applicant must review the environmental performance of the development to the satisfaction of the Planning Secretary. This review must: <ul> <li>a. describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the next year;</li> <li>b. include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against:</li> <li>the relevant statutory requirements, limits or performance measures/criteria;</li> <li>the requirements of any plan or program required under this consent;</li> <li>the monitoring results of previous years; and</li> </ul> </li> </ul>	Copies of annual reviews and monitoring reports are available on the website and include the required elements under this condition.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S5 C4A	<ul> <li>the relevant predictions in the documents listed in condition 2 of Schedule 2;</li> <li>identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</li> <li>identify any trends in the monitoring data over the life of the development;</li> <li>identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies;</li> <li>describe what measures will be implemented over the next year to improve the environmental performance of the development; and</li> <li>evaluate and report on the effectiveness of environmental management of the development.</li> <li>Revision of Strategies, Plans and Programs</li> <li>Within 3 months of the submission of an:         <ul> <li>incident report under condition 2 above;</li> <li>annual review under condition 4 above;</li> <li>audit under condition 5 below; or</li> <li>any modification to the conditions of this consent, the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Planning Secretary.</li> </ul> </li> <li>Within 6 weeks of conducting any such review, the Applicant must advise the Planning Secretary of the outcomes of the review, and provide any documents that have been revised to the Planning Secretary for review and approval.</li> <li>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</li> </ul>	Observed CMO system, which includes tasks on a recurring basis for monthly management review, and reviews in response to incidents. Annual reports during the audit period identify status of management plans, indicating regular revisions and submission of management plans.	Compliant	
INDEPEND	DENT ENVIRONMENTAL AUDIT			
S5 C5	By 31 March 2010, and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	The current IEA satisfies these requirements.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>a. be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Planning Secretary;</li> <li>b. include consultation with the relevant agencies;</li> <li>c. assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant mining lease and EPL (including any strategy, plan or program required under these approvals);</li> <li>d. review the adequacy of strategies, plans and/or programs required under these approvals;</li> <li>e. recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals; and</li> <li>f. be conducted and reported to the satisfaction of the Planning Secretary.</li> <li>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</li> </ul>			
S5 C6	Within 12 weeks of commencing each audit, or as otherwise agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The Applicant must implement these recommendations.	A review of previous audit findings indicated that all actions had been closed out.	Compliant	
S5 C7	Deleted			
COMMUNI	TY CONSULTATIVE COMMITTEE			
S5 C8	<ul> <li>The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Planning Secretary in general accordance with the Department's <i>Community Consultative Committee Guidelines: State Significant Projects</i> (2016, or its latest version).</li> <li>Notes:</li> <li>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</li> <li>In accordance with the Guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council,</li> </ul>	<ul> <li>HVO has a range of communication methods in place which enables it to share information with the local community. These methods include:</li> <li>The Community Consultative Committee (CCC).</li> <li>Direct engagement with nearby landholders.</li> <li>The HVO Public Website (https://www.hvo.com.au/contact/).</li> </ul>	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>recognised environmental groups and the general community in the area of the development.</li> <li>With the approval of the Planning Secretary, this CCC may be combined with the CCC for HVO North.</li> </ul>	<ul> <li>Distribution of Community Newsletters.</li> <li>HVO utilise the established Community Consultative Committee (CCC) which meets quarterly to satisfy the requirements of Schedule 5, Condition 8 of PA06_0261 and Schedule 5, Condition 6 of DA450-10-2003.</li> <li>Minutes of the CCC are available on the HVO website.</li> </ul>		
ACCESS	TO INFORMATION			
55 C9	<ul> <li>The Applicant must, for the life of the development: <ul> <li>a. make the following information publicly available on its website:</li> <li>the documents listed in condition 2 of Schedule 2;</li> <li>current statutory approvals for the development;</li> <li>approved strategies, plans or programs required under the conditions of this consent;</li> <li>a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>a summary of the current stage and progress of the development;</li> <li>contact details to enquire about the development or to make a complaint;</li> <li>a complaints register, which is to be updated on a monthly basis;</li> <li>minutes of CCC meetings;</li> <li>the last five annual reviews;</li> <li>any independent environmental audit, and the Applicant's response to the recommendations in any audit;</li> <li>any other matter required by the Planning Secretary; and</li> <li>keep this information up to date, to the satisfaction of the Planning Secretary.</li> </ul> </li> </ul>	<ul> <li>Review of website indicated that the following documents are available on the website, including: <ul> <li>Community consultation reports</li> <li>Audit reports</li> <li>Management Plands</li> <li>Monthly Environment Reporting 2017 – 2023</li> <li>EPL Monitoring Reports 2017 – 2023</li> <li>Annual Environmental Reviews 2014 – 2022</li> <li>Licences and approvals</li> <li>Environmental Assessments</li> <li>Community Consultative Committee 2016 – 2023</li> <li>Blasting Schedule</li> <li>EPBC Compliance Reporting</li> <li>Newsletters</li> <li>Community Complaints Register</li> </ul> </li> </ul>	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4A 1	<ul> <li>The noise criteria in Table 2 are to apply under all meteorological conditions except the following: <ul> <li>a. where 3°C/100 metres (m) lapse rates have been assessed, then:</li> </ul> </li> <li>wind speeds greater than 3 metres/second (m/s) measured at 10 m above ground level;</li> <li>temperature inversion conditions between 1.5°C and 3°C/100 m and wind speeds greater than 2 m/s measured at 10 m above ground level; or</li> <li>temperature inversion conditions greater than 3°C/100 m. b. where Pasquill Stability Classes have been assessed, then:</li> <li>wind speeds greater than 3 m/s at 10 m above ground level;</li> <li>stability category F temperature inversion conditions and wind speeds greater than 2 m/s at 10 m above ground level;</li> </ul>	Noted and agreed by HVO.	Noted	
Determina	tion of Meteorological Conditions			
4A 2	Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station required under condition 24 of schedule 3.	Monthly Monitoring Reports identify that meteorological data acquired from HVO Cheshunt AWS and HVO Corporate AWS. Confirmed with Environmental Services.	Compliant	
Compliand	ce Monitoring			
4A 3	Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent. Note: The Planning Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.	Monthly Monitoring Reports and AERs identify that compliance is evaluated through attended monitoring as per the relevant conditions of approval.	Compliant	
4A 4	<ul> <li>Unless otherwise agreed by the Planning Secretary, this monitoring must be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (2000, or its latest version) in particular the requirements relating to: <ul> <li>a. monitoring locations for the collection of representative noise data;</li> <li>b. meteorological conditions during which collection of noise data is not appropriate;</li> <li>c. equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment;</li> </ul> </li> </ul>	<ul> <li>a) Reviewed noise monitoring locations shown on Figure 8.1 and representation of private receptors shown on Figure 8.2. Satisfied that attended monitoring locations are representative of receptors.</li> <li>b) Monthly Monitoring Reports detail meteorological conditions during</li> </ul>	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>d. modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration; and</li> <li>e. the use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the NSW Noise Policy for Industry (2017, or its latest version) Fact Sheet C) and before comparison with the specified noise levels in this consent.</li> </ul>	<ul> <li>attended noise monitoring events, including periods where noise limits do not apply.</li> <li>c. Sighted example of noise consultant's reports. Equipment, including calibration certificates provided.</li> <li>d. Reported noise monitoring event data in Monthly Monitoring Reports and AERs show corrections for low frequency noise and tonality.</li> <li>e. Reported noise monitoring event data in Monthly Monitoring Reports and AERs show corrections for low frequency noise and tonality.</li> </ul>		

## B.2 DA450-10-2003



## DA 450-10-2003 MOD 7 AUDIT CHECKLIST – HVO IEA 2022

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Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
SCHED	OULE 2 – ADMINISTRATIVE CONDITIONS			
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT				
S2 C1	The Applicant must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	The Environmental Management System (EMS) provides the framework for minimising environmental impacts across the entirety of activities and environment features at Hunter Valley Operations (HVO). The Risk Assessment process within the EMS identifies potential environmental harm, prescribes controls and defines any actions necessary to manage the risk of environmental harm to as low as practically possible. The PIRMP prescribes the response framework when an incident has occurred to ensure actions are implemented to minimise the potential impact of an unplanned event. Review of the activities undertaken, incidents, and complaints received during the audit period indicate that HVO is generally implementing all reasonable and feasible measures to prevent and/or minimise any material harm to the environment.	Compliant	
	PF APPROVAL			
S2 C2	<ul> <li>The Applicant must carry out the development generally in accordance with the:</li> <li>a. DA 450-10-2003;</li> <li>b. EIS titled <i>Hunter Valley Operations – West Pit Extension</i> and Minor Modifications, volumes 1 –4, dated October 2003, and prepared by Environmental Resources Management Australia;</li> </ul>	HVO has generally carried out the project in accordance with the EA, statement of commitments, and conditions of the approval during the audit period.	Non-compliant	No further action required.

Cond No.	Condition	Comments & Evidence	Audit Findings F	Recommendations
	<ul> <li>c. the section 96(1A) modification application for the Hunter Valley Loading Point, dated 30 June 2005, and prepared by Matrix Consulting;</li> <li>d. <i>Carrington Pit Extended Statement of Environmental Effects</i> volumes 1 &amp; 2, dated October 2005, and prepared by Environmental Resources Management Australia;</li> <li>e. <i>Carrington Pit Extension Response to Submissions Report</i>, dated May 2006, and prepared by Environmental Resources Management Australia;</li> <li>f. Summary of Commitments for Carrington Pit as Extended, dated 28 May 2006 and prepared by the Applicant;</li> <li>g. <i>Carrington West Wing Environmental Assessment dated</i> 1 October 2010, <i>Carrington West Wing Response to Submissions</i> dated 21 December 2010, <i>Carrington West Wing Response to Submissions</i> dated 21 December 2010, <i>Carrington West Wing Agricultural Impact Assessment</i> dated 10 June 2011, <i>Carrington West Wing Statement of Commitments</i> dated 4 March 2013;</li> <li>h. <i>HVO North – Fine Reject Emplacement Modification Environmental Assessment</i> dated June 2013 and <i>HVO North – Fine Reject Emplacement Modification</i> 5 and accompanying environmental assessment entitled Hunter Valley Operations North Modification 5 HVLP Sediment Basin and HVO North Communication Towers Environmental Assessment and dated November 2016;</li> <li>j. modification application DA 450-10-2003 Modification 6 and accompanying Environmental Assessment entitled Hunter Valley North Operations Modification 6 Environmental Assessment Report dated November 2016;</li> <li>j. modification application DA 450-10-2003 Modification 6 and accompanying Environmental Assessment entitled Proposed modification 6 Response to Submissions North development consent (<i>DA</i> 450-10-2003) to amend historical boundary errors and update the Schedule of Lands dated June 2017.</li> </ul>	<ul> <li>There have been a number of non- conformances with the following conditions of the approval during the audit period:</li> <li>Schedule 3 Condition 4A – Air Quality</li> <li>Schedule 3 Condition 20 – Pollution of Waters</li> <li>Schedule 3 Condition 21 – Discharge Limits</li> <li>Schedule 3 Condition 27 – Water Management Plan</li> </ul>		
S2 C2A	The Applicant must carry out the development in accordance with the conditions of this consent.	Refer S2 C2	Non-compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S2 C3	If there is any inconsistency between the documents listed in condition 2, the most recent document shall prevail over the documents in condition 2 to the extent of any inconsistency.	Noted. There was no evidence during the audit that the latest version of Documentation did not take precedence over the older versions when inconsistencies existed.	Compliant	
S2 C4	<ul> <li>The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: <ul> <li>a. any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);</li> <li>b. any reviews, reports or audits commissioned by the Department regarding compliance with this consent; and</li> <li>c. the implementation of any actions or measures contained in these documents.</li> </ul> </li> </ul>	HVO was observed to be complying with all reasonable requirement/s from the Secretary arising from reports, strategies, plans, programs, reviews, audits or correspondence and has implemented any required actions or measures.	Compliant	
SURREND	ER OF CONSENTS			
S2 C5	Within 3 months of the submission of the revised West Pit extension MOP to the DRE, the Applicant must surrender all existing development consents and existing use rights associated with Hunter Valley Operations' (HVO's) mining operations and related facilities north of the Hunter River in accordance with clause 97 of the <i>EP&amp;A Regulation.</i>	Not triggered during the audit period	Not triggered	
LIMITS ON	I APPROVAL			
S2 C6	The Applicant may carry out mining operations on the site until 12 June 2025. Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and DRE. Consequently, this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and those additional undertakings have been carried out satisfactorily.	Reviewed MOP 2020 covering the period 30 Sep 2020 to 31 December 2022	Compliant	
S2 C7	The Applicant must not extract more than 12 million tonnes per annum (Mtpa) of ROM coal from the West Pit and 10 Mtpa of ROM coal from the Carrington Pit.	HVO has not extracted more than the extraction limits during the audit period.	Compliant	
S2 C8	The Applicant must ensure that the Hunter Valley Coal Preparation Plant does not receive more than 16 Mtpa of coal from mining operations south of the Hunter River, and process more than 20 Mtpa of coal.	HVO has not extracted more than 20Mt of ROM coal during the audit period:	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S2 C9	The Applicant must ensure that the West Pit Coal Preparation Plant does not process more than 6 Mtpa of coal.	<ul> <li>2019 - 10.8Mt</li> <li>2020 - 10.23Mt</li> <li>2021 - 9.87Mt</li> <li>2022 - 11.67Mt forecast</li> <li>Data maintained in the WAF register for site demonstrates that these processing limits were not exceeded.</li> </ul>	Compliant	
STRUCTU		Processing initial for a second		
S2 C10	<ul> <li>The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. <i>Notes:</i> <ul> <li>a. Under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.</li> <li>b. Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of development.</li> <li>c. <sup>1</sup>The development is located in the Patrick Plains Mine Subsidence District. Under section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the Mine Subsidence Board's approval before constructing or relocating any improvements on the site.</li> </ul> </li> </ul>	Construction was undertaken for the ANE Plant under Mod 6 of PA_06_0261.	Compliant	
DEMOLITI	ON			
S2 C11	The Applicant must ensure that any demolition work is carried out in accordance with <i>AS 2601-2001: The Demolition of Structures,</i> or its latest version.	The Orica Cheshunt facility was demolished during the period August to November 2022. The notice of demolition to SafeWork NSW dated 1 August 2022 was observed, indicating the use of a licenced demolition contractor for the demolition of this facility. Project close out report dated 11 November 2022 was also reviewed, indicating successful completion of these works in accordance with AS2601.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations						
OPERATIO	OPERATION OF PLANT AND EQUIPMENT									
S2 C12	<ul><li>The Applicant must ensure that all plant and equipment used at the site, or to transport coal off-site, are:</li><li>a. maintained in a proper and efficient condition; and</li><li>b. operated in a proper and efficient manner.</li></ul>	Refer to PA 06_0261 Sch 2 Cond 12.	Compliant							
COMMUN	TY ENHANCEMENT CONTRIBUTION									
S2 C13	Before carrying out any development, or as agreed otherwise by Council, the Applicant must pay Council \$15,000 for the provision of stream improvement works in the Hunter River or its tributaries. If Council has not carried out these enhancement works within 12 months of payment, the Applicant may retrieve the funds from Council.	Completed (IEA 2014)	Not triggered							
S2 C14	Deleted	Deleted	Noted							
EVIDENCE	E OF CONSULTATION									
S2 C15	<ul> <li>Where consultation with any stakeholder identified in the conditions of this consent is required by any conditions of this consent, the Applicant must: <ul> <li>a. consult with the relevant stakeholder prior to submitting the required document to the Secretary for approval;</li> <li>b. submit evidence of such consultation as part of the relevant document;</li> <li>c. describe how matters raised by the stakeholder have been addressed and identify any matters that have not been resolved; and</li> <li>d. include details of any outstanding issues raised by the stakeholder and an explanation of disagreement between any stakeholder and the Applicant.</li> </ul> </li> </ul>	Where required, management plans and other documents generally include revision details and records of consultation. While the matters raised, resolution of these matters and details of any disagreement are addressed within these documents, it is recommended that clearer reference to consultation matters raised, and resolution (or disagreement) on these matters could be included in a table within relevant documents to more clearly demonstrate the outcomes of consultation.	Compliant							
COMPLIA	NCE									
S2 C16	The Applicant must ensure that all employees, contractors and sub- contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	Refer to PA 06_0261 Sch 2 Cond 16.	Compliant							

Cond No.	. Condition		Comments & Evidence	Audit Findings	Recommendations
SCHEE	OULE 3 – SPECIFIC ENVIRONM	IENTAL CONDITIONS			
ACQUISI	TION UPON REQUEST				
S3 C1	Upon receiving a written request for acq land listed in Table 1, the Applicant mus with the procedures in conditions 6-7 of schedule 5 for property 8. Table 1: Land subject to acquisition upon request	acquire the land in accordance	All properties within Table 1 are mine owned All purchased before the audit period.	Not triggered	
	8 - Holz	10 - Moses			
	9 - Dallas	12 - Barry			
	Note: To identify the locations referred to in Table 1, see Appe	undix 2.	3		
S3 C2	While the land listed in condition 1 is priving implement all practicable measures to endevelopment comply with predictions in Secretary.	nsure that the impacts of the	All properties are mine owned. Viewed AR 2019,2020, and 2021 which shows compliance with predictions in the EIS.	Compliant	
AIR QUA	LITY & GREENHOUSE GAS				
S3 C3	Odour The Applicant must ensure that no offen site, as defined under the POEO Act.	sive odours are emitted from the	A complaint was received regarding odour following 3 blasts from the Cheshunt P2 area on 26 May 2021. Investigation of this incident identified that the complainant was located approximately 8.5km distant from the site, and given the scale of the blasts, the weather conditions, that the odour was unlikely to have been caused by the blasts.	Compliant	
S3 C4	<b>Greenhouse Gas Emissions</b> The Applicant must implement all reasor minimise the release of greenhouse gas satisfaction of the Secretary.		Total greenhouse gas emissions are reported in the Annual Reviews and have shown a decline since the previous audit. Initiatives to reduce fuel usage emissions and electricity consumption are offsetting some increase in fugitive emissions due to the exposure of deeper coal seams. HVO is registered as a Safeguard facility and therefore also has a	Compliant	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
					Safeguard baseline. Emissions above the baseline for that year need to be offset by retiring Australian Carbon credit Units (ACCUs). HVO was below the baseline during the audit period and also below EIS predictions as reported in Annual Reviews.		
S3 C4A	ensure that all reas measures are emp the development d	quality affected isonable and fea ployed so that p do not exceed th ately-owned land and.	land in Table 1, the A asible avoidance and articulate matter emis ne criteria listed in Tal d or on more than 25	mitigation ssions generated by bles 2, 3 or 4 at any percent of any	Reviews. PM10 Dust Exceedance Cheshunt East HVAS – 12 September 2021 The Cheshunt East High Volume Air Sampler (HVAS) exceeded the HVO North PM10 24-hour air quality criteria on 12 September 2021 recording 63.4µg/m³ against a criteria of 50 µg/m³. The data was sent to an external consultant for investigation which found HVO's contribution was only 31.2 µg/m³ however the criteria is	Non-compliant	No further action required
	measures' includes Condition 5 of Sch Schedule 4 to deve system that ensure exceedance of the	es, but is not limi nedule 4 and the relop and implen es effective ope e criteria.	easible avoidance an ited to, the operationa e requirements in Cor nent a real-time air qu rational responses to	al requirements in nditions 5 and 6 of uality management	external consultant for investigation which found HVO's contribution was		
	measures' includes Condition 5 of Sche Schedule 4 to deve system that ensure	es, but is not limi nedule 4 and the relop and implen es effective ope e criteria.	ited to, the operationa e requirements in Cor nent a real-time air qu rational responses to	al requirements in nditions 5 and 6 of uality management	external consultant for investigation which found HVO's contribution was only 31.2 μg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring		
	measures' includes Condition 5 of Sch Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria	es, but is not limi nedule 4 and the relop and implen es effective ope e criteria.	ited to, the operationa e requirements in Cor nent a real-time air qu rational responses to	al requirements in nditions 5 and 6 of uality management the risks of	external consultant for investigation which found HVO's contribution was only 31.2 μg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a		
	measures' includes Condition 5 of Schu Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria Pollutant	es, but is not limi nedule 4 and the relop and implem es effective ope e criteria. ria for particulate matter culate (TSP) matter	ited to, the operationa e requirements in Cor nent a real-time air qu rational responses to er Averaging Period	al requirements in nditions 5 and 6 of uality management the risks of d <u>Criterion</u>	external consultant for investigation which found HVO's contribution was only 31.2 µg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise and air quality agreements with private		
	measures' includes Condition 5 of Schu Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria Pollutant Total suspended partice Particulate matter < 10	es, but is not limit nedule 4 and the relop and implem es effective ope e criteria. ria for particulate matter culate (TSP) matter 0 µm (PMto)	e requirements in Cor nent a real-time air qu rational responses to er Averaging Period Annual Annual	al requirements in nditions 5 and 6 of uality management the risks of d <u>Criterion</u> a 90 µg/m <sup>3</sup>	external consultant for investigation which found HVO's contribution was only 31.2 μg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise		
	measures' includes Condition 5 of Sch Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria Pollutant Total suspended partic	es, but is not limit nedule 4 and the relop and implem es effective ope e criteria. ria for particulate matter culate (TSP) matter 0 µm (PMto)	e requirements in Cor nent a real-time air qu rational responses to er Averaging Period Annual Annual	al requirements in nditions 5 and 6 of uality management the risks of d <u>Criterion</u> a 90 µg/m <sup>3</sup>	external consultant for investigation which found HVO's contribution was only 31.2 µg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise and air quality agreements with private		
	measures' includes Condition 5 of Schu Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria Pollutant Total suspended partic Particulate matter < 10 Table 3: Short term criteria	es, but is not limit nedule 4 and the relop and implen es effective ope e criteria. ria for particulate matter culate (TSP) matter 0 µm (PMto) rion for particulate mat	ited to, the operationa e requirements in Cor nent a real-time air quarational responses to er Averaging Period Annual Annual tter	al requirements in nditions 5 and 6 of uality management the risks of d <u>Criterion</u> a 90 µg/m <sup>3</sup> a 30 µg/m <sup>3</sup>	external consultant for investigation which found HVO's contribution was only 31.2 µg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise and air quality agreements with private		
	measures' includes Condition 5 of Schu Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria Pollutant Total suspended partic Particulate matter < 10 Table 3: Short term criteria Pollutant Particulate matter < 10	es, but is not limit nedule 4 and the relop and implem es effective ope e criteria. ria for particulate matter culate (TSP) matter 0 µm (PMto) rion for particulate matter 0 µm (PMto)	erequirements in Cor nent a real-time air quarational responses to erectional responses to Averaging Period Annual Annual tter Averaging Period	al requirements in nditions 5 and 6 of uality management the risks of d <u>Criterion</u> a 90 µg/m <sup>3</sup> a 30 µg/m <sup>3</sup>	external consultant for investigation which found HVO's contribution was only 31.2 µg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise and air quality agreements with private		
	measures' includes Condition 5 of Schu Schedule 4 to deve system that ensure exceedance of the Table 2: Long term criteria Pollutant Total suspended partic Particulate matter < 10 Table 3: Short term criteria Pollutant	es, but is not limit nedule 4 and the relop and implem es effective ope e criteria. ria for particulate matter culate (TSP) matter 0 µm (PMto) rion for particulate matter 0 µm (PMto)	erequirements in Cornent a real-time air quarational responses to erever and a real-time air quarational responses to erever and a real-time air quarational responses to erever and a real-time and a real-ti	al requirements in nditions 5 and 6 of uality management the risks of d Criterion a 90 µg/m <sup>3</sup> a 30 µg/m <sup>3</sup> d Criterion a 50 µg/m <sup>3</sup>	external consultant for investigation which found HVO's contribution was only 31.2 µg/m <sup>3</sup> however the criteria is measured against HVO plus all other sources hence the exceedance was notified to DPE. HVO received a warning letter from DPE, requiring revision of the Air Quality Management Plan and reference to negotiated noise and air quality agreements with private		

Cond No.	Condition	Condition					Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>Notes to Tables 2–4:</li> <li><sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);</li> <li><sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own);</li> <li><sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.</li> <li><sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents illegal activities or any other activity agreed by the Secretary.</li> </ul>					levelopment on its own); Australia, AS/NZS ion of Particulate Matter -			
S3 C4B	Air Quality Acqu	isition Cri	teria				No written requests for acquisition were observed for the audit period.	Not triggered	
	If particulate matter emissions generated by the development exceed the criteria in Tables 5, 6 or 7 on a systemic basis at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the Applicant must acquire the land in accordance with the procedures in Conditions 7 and 8 of Schedule 5.								
	Pollutant		4	Averaging Period		d Criterion			
	Total suspended parti	iculate (TSP) r	natter /	Annual a 90 µ		a 90 µg/m <sup>3</sup>			
	Particulate matter < 1	Particulate matter < 10 µm (PM <sub>10</sub> )		Annual a 30 µg		a 30 µg/m <sup>3</sup>			
	Table 6: Short term acqu Pollutant	Table 6: Short term acquisition criteria for particu Pollutant Averagi		ulate matter jing period d Criterion		iterion			
	Particulate matter < 1	0 µm (PM10)	24 hour		a 150	) µg/m³			
	Particulate matter < 1	Particulate matter < 10 µm (PM <sub>10</sub> ) 24 hour b 50 µg/m <sup>3</sup>				µg/m³			
	Table 7: Long term acqu	isition criteria	for deposited	dust					
	Pollutant	Averagin	ig Period	Maximum incre deposited dust		Maximum total deposited dust level			
	<sup>C</sup> Deposited dust	Annual		b 2 g/m²/month	-	a 4 g/m²/month			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>Notes to Tables 5-7:</li> <li><sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);</li> <li><sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own);</li> <li><sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003. Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.</li> <li><sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Secretary.</li> </ul>			
S3 C4C	Mine-owned Land	Refer to PA 06_0261 Sch 3 Cond 21A.	Compliant	
	<ul> <li>The Applicant must ensure that particulate matter emissions generated by the development do not exceed the criteria listed in Table 2, Table 3 and Table 4 at any occupied residence on any mine-owned land (including land owned by adjacent mines) unless: <ul> <li>a. the tenant and landowner has been notified of health risks in accordance with the notification requirements under Schedule 5 of this consent;</li> <li>b. the tenant on land owned by the Applicant can terminate their tenancy agreement without penalty, subject to giving reasonable notice, and the Applicant uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation;</li> <li>c. air mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by another mine other than the Applicant);</li> <li>d. particulate matter air quality monitoring is undertaken to inform the tenant and landowner of potential health risks; and</li> <li>e. monitoring data is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property, to the satisfaction of the Secretary.</li> </ul> </li> </ul>			
S3 C5	Air Quality Operating Conditions	Refer to PA 06_0261 Sch 3 Cond 22.	Compliant	
	<ul> <li>The Applicant must:</li> <li>a. implement best management practice to minimise the off-site odour, fume and dust emissions of the development, including best practice coal loading and profiling and other measures to minimise dust emissions from coal transportation by rail;</li> </ul>			

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	<ul> <li>b. operate a comprehensive air quality management system on site that uses a combination of predictive meteorological forecasting, predictive and real time air dispersion modelling and real-time air quality monitoring data to guide the day to day planning of mining operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this approval;</li> <li>c. manage PM<sub>2.5</sub> levels in accordance with any requirements of any EPL;</li> <li>d. minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d above under Table 5-7);</li> <li>e. minimise the surface disturbance of the site generated by the development; and</li> <li>g. co-ordinate air quality management on site with the air quality management at nearby mines (Mount Thorley Warkworth, Wambo, Ravensworth and HVO South mines) to minimise the cumulative air quality impacts of these mines and the development, to the satisfaction of the Secretary.</li> </ul>		
S3 C6	<ul> <li>Air Quality &amp; Greenhouse Gas Management Plan</li> <li>The Applicant must prepare a detailed Air Quality &amp; Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must: <ul> <li>a. be prepared in consultation with the EPA, and submitted to the Secretary for approval by the end of June 2013;</li> <li>b. describe the measures that would be implemented to ensure: <ul> <li>best management practice is being employed;</li> <li>the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; and</li> <li>compliance with the relevant conditions of this consent.</li> </ul> </li> <li>c. describe the proposed air quality management system;</li> <li>d. include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</li> </ul> </li> </ul>	Refer to PA 06_0261 Sch 3 Cond 23.	Compliant

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>e. include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;</li> <li>f. include an air quality monitoring program that: <ul> <li>uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development;</li> <li>adequately supports the proactive and reactive air quality management system;</li> <li>includes PM2.5 monitoring;</li> <li>includes monitoring of occupied development-related residences and residences on air quality-affected land listed in Table 1, subject to the agreement of the tenant;</li> <li>evaluates and reports on the effectiveness of the air quality management system; and</li> <li>includes a protocol for determining any exceedances of the relevant conditions in this approval; and</li> </ul> </li> <li>g. include a protocol that has been prepared in consultation with the owners of nearby mines (Mt Thorley Warkworth, Wambo, Ravensworth and HVO South mines) to minimise the cumulative air quality impacts of these mines and the development.</li> </ul>			
NOISE				
S3 C7	Noise Impact Assessment Criteria The Applicant must ensure that the noise generated by the development does not exceed the noise impact assessment criteria present in Table 9 at any privately-owned land.	Measured noise levels exceeded the LA1,1minute criteria (46 dB) at Jerrys Plains East by 9 dB on 22/07/2021 (time 32:16) with a result of 55 LA1,1minute. This has been attributed to impact noise from a dragline. In response follow up monitoring was performed with five additional 1-minute measurements taken on the night and additional measurement taken the following week. Follow up measurements were compliant. EPA (sighted letter 23 July 2021) and DPIE (sighted letter 30 July 2021) were	Non-compliant	No further action required.

No. Co	ndition			Comments & Evidence	Audit Findings	Recommendations
	Table 9: Noise imp	act assess	ment criteria dB(A)	notified of the initial exceedance and		
1	Day/Evening/Night _Aeg(15 minute) 40		Land Number 4 – Muller (from year 1 to year 7)	provided with an exceedance report.		
		40	<ul> <li>7 - Stapleton</li> <li>Jerrys Plains Village - represented by residence locations 13 and 14 on Figure 24, volume 4 of the EIS (years 20 &amp; 21).</li> <li>1 - Hayes (years 20 &amp; 21)</li> <li>18 - Bennet (years 20 &amp; 21)</li> <li>51 - Nicholls (years 20 &amp; 21)</li> <li>52 - Old - (years 20 &amp; 21)</li> </ul>			
	39	46	2 – Skinner 3 – Elisnore 11 – Fisher 19 – Biralee Feeds 31 – Cooper 36 – Garland 54 – Skinner			
	38	46	1 – Hayes (from year 1 to year 19) 18 – Bennet (from year 1 to year 19) 51 – Nicholls (from year 1 to year 19) 52 – Old (from year 1 to year 19)			
	36 35	46 46	<ul> <li>4 – Muller (from year 8 to year 21)</li> <li>All other residential or sensitive receptors, excluding the receptors listed in condition 1 above.</li> </ul>			
a.	mining operations are shown in the E criteria will be operations. The locations pred (see schedule The noise limit	ons as s delayed EIS for a adjusted location icted in 6, cond ts in Tab	in Table 9 are to be considered as the position of set out in the EIS for that year. If mining d or accelerated from the planned location as particular year, then the noise assessment d in accordance with the location of actual mining on of actual mining operations in relation to the EIS, will be indicated in the Annual Review lition 5). ble 9 are for the noise contribution of the West Pit ter Valley Operations north of the Hunter River			
	and coal haula River.	age iden	tified in the EIS from the south side of the Hunter			
С.	point within the within 30 metr more than 30	e reside es of a c metres f	pment is to be measured at the most affected ntial boundary, or at the most affected point dwelling (rural situations) where the dwelling is from the boundary, to determine compliance with noise limits in the above table.			

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>above table. Where it can be noise from the development alternative means of determining the NSW Industrial Noise Police the NSW Industrial Noise Police be noise levels where applicable.</li> <li>e. Noise from the development dwelling façade to determining the above table.</li> </ul>	nt is to be measured at 1 metre from the ne compliance with the LA1(1 minute) noise are to be applied in accordance with the			
S3 C8	10, the Applicant must, upon re		There were no requests for acquisition during the audit period.	Not triggered	
S3 C9	<ul> <li>Noise Operating Conditions</li> <li>The Applicant must:</li> <li>implement best management p frequency, road and rail traffic</li> <li>a. operate a comprehensive r a combination of predictive noise monitoring data to gu operations and the implement mitigation measures to ension of this approval;</li> <li>b. maintain the effectiveness</li> </ul>	oise management system on site that uses meteorological forecasting and real-time ide the day to day planning of mining entation of both proactive and reactive noise ure compliance with the relevant conditions of any installed noise suppression nes and ensure defective plant is not used	<ul> <li>a) Section 7.1.3 and Section 7.1.4 of the NMP describe proactive and reactive noise mitigation measures, including predictive meteorological forecasting (Section 7.1.3.1) and real-time monitoring (Section 7.1.4.2).</li> <li>Discussed forecasting system with HVO staff (Tech Services and Environmental Services). Sighted</li> </ul>	Compliant	

Cond No. Cor	ndition	Cor	nments & Evidence	Audit Findings	Recommendations
c. d. e. f. g.	ensure that any noise attenuated plant on site is deployed preferentially in locations relevant to sensitive receivers; minimise the noise impacts of the development during meteorological conditions when the noise limits in this approval do not apply; ensure that the site is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142); use its best endeavours to ensure that the rolling stock supplied by service providers is designed, constructed and maintained to minimise noise; co-ordinate the noise management on site with the noise management at nearby mines (Mt Thorley Warkworth, Wambo, Ravensworth and HVO South mines) to minimise the cumulative noise impacts of these mines and the development, the satisfaction of the Secretary.	Con b) d) f)	example of daily forecast email sent to operations staff. Discussed with Environmental Services process for routine sound power level (SWL) testing of equipment, and ad hoc SWL testing in response to notification by operator or as an action from an investigation into a community complaint. Notified by Environmental Services that all operational haul trucks have been fitted with sound suppression kits. Section 7.1.3 of the NMP describes the predictive meteorological forecasting system. Discussed forecasting system with HVO staff (Tech Services). Sighted example of daily forecast email sent to operations staff. Sighted letter from Pacific National (dated 15 January 2019) confirming that all locomotive classes are compliant with ARTC's EPL (# 3142). Sighted letter (dated 20 January 2019) from Pacific National confirming that Pacific National	Audit Findings	Recommendations

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		strictly adhere to programmes to ensure rolling stock is designed, constructed and maintained to minimise noise. HVO participates in quarterly meetings with representatives from nearby mines under a protocol. Additionally, HVO and United Wambo share monitoring data from the Moses Crossing monitoring location, and HVO liaises with Ravensworth Complex regarding co-operation to minimise cumulative noise impacts under an informal agreement.		
S3 C10	<ul> <li>Noise Management Plan The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must: <ul> <li>a. be prepared in consultation with the EPA, and submitted to the Secretary for approval by the end of June 2013;</li> <li>b. describe the measures that would be implemented to ensure:</li> <li>best management practice is being employed;</li> <li>the noise impacts of the development are minimised during meteorological conditions when the noise criteria in this consent do not apply; and</li> <li>compliance with the relevant conditions of this consent.</li> <li>c. describe the proposed noise management system in detail, including:</li> <li>nomination of the real-time noise monitoring locations and the noise levels that would trigger additional noise management actions;</li> <li>a matrix of predetermined actions to be employed when trigger levels are exceeded; and</li> <li>procedures for varying the rates and locations of attended monitoring should the real-time monitoring data suggest that the relevant noise limits are being exceeded;</li> <li>d. include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</li> </ul></li></ul>	<ul> <li>Noise Management Plan</li> <li>Document Number: HVOOC-</li> <li>1797567310-4028</li> <li>Version: 1.0</li> <li>Effective: 15/02/2022</li> <li>a) Correspondence with DPIE (dated 16 December 2021) demonstrates that the Department has reviewed and approved the NMP.</li> <li>b) Section 7 of the NMP describes the noise management measures to be implemented to ensure compliance with the noise criteria and operation conditions of the consent. Section 5.4 defines best management practices and commits to the implementation of best management practice measures. Section 7.1.3.1</li> </ul>	Compliant	<b>OFI</b> - Recommend updating Section 8.1.1, Table 8-1 to reference AS1055-2018 (supersedes AS1055-1997), and include reference to NSW EPA Approved methods for the measurement and analysis of environmental noise in NSW, 2022.

Cond No. Condition	Comments & Evidence	Audit Findings	Recommendations
<ul> <li>e. include a noise monitoring program that:</li> <li>uses attended monitoring to evaluate the performance of the development, including a minimum of four days attended monitoring per quarter at locations agreed to by the Secretary, or more regularly where required;</li> <li>uses real-time monitoring to support the proactive and reactive noise management system on site;</li> <li>evaluates and reports on the effectiveness of the noise management system on site;</li> <li>provides for the annual validation of the noise model for the development; and</li> <li>f. include a protocol that has been prepared in consultation with the owners of nearby mines (Mt Thorley Warkworth, Wambo, Ravensworth and HVO South mines) to minimise the cumulative noise impacts of these mines and the development.</li> <li>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</li> </ul>	<ul> <li>describes the predictive meteorological forecasting system to enable proactive management of noise emissions under noise enhancing conditions.</li> <li>c) Section 7 of the NMP describes in detail the proactive and reactive management measures. Table 7-2 provides the real time noise alarms Trigger Action Response Plan. Section 7.1.5.2 and Section 8 provides the procedures for varying the rates and locations of monitoring.</li> <li>d) Section 7.1.3.2 provides a risk / response matrix to codify operational responses to varying levels of risk resulting from weather conditions and specific mining activities.</li> <li>e) Section 7 and Section 8 of the NMP describe the real-time (Section 7.1.4.2) and attended (Section 8) monitoring to evaluate the performance of the development. Section 7.1.4.3 and Section 9.2 describes the validation of real-time monitoring locations and model validation. AERs provide comparison of attended and real-time monitoring</li> </ul>		

Cond No.	Condition					Comments & Evidence	Audit Findings	Recommendations
METEODO		10				for each reporting period. Section 8.2 of the NMP provides a protocol for evaluating compliance and Section 9.1.2 provides the external reporting procedure following an incident. Section 6.2 of the NMP describes the measures to control cumulative noise impacts with nearby mines.		
S3 C11	The Applicant must ma		nanent meteo	rological stati	ion at a	The site operates a real time	Compliant	
	location approved by the monitor the parameter measure, averaging proved by the monitor the parameter measure, averaging provide the monitor of the monitor	he EPA, and s specified in eriod, frequer itoring Units of measure °C/100m mm/hr ° K K K W/m <sup>2</sup> ° m/s hods for the Sampli	to the satisfact Table 13, using here, and samp Averaging period 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour	ction of the Song the specific of the specific	ecretary, to ied units of in the table. Sampling method <sup>1</sup> Note <sup>2</sup> AM-4 AM-2 AM-1 AM-4 AM-4 AM-4 AM-4 AM-2 AM-2 AM-2	meteorological station. Records of monthly maintenance inspections were observed during the audit.		
BLASTING	determination of inversions.	se rate nom measu	rements made at 2m	and rom or any mg	proved system of the			
S3 C12	Airblast Overpressur The Applicant must er blasting at the develop residence on privately	sure that the ment does n				There were exceedances of the 115dBL Peak criterion, however, events occurred less than 5% of all blasts in each year.	Compliant	

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	Table 12: Airblast overpressure in	npact assessment criteria			
	Airblast overpressure level (dB(Lin Peak)) Allowable exceedance				
	115	5% of the total number of blasts in a 12 month period			
	120	0%	_		
S3 C13	Ground Vibration Impa	ct Assessment Criteria	There have been no exceedances of	Compliant	
		re that the ground vibration level from blasting at ot exceed the criteria in Table 15 at any residence assessment criteria	the ground vibration impact assessment criteria during the audit period.		
	Peak particle velocity (mm/s)	Allowable exceedance			
	5	5% of the total number of blasts in a 12 month period			
	10	0%	_		
S3 C14	Blasting Hours The Applicant must only carry out blasting at the development between 7 am and 6 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, Public Holidays or any other time without the written approval of the EPA.		Blasts only between 7am to 6pm Monday to Saturday. No blasting on Sundays or public holidays.	Compliant	
S3 C14A	<ul> <li>Blasting Frequency</li> <li>The Applicant may carry out a maximum of: <ul> <li>a. 3 blasts a day, unless an additional blast is required following a blast misfire; and</li> <li>b. 12 blasts a week,</li> <li>for all open cut mining operations at the HVO North mine.</li> </ul> </li> <li>This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.</li> <li>Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.</li> </ul>		There have been no more than three blasts per day and a maximum of nine blasts per week during the audit period.	Compliant	
S3 C15	Interactions With Adjoi	-	Sighted Blasting Co-operation Deed	Compliant	
		mining or associated development within 500 reas at Ravensworth Operations, the Applicant	with Ravensworth Operations dated 17 October 2016.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	must enter into an agreement with Ravensworth Operations Pty Ltd (or its assigns or successors in title) to address the potential interactions between the two mines. If during the course of entering into this agreement, or subsequently implementing this agreement, there is a dispute between the parties about any aspect of the agreement, then either party may refer the matter to the Secretary for resolution.			
S3 C16	Prior to carrying out any mining or associated development within 500 metres of active mining areas at Cumnock No. 1 Colliery, the Applicant must enter into an agreement with Cumnock No. 1 Colliery Pty Ltd (or its assigns or successors in title) to address the potential interactions between the two mines. If during the course of entering into this agreement, or subsequently implementing this agreement, there is a dispute between the parties about any aspect of the agreement, then either party may refer the matter to the Secretary for resolution.	Sighted Blasting Co-operation Deed dated 17 October 2016, which includes Cumnock No. 1 Colliery.	Compliant	
S3 C16A	<b>Property Inspections</b> If the Applicant receives a written request from the owner of any privately- owned land within 2 kilometres of the approved open cut mining pit/s on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must:	There have been no written requests for a property inspection to establish baseline conditions in the audit period.	Not triggered	
	<ul> <li>a. provide the Secretary with a report that:</li> <li>establishes the baseline condition of any buildings and other structures on the land, or updates the previous property inspection report; and</li> <li>identifies measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and/or structures; and</li> </ul>			
	<ul> <li>b. provide the landowner with a copy of the new or updated property inspection report.</li> <li>The report is to be prepared by a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the inspection report, either party may refer the matter to the Secretary for resolution.</li> <li>If the Applicant considers that an extension of time is required to complete the report, the Applicant may apply in writing to the Secretary for an</li> </ul>			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	extension. The Applicant must provide a copy of the request and of the Secretary's decision to the landowner.			
S3 C16B	<ul> <li>Property Investigations</li> <li>If the owner of any privately-owned land within 3 kilometres of any approved open cut mining pit on the site or any other privately-owned land where the Secretary is satisfied that an investigation is warranted, claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Applicant must: <ul> <li>a. provide the Secretary with a report that:</li> <li>investigates the claims; and</li> <li>identifies measures or works that should be implemented to rectify any blasting impacts of the development on these building and/or structures; and</li> </ul> </li> <li>b. provide the landowner with a copy of the claim inspection report and recommendations.</li> <li>If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Secretary.</li> <li>The report is to be prepared by a suitably qualified, experience and independent person, or the Applicant or the landowner disagrees with the findings of the claim inspection report, either party may refer the matter to the Secretary for resolution.</li> <li>If the Applicant considers than an extension of time is required to complete the report, the Applicant must provide a copy of the request and of the Secretary for an extension. The Applicant must provide a copy of the request and of the Secretary for an extension.</li> </ul>		Compliant	
S3 C17	<ul> <li>Blasting Operating Conditions</li> <li>During mining operations on site, the Applicant must: <ul> <li>a. implement best management practice to:</li> <li>protect the safety of people and livestock in the surrounding area;</li> <li>protect public or private infrastructure/property in the surrounding area from any damage; and</li> <li>minimise the dust and fume emissions of any blasting;</li> </ul> </li> </ul>	<ul> <li>a) Section 5.2 of the Blast Management Plan Version 3.3 (3 April 2019) defines the best management practice principles underpinning the BMP. Section 6 of the BMP describes the blast management controls to protect</li> </ul>	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>b. minimise the frequency and duration of any road closures, and avoid road closures during peak traffic periods;</li> <li>c. co-ordinate the timing of blasting on site with the timing of blasting at nearby mines (including the Mt Thorley Warkworth, Wambo, Ravensworth and HVO South mines) to minimise the cumulative blasting impacts of these mines and HVO North mine; and</li> <li>d. operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.</li> </ul>	<ul> <li>safety of people and livestock, public or private infrastructure and dust and fume. Tech Services demonstrated the pre-blast environmental checklist to manage blasting impacts. Included a check of all blast monitors, meteorological conditions, blast parameters.</li> <li>b) Pre-blast modelling undertaken to predict potential impact including need to road closures.</li> <li>c) Confirmed with Tech Services daily email provided to all nearby mines to notify of intent to blast. Correspondence with Ravensworth Mine over 2-way radio over timing of blasts.</li> <li>Tech Services provided details on notification to public. Tech Services explained that the Hunter Valley Blasting Hotline is updated prior to each blast. SMS notification (sighted example) sent to distribution list prior to blast. HVO website provides the HVO hotline number, blasting schedule and SMS blast notification service.</li> </ul>		
S3 C18	<ul> <li>The Applicant must not undertake blasting on site within 500 metres of:</li> <li>a. any public road without the approval of the appropriate road authority; or</li> <li>b. any land outside the site that is not owned by the Applicant; unless</li> <li>the Applicant has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the</li> </ul>	<ul> <li>a) Section 6.7 of the BMP describes the requirements for approval from Singleton Council and Transport for NSW for road closures where blasting is to occur within 500m of a public road. Sighted letters from</li> </ul>	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>Applicant has advised the Department in writing of the terms of this agreement, or</li> <li>the Applicant has: <ul> <li>demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and</li> <li>updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.</li> </ul> </li> </ul>	Singleton Council (24 June 2019, 29 June 2022) providing consent for the purpose of road closures for blasting. Sighted Blasting Co- operation Deed with Cumnock No.1 Colliery, ICRA Cumnock and Ravensworth Operations (17 October 2016). Sighted Blasting Deed with United Collieries (24 July 2020). Sighted Temporary blasting agreement letters to UWJV dated 28 April 2020 and 29 June 2020. Section 6.2 and Section 6.7 of the BMP detail the procedure in the event of blasting occurring within 500m of non-HVO land.		
S3 C19	<ul> <li>Blast Management Plan</li> <li>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must: <ul> <li>a. be submitted to the Secretary for approval by the end of September 2013 unless otherwise agreed;</li> <li>b. propose and justify any alternative ground vibration limits for any public infrastructure in the vicinity of the site;</li> <li>c. describe the measures that would be implemented to ensure: <ul> <li>best management practice is being employed;</li> <li>compliance with the relevant conditions of this consent;</li> <li>that blasting will not cause damage to the Carrington West Wing Groundwater Barrier (LPB) as described in Condition 23 of Schedule 4; and</li> </ul> </li> </ul></li></ul>	<ul> <li>Blast Management Plan</li> <li>Version: 3.3</li> <li>Effective: 3/04/2019</li> <li>a) Version 1.0 of the BMP dated 27/09/2013.</li> <li>b) Section 4.2.2 of the BMP details the impact assessment criteria for public infrastructure.</li> <li>c) Section 5.2 defines best management practice principles underpinning the BMP. Section 6 describes the blast management controls including the Carrington</li> </ul>	Compliant	<b>OFI -</b> Recommend updating Section 1, Table 1 to Table 3 to ensure correct references in column 3 ("Section of BMP which addresses this requirement", "Where Commitment is addressed", "Where Condition is addressed".

Cond No.	Condition	Comments & Evidence Audit I	Findings Recommendations
	<ul> <li>that blasting in the Carrington West Wing does not cause damage or instability to the Carrington In Pit Fine Reject Emplacement embankment;</li> <li>include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;</li> <li>include a specific blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;</li> <li>include a monitoring program for evaluating the performance of the development, including: <ul> <li>compliance with the applicable criteria;</li> <li>minimising the fume emissions from the site; and</li> </ul> </li> <li>include a protocol that has been prepared in consultation with the owners of nearby mines (including the Mt Thorley Warkworth, Wambo, Ravensworth and HVO South mines) to minimise the cumulative blasting impacts of these mines and the HVO North mine.</li> </ul>	<ul> <li>West Wing Groundwater Barrier (LPB) (Section 6.5) and Carrington In Pit Fine Reject Emplacement (Section 6.6).</li> <li>d) Appendix C provides the Road Closure Management Plan Golden Highway (Jerrys Plain Road) (HVOOC-1797567310-2159 Version 1.0 7/01/2019) and HVO Road Closure Management Plan Lemington Road 1 July 2018 – 30 June 2019.</li> <li>e) Appendix B provides a Blast Fume Management Plan to demonstrate how emissions would be minimised.</li> <li>f) Appendix D provides the Blast Monitoring Programme to evaluate performance.</li> <li>Section 6.8 provides details on blast protocol agreements, developed in consultation with nearby mines to minimise cumulative impacts.</li> </ul>	
<sup>2</sup> SURFACE	& GROUND WATER		
	r the Water Act 1912 and/or Water Management Act 2000, the Applicant is re-		
S3 C20	<b>Pollution of Waters</b> Except as may be expressly provided by an EPA licence, the Applicant must comply with section 120 of the <i>Protection of the Environment</i> <i>Operations Act 1997</i> during the carrying out of the development.	Sighted 2019, 2020, 2021 Annual Non-co Returns and monthly environmental monitoring report from January 2022 until August 2022.	OmpliantNo further action required.OFI - Repair the inlet to Dam 5N to stop ongoing sedimentation, remove sediment from the dam, and confirm the capacity of Dam 5N and Dam 2N meets industry guidelines.

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		2021 Annual Review detailed the TSS		
		exceedance during a discharge under		
		the HRSTS from Dam 9W (Parnells		
		Dam) on 24 March 2021. A sample		
		collected returned a TSS value of		
		266mg/L, above the allowable upper		
		limit of 120mg/L under EPL640. On		
		review of the incident report dated 30 <sup>th</sup>		
		April 2022 prepared by HVO, the		
		investigations undertaken following the		
		discharge events drew the conclusion		
		that no environmental harm occurred.		
		The continuous turbidity monitoring		
		undertaken during the discharge event		
		did not show any signs of increased		
		sediment loads within the released		
		water at 10am on 24 <sup>th</sup> March 2021		
		when the manual sample was		
		collected for TSS analysis. The cause		
		of the elevated reading could not be		
		determined. The report stated that the		
		Hunter River was in flood flow at the		
		time of the incident and that the water		
		within the River was more turbid than		
		the water in Parnells Dam based on		
		visual observations.		
		Discharge from mine water dam 15N		
		commenced on 8th March 2022. The		
		incident report dated 21 <sup>st</sup> March 2022		
		stated that the site received over		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		141mm of rainfall. This period was		
		later declared a natural disaster with		
		widespread floods in the region. As a		
		result an email from the EPA was cited		
		stating that there was no need for		
		licences to report pollution events as a		
		result of the flooding. It is noted that		
		there is currently a Pollution Reduction		
		Program in place under EPL640 that		
		includes increasing the capacity of		
		Dam 15N to contain the 24hr, 100yr		
		ARI event. During the site audit		
		inspection in December 2022, HVO		
		environmental staff stated that the		
		geotechnical investigations had been		
		recently completed with detailed		
		design due to commence in early		
		2023.		
		A discharge from mine water dam 32N		
		in Bayswater Creek commenced on		
		28 <sup>th</sup> March 2022 following a long		
		period of above average. The incident		
		report prepared by HVO dated 8 <sup>th</sup> April		
		2022 stated that no environmental		
		harm was caused with TSS readings		
		below 10mg/L, EC levels lower in the		
		dam compared to the Creek and a		
		more neutral pH in the dam compared		
		to the Creek. Dam 32N is part of		
		upgrade works to occur at the Hunter		
		Valley load point under a pollution		
		reduction program in EPL640 which		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		will include a dewatering pump being		
		installed. Works are due to be		
		completed in 2023.		
		Another discharge from mine water		
		Dam 15N commenced on 6 <sup>th</sup> July		
		2022. The incident report prepared by		
		HVO dated 13 <sup>th</sup> July 2022 stated that		
		161.6mm was recorded at site from 2-		
		6 July 2022. The report stated that		
		based on water quality samples		
		collected and analysed, the spill was		
		deemed to not cause environmental		
		harm.		
		It is noted that there were also the		
		following uncontrolled discharges from		
		sediment dams across the northern		
		operations area:		
		- Dam 2N – 23 <sup>rd</sup> March 2021: Cited		
		Incident report prepared by HVO dated		
		9 <sup>th</sup> April 2021 stating that following		
		107.4mm of rainfall recorded from 19-		
		23 <sup>rd</sup> March 2021, Dam 2N spilled into		
		Farrells Creek. The amount of rainfall		
		received was above Blue Book design		
		rainfall of 57.2mm. It was deemed that		
		no environment harm occurred and an		
		email cited from EPA received 15 <sup>th</sup>		
		April 2021 stated no further action		
		would be taken on this occasion.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		<ul> <li>Dam 2N – 8<sup>th</sup> March 2022: During flooding natural disaster.</li> <li>Dam 2N – 4<sup>th</sup> July 2022: Incident report prepared by HVO dated 11<sup>th</sup> July 2022 stated that 161.6mm was recorded at site from 2-6 July 2022 exceeding design rainfall event. Based on water quality monitoring, the discharge was claimed to not create environmental harm.</li> </ul>		
S3 C20A	Water Supply The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.	Sighted 2019, 2020 and 2021 Annual Reviews which includes the results of the annual water balance. All years reported a net increase of water storage on site. Due to recent La Nina climatic conditions, no fresh water has been pumped from the Hunter River during 2021. Water has been released from site under EPL640 and HRSTS regulations during 2021 and 2022 to help manage water storage levels. The WMP (2018) Section 6.2/6.3 details water security including available transfers from other mines or	Compliant	
S3 C20B	<b>Compensatory Water Supply</b> The Applicant must provide compensatory water supply to any landowner of privately-owned land whose water supply is adversely and directly impacted (other than an impact that is negligible) as a result of the	from the Hunter River under licence. Sighted 2019, 2020 and 2021 Annual Reviews. There has been no requirement to provide compensatory water supply during the audit period.	Not triggered	

Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
	Secretary. The compensatory water long-term supply of water development. Equivalent interim basis) within 24 h agreed with the landown If the Applicant and the la implemented, or there is measures, then either par resolution. If the Applicant is unable	r supply measures r that is equivalent t water supply shou ours of the loss be er. andowner cannot a a dispute about th arty may refer the r t o provide an alter t must provide alte	er, and to the satisfaction of the must provide an alternative to the loss attributed to the Ild be provided (at least on an eing identified, unless otherwise agree on the measures to be e implementation of these natter to the Secretary for mative long-term supply of mative compensation to the			
S3 C21	<ul> <li>Discharge Limits</li> <li>Except as may be express of the Environment Oper Regulation 2002 (or any Applicant must: <ul> <li>a. not discharge more the points at HVO north of b.</li> <li>b. ensure that the disch the limits in Table 177</li> </ul> </li> </ul>	ressly provided by an EPA licence or the Protectio erations (Hunter River Salinity Trading Scheme) by subsequent version of the Regulation), the than 237 ML/day from the licensed discharge of the Hunter River; charges from licensed discharge points comply wit		HRSTS TSS exceedance – 23 March 2021 Parnells Dam exceeded discharge limits for Total Suspended Solids (TSS) during HRSTS discharge on 24 March. The sample returned a TSS of 266 mg/L vs EPL limit of 120mg/L. Due to Flood Flow in the Hunter River at the time there was no potential for environmental barm. An investigation	Non-compliant	
	Table 15: Discharge Limits Pollutant pH Non-filterable residue Note: This condition does not authori	Units of measure pH mg/litre se the pollution of waters by	100 percentile concentration limit 6.5 ≤ pH ≤ 9.5 NFR ≤ 120 any other pollutants.	environmental harm. An investigation was undertaken however a cause was not able to be confirmed. TSS samples taken up to and after the 24 March were well below the limit. Continuous Turbidity monitoring was occurring and did not indicate an increasing trend. Notified to DPE and EPA with an incident report. On 20 <sup>th</sup> March 2021 Inaccurate flow reading occurred due to the weir plate not being removed on Parnells Dam. This was detailed in the Annual Return to the EPA.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C22	<sup>3</sup> Water Licensing		Not triggered	
	Prior to the renewal of a licence obtained under the <i>Water Act</i> , or 5 years after the issue date (whichever is first), the Applicant must undertake a comparison of predicted impacts, on water resources, in the EIS against actual impacts, to the satisfaction of the DPI Water. <sup>3</sup> Incorporates DPI Water GTAs			
S3 C22A	<b>Groundwater Barrier</b> Within 2 years of commencing mining in the Carrington Pit Southern Extension, or as otherwise agreed with the Secretary, the Applicant must construct a groundwater barrier wall across the eastern arm of the palaeochannel of the Hunter River, to the satisfaction of the Secretary and at a location no further south than shown in the figure <i>"Carrington River Red Gums, Billabong and Associated Infrastructure"</i> included in the <i>Carrington Pit Extension Response to Submissions Report</i> , dated May 2006.	2021 Annual Environmental Review notes that a conceptual engineering design was developed for the installation of a low permeability barrier wall between the TSF and the alluvium. As part of a Pollution Reduction Program, works in 2022 include a detailed engineering design and commencement of construction. An EPL variation has been submitted to extend the due date for these works.	Compliant	
S3 C22B	<ul> <li>By 31 December 2006, or as otherwise agreed with the Secretary, the Applicant must submit a report to the Department and the DPI Water that:</li> <li>a. examines all reasonable and feasible options for the design and construction of the groundwater barrier wall (including matters such as materials, timing and method of construction, costs, projected initial and long-term effectiveness) to the satisfaction of the Secretary; and</li> <li>b. recommends a preferred option for the approval of the Secretary.</li> </ul>	Viewed the 2016 IEA which confirms that the 2014 IEA and 2007 HLA audit verified that the required report was provided in accordance with this condition.	Compliant	
S3 C23	<ul> <li>Carrington West Wing Groundwater Barrier (LPB)</li> <li>The Applicant must design the Carrington West Wing LPB to the satisfaction of DPI Water and the Secretary. The detailed design must: <ul> <li>a. ensure that negligible movement of water can occur through the barrier in either direction over the long term;</li> <li>b. be prepared by a suitably qualified and experienced expert/s;</li> <li>c. be endorsed by DPI Water and approved by the Secretary, prior to construction of the LPB;</li> <li>d. achieve the relevant performance measures including: <ul> <li>applicable permeability of 10-8 metres/second or less;</li> <li>applicable Australian Standards (including AS 3798-2007); and</li> </ul> </li> </ul></li></ul>	Mining in the Carrington West Wing has not yet commenced	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	hydraulic, geomorphologic and seismic stability which will withstand any blasting-related vibrations, mining operations, fluvial and weather events, decay corrosive and biological attack. Note: The conceptual low permeability barrier is shown in Appendix 4.			
S3 C24	<ul> <li>Prior to undertaking any mining operations within 100 metres of the western arm of the Hunter River paleochannel, the Applicant must:</li> <li>a. install the LPB in the western arm of the paleochannel;</li> <li>b. submit an as-executed report to the Secretary and DPI Water by a suitably qualified and experienced practising engineer, certifying that the LPB has been constructed to achieve the relevant performance measures set out in Condition 23(d) of Schedule 4; and</li> <li>c. obtain endorsement on the installed LPB from DPI Water.</li> <li>If there is evidence after its installation that the LPB is not achieving the performance objective and performance measures in Condition 23 of Schedule 4, mining operations within 100 metres of the western arm of the Hunter River paleochannel must cease until approval to recommence is granted by the Secretary.</li> </ul>	Water Management Plan - Section 8.5.2 A monitoring program to measure the effectiveness of the low permeability barriers as part of the Carrington West Wing Extension will be developed in consultation with the P&E and DPI Water prior to construction.	Not triggered	
S3 C25	<ul> <li>LPB Monitoring and Management Plan</li> <li>The Applicant must prepare a Low Permeability Barrier Monitoring and Management Plan to the satisfaction of DPI Water and the Secretary. The plan must: <ul> <li>a. address the monitoring and management of both the Carrington West Wing LPB and the Carrington Pit Southern Extension LPB;</li> <li>b. be prepared by a suitably qualified and experienced expert;</li> <li>c. be endorsed by DPI Water and approved by the Secretary, prior to construction of the Carrington West Wing LPB;</li> <li>d. describe the monitoring and maintenance procedures to be implemented and the scheduling of these procedures;</li> <li>e. demonstrate that the monitoring system is capable of timely detection of any failure or deficiency in either LPB; and</li> <li>f. describe the contingency measures that will be implemented in the event of a failure or deficiency in either LPB.</li> </ul> </li> <li>The Applicant must implement the approved monitoring and management plan as approved from time to time by the Secretary.</li> </ul>	Water Management Plan - Section 8.5.2 A monitoring program to measure the effectiveness of the low permeability barriers as part of the Carrington West Wing Extension will be developed in consultation with the P&E and DPI Water prior to construction.	Not triggered	
S3 C26	Flood Design Works	Not yet triggered with mining in the area yet to commence.	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	The Applicant must design and construct the flood levees and associated flood design works in the Carrington West Wing area at least 1.0 metres higher than the 1 in 100 year ARI flood event, to the satisfaction of DPI Water.			
S3 C27	<ul> <li>Water Management Plan</li> <li>The Applicant must prepare a Water Management Plan for the HVO North mine to the satisfaction of the Secretary. This plan must be prepared in consultation with DPI Water and the EPA by suitably qualified and experienced persons whose appointment has been approved by the Secretary, and submitted to the Secretary by the end of September 2013 unless otherwise agreed. This plan must include: <ul> <li>a. a Site Water Balance that:</li> <li>includes details of:</li> <li>sources and security of water supply, including contingency planning for future reporting periods;</li> <li>water use on site;</li> <li>water management on site, including details of water sharing between neighbouring mining operations;</li> <li>any off-site water transfers and discharges;</li> <li>reporting procedures, including comparisons of the site water balance for each calendar year; and</li> </ul> </li> <li>describes the measures that would be implemented to minimise clean water use on site;</li> <li>b. a Surface Water Management Plan, that includes:</li> <li>detailed baseline data on surface water flows and quality in the waterbodies that could be affected by the development;</li> <li>a detailed description of the water management system on site, including the: <ul> <li>clean water diversion systems and their final positioning;</li> <li>erosion and sediment controls; and</li> <li>water storages;</li> </ul> </li> <li>detailed plans, including design objectives and performance criteria, for: <ul> <li>design and management of the final voids;</li> <li>design and management of the evaporative sink;</li> </ul> </li> </ul>	Latest version submitted for approval: 23/11/2022 Version 3.0 of the WMP was approved on 16/10/2018 by Megan Dawson as nominee of the Secretary, and is included on the HVO website. Subsequent to this approval, a number of updates and minor amendments have been made to incorporate additional monitoring, response to audits and annual reviews and on feedback from DPE. Version 3.4 has been submitted to DPE for approval following the approval of PA 06_0261 Mod 6. Uncontrolled version 3.4 also sighted which has been issued to the Secretary and is awaiting approval. This version provides more up to date information reflecting management practices currently undertaken on site. Unless noted otherwise, comments below are based on the approved 2018 version 3.0. Item A – Appendix A of the Water Management Plan (WMP) contains a letter from the Secretary confirming the appointment of Andrew Hodge as the author. Appendix B contain letters from DPI Water and EPA showing consultation has been undertaken.		Version 3.4 of the WMP has been issued to the secretary and is waiting approval. Review the contents of the WMP to reflect the audit findings when next updated.

Cond No. Condition		Comments & Evidence	Audit Findings	Recommendations
<ul> <li>design and manage</li> <li>ensuring the stability barriers;</li> <li>establishment of drasite; and</li> <li>control of any poter areas of the site;</li> <li>performance criteria for investigating any poten development:         <ul> <li>the water managem</li> <li>the stability of high</li> <li>surface water qualities</li> <li>stream and ripariant</li> <li>a program to monitor:</li> <li>the effectiveness of</li> <li>surface water flows health in the Hunter affected by the development.</li> </ul> </li> <li>c. a Groundwater Managemet</li> <li>detailed baseline data of the region, and privatel affected by the development.</li> <li>c. a Groundwater assessmet investigating any potention of the affected of the development.</li> <li>detailed baseline data of the region, and privatel affected by the development.</li> </ul> <li>c. a Groundwater function of the development.</li> <li>detailed baseline data of the region, and privatel affected by the development.</li> <li>detailed baseline data of the region, and privatel affected by the development.</li> <li>a program to monitor:         <ul> <li>groundwater assessmet investigating any potention.</li> <li>a program to monitor:             <ul> <li>groundwater inflows</li> <li>the impacts of the comparison of the comparison of the comparison.</li> <li>the alluvial aquifumonitoring boresting the second of the comparison o</li></ul></li></ul></li>	walls adjacent to low permeability barriers; y of the Hunter River; and vegetation health of the Hunter River; the water management system; and and quality, stream and riparian vegetation River (in so far as it could potentially be elopment); and y exceedances of the performance criteria, set any adverse surface water impacts of the ent Plan, which includes: on groundwater levels, yield and quality in y-owned groundwater bores, that could be ment; ent criteria, including trigger levels for tially adverse groundwater impacts; s to the open cut mining operations; levelopment on: ers, including additional groundwater as required by DPI Water; s of the low permeability barrier;	Item B – Not-relevant to this audit period Item C – Site Water balance included in Section 6 of the WMP, details sources and security of water supply, on site water use and management. The WMP details how the reliance on external water use is minimised through the priority use of captured rainfall runoff from mine disturbance areas and groundwater inflow to voids. The WMP does not contain a methodology to quantify annual groundwater inflow into the Lemington Underground Workings. Section 7.3.2 contains a brief overview of Erosion and Sediment Control. It states that a site-specific ESC Plan is developed under the Ground Disturbance Permit system. Observed example for a drill pad. The Surface Water Monitoring Program is detailed in Appendix C of the WMP. Baseline water quality data is contained in Section 7.2 and water access licence details are contained within Section 5.7. Section 5.8 details the licenced discharge points. Design objectives and performance measures are provided in Section 7.3.2 for ESC works, Section 5.5 and 7.3 for diversions, Section 7.4.3 for emplacement areas and backfilled voids and Section 7.4.1 for final voids. Surface Water Impact Criteria are detailed in Table 2 of WMP Appendix C.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>any groundwater bores on privately-owned land that could be affected by the development; and</li> <li>groundwater dependent ecosystems, including the River Red Gum Floodplain Woodland EEC located in the Hunter River alluvium;</li> <li>the seepage/leachate from water storages, backfilled voids and the final void;</li> <li>a program to validate and recalibrate (if necessary) the groundwater model for the development, including an independent</li> </ul>	Section 9 and Appendix C details the program to monitor potentially adverse impacts on surface water quality, controlled and uncontrolled discharges and seepage/leachate from the site. The Plan to respond to the exceedances is contained in Section 9.5.		
	review of the model every 3 years, and comparison of monitoring results with modelled predictions; and	The WMP should be updated to include the following:		
	<ul> <li>a plan to respond to any exceedances of the groundwater assessment criteria.</li> <li>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</li> </ul>	<ol> <li>Update the WMP with the required methodology to quantify the annual groundwater inflow into the Lemington underground mine workings during the period water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased.</li> <li>Update the WMP to include a program to monitor potentially adverse impacts of the development on flooding, surface water flows, stream and riparian vegetation health</li> <li>Update the WMP to include latest details of how the mine is managing water including the recently installed dam level monitoring and pipe burst detection systems.</li> <li>Update the WMP with the latest water balance model details</li> <li>Update the WMP to include a program to periodically update</li> </ol>		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		and validate the water balance model for the development and compare monitoring results with modelled predictions		
S3 C28	<ul> <li>Final Void Management Plan</li> <li>At least 5 years before the cessation of open cut coal extraction that will result in the creation of a final void, or as otherwise agreed with the Secretary, the Applicant must prepare a Final Void Management Plan for each void, in consultation with DRE and DPI Water, and to the satisfaction of the Secretary. Each plan must: <ul> <li>a. assess locational, design and future use options;</li> <li>b. be integrated with the Water Management Plan and the Rehabilitation Management Plan;</li> <li>c. assess short term and long term groundwater and other impacts associated with each option; and</li> <li>d. describe the measures to be would be implemented to avoid, minimise, manage and monitor potential adverse impacts of the final void over time.</li> </ul> </li> <li>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</li> </ul>	HVO has engaged with the NSW Department of Planning, Industry and Environment (DPIE) to defer the requirement of the final void management plan. However, the Planning and Assessment Group of DPIE advised that a 'high-level' final void management plan was required by the end of 2021. The <i>Conceptual</i> <i>final void management plan</i> , prepared by EMM December 2021 was observed.	Compliant	
S3 C28A	<ul> <li>Fine Reject Management Strategy</li> <li>The Applicant must prepare a life of mine fine reject management strategy to the satisfaction of the Secretary. The strategy must: <ul> <li>a. be prepared in consultation with DRE and DPI Water, and submitted to the Secretary for approval by 30 June 2015;</li> <li>b. describe potential locations and design options for the emplacement of fine reject on site;</li> <li>c. assess any material short term and long term impacts on surface and groundwater resources associated with each option;</li> <li>d. describe the measure that would be implemented to avoid, minimise, manage and monitor any adverse impacts of the fine reject emplacements over time;</li> <li>e. describe how the fine reject emplacements would be rehabilitated and describe potential options for future land uses; and</li> </ul> </li> </ul>	The Life of Mine Fine Reject Strategy was initially prepared with Rev 0 issued on 30 June 2015. The copy of this plan available on the HVO website indicates subsequent review of this plan, with Rev 2 dated 28/09/2018. A subsequent update was submitted to the Department on 16 November 2022 and was approved on 19 January 2023.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>f. be integrated with the Rehabilitation Management Plan and Agricultural Land Reinstatement Management Plan for the mine.</li> <li>The Applicant must implement the approved management strategy as approved from time to time by the Secretary.</li> </ul>			
S3 C29	<ul> <li><sup>4</sup>Temporary Crossing of the Hunter River</li> <li>Prior to the commencement of any work within 40 metres of the Hunter</li> <li>River, a permit under Part 3A of the <i>Rivers and Foreshores Improvement</i></li> <li><i>Act 1948</i> must be obtained from the DPI Water. All works must be:</li> <li>a. undertaken in accordance with the permit application, except as otherwise provided by condition of the permit;</li> <li>c. designed and constructed such that the works do not cause sedimentation, erosion or permanent diversion of the Hunter River;</li> <li>d. constructed in accordance with section 10.8 (Temporary Crossing of the Hunter River), volume 1 of the EIS, dated October 2003; and titled <i>"Hunter Valley Operations – West Pit Extension and Minor Modifications",</i> and</li> <li>e. constructed in accordance with the Statement of Environmental Effects, prepared by Coal &amp; Allied, dated August 2001, titled <i>"Proposed relocation of a dragline and electric rope shovel – Ravensworth and Hunter Valley Operations."</i></li> <li><i>Notes:</i></li> <li>a. Should Crown land, as defined under the Crown Lands Act 1989, be included in the temporary crossing, there is a requirement to seek approval from the Department of Lands under the Crown Lands Act; and</li> <li>b. Any works on Crown public roads require the Department of Lands' approval and must satisfy the statutory requirements of the Roads Act 1993.</li> </ul>	Condition complete. It should be noted that the Rivers and Foreshores Act 1948 has been repealed.	Noted	
FAUNA &	FLORA			
S3 C30	<b>Rehabilitation/Regeneration Strategy</b> The Applicant must not destroy or disturb more than 1 mature river red gum in the river red gum population associated with the Carrington billabong, and ensure than the mining highwall is located at least 150 metres from the standing water line of the billabong.	The current River Red Gum Strategy is being implemented and is summarised in Section 5 of the BMP. Sight inspection included review and confirmation of fencing in this area as indicated in Plates appended to the audit report	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C31	<ul> <li>By 30 June 2007, the Applicant must prepare a comprehensive Rehabilitation and Restoration Strategy for the Carrington billabong and river red gum population, in consultation with DPI Water, and to the satisfaction of the Secretary. This strategy must be prepared by suitably qualified expert/s, and must include: <ul> <li>a. the rehabilitation and restoration objectives for the billabong and associated river red gum population;</li> <li>b. a description of the short, medium and long term measures that would be implemented to rehabilitate and restore the billabong and associated river red gum population (including measures to address matters which affect the long term health and sustainability of the billabong and river red gums such as surface and ground water supply, and controlling weeds, livestock and feral animals); and</li> <li>c. detailed assessment and completion criteria for the rehabilitation and restoration of the billabong and associated river red gum population.</li> </ul> </li> <li>The Applicant must implement the approved management strategy as approved from time to time by the Secretary.</li> <li>Note. The billabong, standing water line and river red gum population referred to are the billabong, standing water line and endangered population of river red gums located on land owned by the Applicant between the Hunter River and Levee 5, as shown in the figure "Carrington River Red Gums, Billabong and Associated Infrastructure" included in the Carrington Pit Extension Response to Submissions Report, dated May 2006.</li> </ul>	The current River Red Gum Strategy outlines mechanisms for protection of Hunter Lowland Red Gum Forest. This strategy is being implemented as referenced above. This strategy also identifies the location of the Hunter Lowland Red Gum Forests and summarises key management actions.	Compliant	
S3 C31A	The Applicant must revegetate an area of at least 0.14 hectares using trees representative of the Swamp Oak Floodplain Forest community on land which adjoins existing riparian vegetation and is suitable for the establishment of this community.	Confirmed in previous IEA.	Compliant	
S3 C32	<ul> <li>By 30 June 2007, the Applicant must prepare a conceptual Landscape and Rehabilitation Management Strategy, in consultation with affected agencies, to the satisfaction of the Secretary. The strategy must:</li> <li>a. include objectives for landscape management and rehabilitation of the site and a justification for the proposed strategy;</li> <li>b. present a conceptual plan for landscape management and rehabilitation of the site;</li> <li>c. be integrated with the relevant requirements of the Mining Operations Plan;</li> <li>d. describe the measures that would be implemented to achieve the objectives (including an indicative timetable for mine closure);</li> </ul>	Condition is from 2007 and outside the audit period, however these conditions were previously compliant, and are still met by the current RMP.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>e. include proposals to offset the flora and fauna impacts of the development (including proposals resulting from condition 31 and 31A above), and an outline of how the strategy would integrate with existing and planned corridors of native vegetation in areas surrounding the development; and</li> <li>f. outline how the proposed strategy would be integrated with the landscape management and rehabilitation of the other operations within Hunter Valley Operations (both north and south of the Hunter River) and other coal mines in the vicinity.</li> <li>The Applicant must implement the approved management strategy as approved from time to time by the Secretary.</li> </ul>			
S3 C33	Strategic Study Contribution If, during the development, the Department or the OEH commissions a strategic study into the regional vegetation corridor stretching from the Wollemi National Park to the Barrington Tops National Park, then the Applicant must contribute a reasonable amount, up to \$10,000, towards the completion of this study.	Not triggered during the audit period.	Not triggered	
S3 C34	<b>Operating Conditions</b> The Applicant must salvage and reuse as much material as possible from the land that will be mined, such as soil, seeds, tree hollows, rocks and logs. Cleared vegetation must be reused or recycled to the greatest extent practicable. No burning of cleared vegetation must be permitted. Reuse options including removing millable logs, recovering fence posts, mulching and chipping unusable vegetation waste for on-site use are to be implemented.	Site inspection saw evidence of stag trees and timber salvaged and re- used, soil stripped and re-used, Rocks and boulders in woodland and mulch.	Compliant	
S3 C35	<ul> <li>Flora and Fauna Management</li> <li>The Applicant must prepare procedures for the management of flora and fauna for the development. These procedures must: <ul> <li>a. provide details on:</li> <li>delineating areas of disturbance;</li> <li>protecting areas outside of the disturbance areas;</li> <li>identifying when pre-clearance surveys are required for fauna;</li> <li>determining the best time to clear vegetation to avoid nesting/breeding activities of threatened fauna;</li> <li>capturing and releasing fauna;</li> <li>relocating bat roosts;</li> </ul> </li> </ul>	Condition covered by the current Rehabilitation MP, and the Biodiversity MP. a) delineating areas of disturbance: RMP section 6.2.1.2 -protecting areas outside of the disturbance areas: BMP -identifying when pre-clearance surveys are required for fauna; BMP -determining the best time to clear vegetation to avoid nesting/breeding activities of threatened fauna; BMP	Compliant	

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>salvaging habitat rese</li> <li>controlling weeds in r</li> <li>controlling access to</li> <li>b. describe how the land in</li> <li>c. describe how the mined biodiversity values;</li> <li>d. identify actions to minimi on threatened fauna;</li> <li>e. describe how the perform strategies would be mon parameters in Table 18;</li> <li>f. identify who is responsib the procedures.</li> <li>The Applicant must submit a approval within 6 months of The Applicant must impleme approved from time to time to time to time to time to the to</li></ul>	le for monitoring, reviewing, and implementing a copy of these procedures to the Secretary for the date of this consent. ent the approved management procedures as	<ul> <li>-capturing and releasing fauna; BMP</li> <li>-relocating bat roosts; BMP</li> <li>-salvaging habitat resources and collecting seed; RMP 6.2.1.2</li> <li>-controlling weeds in regeneration/rehabilitation areas; RMP 6.2.5</li> <li>-controlling access to the regeneration/rehabilitation areas RMP 6.2.6</li> <li>b) Addressed in BMP</li> <li>c) In RMP, section 6.0</li> <li>d) Addressed in BMP</li> <li>e) RMP section 8.0</li> <li>f) RMP section 11.0</li> <li>Annual ecological monitoring reports were observed during the site inspection, and these reports consider and document compliance with Biodiversity Management Plan requirements including biodiversity offsets, vegetation clearance, management activities, ecological monitoring results and pest and weed management activities.</li> </ul>		
S3 C36	Under Condition 62C of Schedule 4.		Flora and Fauna Management Procedure has been replaced with the Integrated Biodiversity Management Plan (IBMP). These Plans are	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul><li>a. review the performance of the flora &amp; fauna management procedures annually, and, if necessary,</li><li>b. revise these documents to take into account any recommendations from the annual review.</li></ul>	reviewed annually as per Sch 5 Cond 4 of DA 450-10-2003 and Sch5 Cond 4A of PA 06_0261.		
ABORIGIN	AL CULTURAL HERITAGE			
Note: The A	Applicant is required to obtain consent from the OEH under the National Parl eral Terms of Approval for the sites listed in condition 37.	s and Wildlife Act 1974 to destroy Abori	ginal sites and obje	cts on the site. The OEH has
S3 C37	West Pit Extension – Consents to Destroy The Applicant must obtain consent from OEH to destroy the following sites: • WPE 1 • WPE 2 • WPE 3 • WPE 4 • WPE 5 • WPE 6 • WPE 7 • WPE 8 • WPE 9 • WPE 10 • WPE 11 • 37-2-1964 • 37-2-1965 • 37-2-1966 • 37-2-1967 • 37-2-038 • 37-2-038 • 37-2-0894 • 37-2-0896 • 37-2-0805	Completed during previous audit period.	Compliant	
S3 C38	West Pit Extension – Salvage Before making application for section 90 consents under NP&W Act, the Applicant must prepare a salvage program for the sites listed in condition	The Mitchell Pit development area has been subject of a AHIP for disturbance of 284 aboriginal heritage sites. This	Compliant	

Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
	37 in consultation with the OEH and Aboriginal communities, and to the satisfaction of the OEH.		site salvage and excavation was reported by Arrow Heritage solutions in October 2019.			
S3 C39	satisfaction of the OEH.	in consent under the Natio	onal Parks and Wildlife         37-2-1522 (CM19)         TD         TG         37-2-1504         37-2-1522         37-2-1522         37-2-1535         37-2-1535         37-2-1864         37-2-1875         37-2-1876         37-2-1962         37-2-1963         37-2-1861         37-2-1861         37-2-1862         37-2-1862	reported by Arrow Heritage solutions in	Compliant	
	<ul> <li>37-2-0784</li> <li>37-2-0785</li> <li>37-2-0786</li> <li>37-2-2078 (C1)</li> <li>37-2-2079 (C2)</li> <li>37-2-2080 (C3)</li> <li>37-5-0494 (C4)</li> <li>37-2-2083 (C8)</li> </ul>	<ul> <li>37-2-1870</li> <li>37-2-1871</li> <li>37-2-1872</li> <li>IF1</li> <li>37-2-2085 (C10)</li> <li>37-2-1962 (CM45)</li> <li>37-2-1963 (CM46)</li> <li>37-2-1504 (CM1)</li> </ul>	<ul> <li>37-2-1860</li> <li>37-5-0131</li> <li>37-3-0286</li> <li>37-5-0061</li> <li>37-1-0399</li> <li>37-2-1535 (CM32)</li> <li>37-2-2754</li> <li>37-2-2755</li> <li>37-2-2756</li> <li>37-2-2757</li> </ul>			

Cond No.	Condition		Comments & Evidence	Audit Findings	Recommendations
		• 37-2-1505 (CM2)			
S3 C40	area are not permitted to heritage site 37-2-1877 ( plan in Appendix 5. Note: for clarification purpos	ssociated activities in the Carrington West Wing be carried out within 20 metres of Aboriginal (CM-CD1) and the Older Stratum as shown on the ses, Condition 40 of Schedule 4 does not prohibit s to be undertaken within CM-CD1 or within 20 metres	Carrington West Wing Project has not commenced. Annual inspection reports confirm no works within 20 m buffer of CM CD 1	Compliant	
S3 C40A	associated activities do r		Refer S3 C40	Compliant	
S3 C41	<ul> <li>associated activities do not cause any impact to Aboriginal heritage site 37-2-1877 (CM-CD1) and the Older Stratum.</li> <li>Heritage Management Plan The Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must: <ul> <li>a. be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</li> <li>b. be prepared in consultation with OEH and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);</li> <li>c. be submitted to the Secretary for approval by the end of June 2013, unless the Secretary agrees otherwise;</li> <li>d. include the following for the management of Aboriginal heritage site 37-2- 1877 (CM-CD1) including a description of the measures that would be implemented to protect, monitor and manage the site from mining operations and associated activities;</li> <li>a description of the measures that would be implemented for: <ul> <li>managing heritage items on the site, including any proposed archaeological investigations and/or salvage measures;</li> <li>managing the discovery of any human remains or previously unidentified Aboriginal objects on site;</li> <li>maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on site;</li> </ul> </li> </ul></li></ul>		HVO North Aboriginal Heritage Management Plan Document Number: HVOOC- 1797567310-3088 Status: Approved Version: 1.0 Effective: 09/02/2020 A regular program of compliance inspections is in place for the site, and compliance audit inspection reports prepared by Arrow Heritage for 2021 and 2022 were observed during the site inspection. Site inspection confirmed identification, security and fencing of these areas and artefact storage as indicated in Plates 50, 57, 58 and 59.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations	
	<ul> <li>both on-site and within any Aboriginal heritage conservation areas; and</li> <li>ensuring any workers on site receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions; and</li> <li>a strategy for the storage of any heritage items salvaged on site, both during the development and in the long term.</li> <li>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</li> </ul>			
S3 C41A	Prior to disturbance by mining, the Applicant must ensure that the scarred tree 37-2-2080 (C3) is removed and relocated to a site where it will be protected from future development, in consultation with the Wonnarua Tribal Council, and to the satisfaction of the Secretary. Note: In conditions 37-41A, all seven-figure numbers refer to Aboriginal site listings in OEH's Aboriginal Heritage Information Management System (AHIMS). All other numbers are site numbers used by the Applicant in on-site Aboriginal heritage studies. Site numbers beginning with C or CM are associated with the Carrington Pit, as shown in Fig 5.1 of Annex G of the Carrington Pit Extended Statement of Environmental Effects.	Competed (Verified within previous 2014 IEA)	Not triggered	
S3 C42	<b>Trust Fund Contribution</b> Before carrying out the development, or as agreed otherwise by the Secretary, the Applicant must contribute \$20,000 to the Hunter Aboriginal Cultural Heritage Trust Fund for further investigations into Aboriginal cultural heritage, as defined by the Trust Deed.	Completed (Verified within previous 2016 IEA)	Compliant	
TRAFFIC a	& TRANSPORT			
S3 C43	New Access Intersection to Hunter Valley Loading Point Note: The Applicant requires Council approval under the Roads Act 1993 for the new road entry from Liddell Station Road to the Hunter Valley Loading Point. <sup>6</sup> The Applicant must design, construct and maintain for the duration of this consent, the proposed new access intersection from Liddell Station Road to the Hunter Valley Loading Point to the satisfaction of the Council.	Completed (Verified within previous 2016 IEA)	Compliant	
S3 C44	Road Closure Note: The Applicant requires MSC approval under the Roads Act 1993 prior to closing a section of Pikes Gully Road. Within 12 months of the date of this consent, unless otherwise agreed by the Secretary, the Applicant is to complete the relevant requirements to	Completed (Verified within previous 2104 IEA)	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	enable the section of Pikes Gully Road situated in the Muswellbrook local government area to be closed as a public road.			
S3 C45	The Applicant must not blast within 500 metres of a public road while the road is open to the public. Any road closures with respect of blasting must be subject to a plan of management approved by Council.	Section 6.7 of the BMP describes the requirements for approval from Singleton Council and Transport for NSW for road closures where blasting is to occur within 500m of a public road. Sighted letters from Singleton Council (24 June 2019, 29 June 2022) providing consent for the purpose of road closures for blasting. Sighted Blasting Co-operation Deed with Cumnock No.1 Colliery, ICRA Cumnock and Ravensworth Operations (17 October 2016). Sighted Blasting Deed with United Collieries (24 July 2020). Sighted Temporary blasting agreement letters to UWJV dated 28 April 2020 and 29 June 2020. Section 6.2 and Section 6.7 of the BMP detail the procedure in the event of blasting occurring within 500m of non-HVO land.	Compliant	
S3 C46	<b>Lemington Road</b> The Applicant must reimburse Council for any road upgrading works undertaken on Lemington Road, to a maximum amount of \$30,000.	Completed (Verified previous 2016 IEA)	Compliant	
S3 C47	The Applicant must after or cease mining operations if driver visibility or traffic safety on Lemington Road is adversely affected by dust, in accordance with the requirements of Council.	Not triggered during the audit period	Not triggered	
S3 C48	The Applicant must be responsible for the full cost of the maintenance of the Lemington Road deviation undertaken for the Carrington Pit until March 2011, in accordance with the standards and requirements of Council.	Completed (Verified previous 2016 IEA).	Compliant	
S3 49	Intersection of Lemington Road and the Golden Highway	Completed (Verified previous 2016 IEA).	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Within 2 years of the date of this consent, the Applicant must upgrade the intersection of the Golden Highway (SH 27) and Lemington Road to a type "BAR" intersection with a sealed shoulder to the satisfaction of the RMS.			
S3 49A	Road Safety Audit a. By 31 December 2006, the Applicant must prepare and submit a road safety audit to the RMS and Council for all public roads used by mine employees and service vehicles in the vicinity of the development, including an audit of the existing intersections of all mine access roads with public roads;	Completed (Verified previous 2016 IEA).	Compliant	
	<ul> <li>any improvement to meet accepted road safety standards required by the relevant road manager (ie the RMS or Council) for public roads as a result of impacts related to the development as identified by the audit must be undertaken at the Applicant's cost and to the satisfaction of the road manager;</li> </ul>			
	c. any dispute between the Applicant and the relevant road manager in relation to the audit findings and the requirements of the road manager for improvements of public roads is to be determined by the Secretary; and			
	d. any maintenance of line marking and sign posting required by the relevant road manager at existing intersections of mine access roads with public roads must be undertaken at the Applicant's cost and to the satisfaction of the road manager.			
S3 C50	<b>Coal Haulage</b> <sup>7</sup> The Applicant must ensure that spillage of coal from coal haulage vehicles is minimised and that sediment-laden runoff from roads is effectively managed, to the satisfaction of the Secretary. Measures that must be implemented include:	Vehicle wash is used for vehicles and loads are required to be covered.	Compliant	
	<ul> <li>a. covering all loads where loaded coal trucks leave the site and enter public roads;</li> </ul>			
	<ul> <li>b. ensuring the gunwhales of all loaded trucks are clean of coal;</li> <li>c. providing effective wheel wash facilities at all coal load and unload facilities prior to vehicles entering public roads; and</li> <li>d. sweeping, at regular intervals and at the completion of campaign hauls,</li> </ul>			
	public roads used for the transportation of coal.			
S3 C51	The Applicant must enter into an agreement with Council for the maintenance of the sections of Pikes Gully Road and Liddell Station Road	Pikes Gully Road s138 approvals were sighted. None relating specifically to Liddell Station Road however where	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	whilst used by the Applicant for the haulage of coal, and during the period the roads are owned by Council.	Pikes Gully becomes LSR north of NEH is covered in Pikes Gully Road s138.		
S3 C52	<ul> <li>Monitoring The Applicant must maintain and include in each Annual Review records of the: <ul> <li>a. amount of coal transported from the site each year;</li> <li>b. amount of coal received from Hunter Valley Operations south of the Hunter River;</li> <li>c. amount of coal hauled by road to the Hunter Valley Loading Point;</li> <li>d. amount of coal hauled by road to the Newdell Loading Point;</li> <li>e. amount of coal hauled by road from the Newdell Loading Point to the Ravensworth coal Terminal;</li> <li>f. amount of coal hauled by road from the Hunter Valley Loading Point to the Ravensworth Coal Terminal; and </li> <li>g. number of coal haulage truck movements generated by the development.</li> </ul></li></ul>	Included in annual reviews	Compliant	
VISUAL IN	IPACT			
S3 C53	<ul> <li>Visual Amenity</li> <li>The Applicant must implement measures to mitigate visual impacts including: <ul> <li>a. design and construction of development infrastructure in a manner that minimises visual contrasts; and</li> <li>b. progressive rehabilitation of mine waste rock emplacements (particularly outer batters), including partial rehabilitation of temporarily inactive areas.</li> </ul></li></ul>	See response to Sch 3 Cond 62D confirming progressive rehabilitation was viewed onsite inspection.	Compliant	
S3 C54	<ul> <li>The Applicant must plant trees to provide an effective visual screen from Lemington Road in the vicinity of the Belt Line Road and adjacent to the Mitchell pit area. The plan for this tree planting is to:</li> <li>a. provide for tree planting within 2 years of the date of this consent;</li> <li>b. achieve an 80% survival rate by the 5<sup>th</sup> year;</li> <li>c. be submitted to DRE and Secretary for review and approval; and</li> <li>d. provide an assessment of whether visual bunds are required to supplement the vegetative visual screen.</li> </ul>	Observed letter from DPE dated 4 July 2022 regarding the Hunter Valley Operations North Mitchell Pit, Visual Bund Assessment. This correspondence notes that HVO had satisfied the requirements under this condition and no further visual screening is required.	Compliant	
S3 C55	Lighting Emissions	Refer to PA 06_0261 Sch 3 Cond 50	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	The Applicant must take all practicable measures to mitigate off-site lighting impacts from the development.			
S3 C56	All external lighting associated with the development must comply with <i>Australian Standard AS2482 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.</i>	Refer to PA 06_0261 Sch 3 Cond 50	Compliant	
WASTE M	INIMISATION			
S3 C57	The Applicant must minimise the amount of waste generated by the development to the satisfaction of the Secretary.	Refer to PA 06_0261 Sch 3 Cond 55	Compliant	
HAZARDS	MANAGEMENT			
S3 C58	<ul> <li>Spontaneous Combustion</li> <li>The Applicant must: <ul> <li>a. take the necessary measures to prevent, as far as is practical, spontaneous combustion on the site; and</li> </ul> </li> <li>b. manage any spontaneous combustion on-site to the satisfaction of DRE.</li> </ul>	The site maintains a Spontaneous Combustion Principal Hazard Management Plan (V5.0), defining management measures, inspection requirements and responsibilities to manage spon com. In addition, training is provided to staff in accordance with this management plan as observed on site. Proactive management of spon com is managed through daily inspections and confirmed through interviews with personnel on site. A weekly heating survey report is also provided to Mining Supervisors and Superintendents. A spon com register has been developed for the site, providing GPS location, coal type and length of time on stockpile. Two spontaneous combustion incidents reported during the audit period, and evidence of review and closure of actions following these incidents is maintained in the CMO system.	Compliant	

Cond No.	Condition		Comments & Evidence	Audit Findings Recommendations
S3 C59	a. dangerous goods is do <i>Standards</i> , particularly <i>Goods Code</i> ; and	e that the storage, handling, and transport of: ne in accordance with the relevant <i>Australian</i> <i>AS1940</i> and <i>AS1596</i> , and the <i>Dangerous</i> ed in accordance with the requirements of DRE.	Site inspection identified dangerous goods stored in appropriately bunded areas.	Compliant
BUSHFIR	EMANAGEMENT			
S3 C60	fires on-site; and b. assist the Rural Fire Se	oment is suitably equipped to respond to any ervice and emergency services as much as e on-site during the development.	Refer to PA 06_0261 Sch 3 Cond 59	Compliant
S3 C61		that the Bushfire Management Plan for the site, uncil and the Rural Fire Service.	Refer to PA 06_0261 Sch 3 Cond 59	Compliant
REHABIL	ITATION			
S3 C62	rehabilitation must be generehabilitation strategy desc Schedule 3 (and depicted Appendices 6 and 7) and the Table 17: Rehabilitation Objectives Area/Domain Mine site (as a whole), including the final void Carrington West Wing revised proposed extension area Surface infrastructure Community	litate the site to the satisfaction of DRE. The erally in accordance with the proposed cribed by the documents listed in Condition 2 of conceptually in the final landform plans in	Not triggered, but tracking towards compliant. Rehabilitation reporting in AR shows rehab progressing in line with rehab plan, and previously with the MOP. Minesoils found the rehabilitation on site is variable in age and quality and is being managed according to closure outcomes with areas of lower quality being more intensely managed to bring it in line with targets. Drainage structures were inspected and appear to be constructed and	Not Triggered
			maintained in accordance with the Blue Book.	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S3 C62A	<ul> <li>The Applicant must:</li> <li>a. develop a detailed soil management protocol that identifies procedures for <ul> <li>comprehensive soil surveys prior to soil stripping;</li> <li>assessment of top-soil and sub-soil suitability for mine rehabilitation; and</li> <li>annual soil balances to manage soil handling including direct respreading and stockpiling;</li> </ul> </li> <li>maximise the salvage of suitable top-soils and sub-soils and biodiversity habitat components such as bush rocks, tree hollows and fallen timber for rehabilitation of disturbed areas within the site and for enhancement of biodiversity offset areas;</li> <li>c. ensure that coal reject or any potentially acid forming interburden materials must not be emplaced at elevations within the pit shell or out of pit emplacement areas; and</li> </ul>	Soil stockpiles are managed well, sown with a mix of natives and ground covers as soon as shaped, less than 3m, and located in close proximity to where the material will be re-spread. The intended post mining land use is considered suitable for the grassland areas to support grazing, with some areas now under grazing leases, indicating the land will be managed as a grazing enterprise whilst being monitored for impacts. Weed management remains a priority on site, especially Galenia and over time Rhodes Grass. Soil management is covered in the RMP in section 6.2.1.1. Topsoil Plan sighted during site visit. Digital GDP process with GIS recorded topsoil stockpiles register. Monthly reconciled & GIS update based on GDP's. Each stockpile named, surveyed and 6 monthly reconciliation including a presentation from survey providing total site volume.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	d. ensure that no dirty water can drain from an out of pit emplacement area to any offsite watercourse or to any land beyond the lease boundary.			
S3 C62B	Progressive Rehabilitation The Applicant must carry out rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies must be employed when areas prone to dust generation cannot yet be permanently rehabilitated. Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage in the development.	Annual Review shows rehabilitation progressing inline with/ahead of the MOP. Areas prepped for rehabilitation listed in AR also, and areas seeded/prepped.	Compliant	
S3 C62C	<ul> <li>Rehabilitation Management Plan</li> <li>The Applicant must prepare a Rehabilitation Management Plan for the HVO North mine to the satisfaction of DRE. This plan must: <ul> <li>a. be prepared in consultation with the Department, DPI Water, OEH, Council and the CCC;</li> <li>b. be submitted to DRE by the end of September 2013;</li> <li>c. be prepared in accordance with any relevant DRE guideline;</li> <li>d. include an Agricultural Land Reinstatement Management Plan;</li> <li>e. include detailed performance and completion criteria for evaluating the achievement of the rehabilitation objectives in Table 17 and the overall rehabilitation of the site, and triggering remedial action (if necessary);</li> <li>f. include proposals to offset the flora and fauna impacts of the development (including proposals resulting from condition 31 above), and an outline of how the plan would integrate with existing and planned corridors of native vegetation in areas surrounding the development;</li> <li>g. describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform and final land use;</li> <li>h. outline how the proposed plan would be integrated with the landscape management and rehabilitation of the other operations within Hunter Valley Operations (both north and south of the Hunter River) and other coal mines in the vicinity;</li> </ul> </li> </ul>	The current RMP addresses these conditions as follows: a) Section 12.1, 4.3 b) this condition pre-dates this audit. c) d) Section 1.0 e) Not included in the current RMP, instead addressed in a separate plan, Agricultural Land Reinstatement Plan f) Captured in the Biodiversity Offset Strategy, and the Integrated Biodiversity Offset MP g) Sections 2.0, 5.0, 6.0, 7.0 h) Section 5.0 i) Section 6.2.3.6 j) Section 8.0 k) entire RMP Noted.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>i. include interim rehabilitation where necessary to minimise the area exposed for dust generation;</li> <li>j. include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and</li> <li>k. build to the maximum extent practicable on the other management plans required under this consent.</li> <li>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</li> </ul>			
S3 C62D	<ul> <li>Agricultural Land Reinstatement Management Plan The Agricultural Land Reinstatement Management Plan required under Condition 62C of Schedule 4 is intended to ensure that the alluvial lands are restored to a productive capacity at least equivalent to their pre-mining state and are able to be managed using techniques and equipment common to management of equivalent lands in the district. The plan must:  <ul> <li>a. be prepared in consultation with DPI and to the satisfaction of the Secretary;</li> <li>b. be prepared in accordance with any relevant DPI guideline;</li> <li>c. include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the Carrington West Wing revised proposed extension area, and triggering remedial action (if necessary);</li> <li>d. include a long-term monitoring programme on the success of reinstating alluvial lands, which must: <ul> <li>assess a comprehensive suite of indicators of productivity and environmental sustainability (such as soil settling, soil profile development, other soil characteristics, water transmissivity and soil water availability, agricultural productivity, fertilizer needs, weeds and pests) over an extended period (a minimum of 20 years);</li> <li>compare the performance of the reinstated alluvial lands with a reference site; and <ul> <li>make monitoring results publicly available.</li> </ul> </li> </ul></li></ul></li></ul>	Agricultural Land Reinstatement Management Plan addresses these conditions as follows: a) Chapter 4 b) Section 2.4 c) Chapter 5 d) Chapter 7 e) Chapter 9 Not Triggered but verified by rehabilitation disturbance layer sighted during inspection. Carrington West wing extension areas in question are not yet mined.	Not Triggered.	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Note: The Carrington West Wing revised proposed extension area is shown in Appendix 5.			
MINE EXIT	STRATEGY			
S3 C63	Within 5 years of the date of this consent, the Applicant must work with the Council and MSC to investigate the minimisation of adverse socio- economic effects of a significant reduction in local employment levels and closure of the development at the end of its life.	Outside Audit period - Unable to locate evidence of consultation with SSC and MSC. 2013 IEA identified this action as compliant based on Exit Strategy being developed in 2004. Unable to locate this strategy. During the reporting period HVO participated in the Community Development Fund and Enterprise Facilitation programme, both of which had objectives to create sustainability through economic diversity.	Not triggered	
SCHED	ULE 4 – ADDITIONAL PROCEDURES FOR AIR QUALIT	Y AND NOISE MANAGEMEN	IT	
S4 C1	<ul> <li>Notification of Landowners/Tenants</li> <li>By the end of September 2013, the Applicant must: <ul> <li>a. notify in writing any remaining private owners of:</li> <li>the land listed in Table 1 of schedule 4 that they have the right to require the Applicant to acquire their land at any stage during the development;</li> <li>any residence on the land listed in Table 1 of schedule 4 that they have the right to request the Applicant to ask for additional noise and/or air quality mitigation measures to be installed at their residence at any stage during the development; and</li> <li>any privately-owned land within 2 kilometres of the approved open cut mining pit/s that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;</li> </ul> </li> <li>b. notify the tenants of any mine-owned land of their rights under this approval; and</li> <li>c. send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the documents listed in condition 2 of schedule 3 identify that dust</li> </ul>	Land and road access arrangements were observed for the audit period.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	emissions generated by the development are likely to be greater than any air quality criteria in schedule 4 at any time during the life of the development.			
S4 C2	<ul> <li>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 purchased by the Applicant, the Applicant must:</li> <li>a. advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time);</li> <li>b. advise the prospective tenants of the rights they would have under this approval; and</li> <li>c. request the prospective tenants consult their medical practitioner to discuss the air quality monitoring data and prediction and health impacts arising from this information,</li> <li>to the satisfaction of the Secretary.</li> </ul>	Copies of notification letters to residents, inclusive of the NSW Health fact sheet "Mine Dust and You" were sighted during the audit.	Compliant	
S4 C3	<ul> <li>As soon as practicable after obtaining monitoring results showing: <ul> <li>a. an exceedance of any criteria in schedule 4, the Applicant must:</li> <li>notify each affected landowner and/or tenant of the land (including the tenants of any mine-owned land) in writing of the exceedance; and</li> <li>provide each affected party with regular monitoring results until the development is again complying with the relevant criteria; and</li> </ul> </li> <li>b. an exceedance of the air quality criteria in schedule 4, the Applicant must additionally provide each affected party with: <ul> <li>a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time), if not recently provided; and</li> <li>monitoring data in an appropriate format such that the party's medical practitioner can assist them in making an informed decision on the health risks associated with continued occupation of the property,</li> </ul> </li> </ul>	Copies of notification letters to residents, inclusive of the NSW Health fact sheet "Mine Dust and You" were sighted during the audit.	Compliant	
S4 C4	Independent Review	No independent reviews have been	Not triggered	
	If an owner of privately-owned land considers the development to be exceeding the criteria in Schedule 4, then he/she may ask the Secretary in	requested during the audit period.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	writing for an independent review of the impacts of the development on his/her land.			
	If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant must:			
	a. commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:			
	<ul> <li>consult with the landowner to determine his/her concerns;</li> </ul>			
	<ul> <li>conduct monitoring to determine whether the development is complying with the relevant impact assessment criteria in Schedule 4; and</li> </ul>			
	<ul> <li>if the development is not complying with these criteria then:</li> </ul>			
	<ul> <li>determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land;</li> </ul>			
	<ul> <li>identify the measures that could be implemented to ensure compliance with the relevant criteria; and</li> </ul>			
	b. give the Secretary and landowner a copy of the independent review.			
S4 C5	If the independent review determines that the development is complying with the criteria in Schedule 4, then the Applicant may discontinue the independent review with the approval of the Secretary.	Not triggered	Not triggered	
	If the independent review determines that the development is not complying with the criteria in Schedule 4, and that the development is primarily responsible for this non-compliance, then the Applicant must:			
	a. implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the development complies with the relevant criteria; or			
	b. secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria,			
	to the satisfaction of the Secretary.			
	If the independent review determines that the development is not complying with the relevant acquisition criteria in Schedule 4, and that the development is primarily response for this non-compliance, then upon receiving a written request from the landowner, the Applicant must acquire all or part of the landowner's land in accordance with the procedures in Conditions 7 and 8 below.			

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
S4 C6	<ul> <li>If the independent review determines that the relevant criteria are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Applicant must: <ul> <li>a. implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or</li> <li>b. secure a written agreement with the landowner and other relevant mine/s to allow exceedances of the relevant impact assessment criteria,</li> <li>to the satisfaction of the Secretary.</li> </ul> </li> <li>If the independent review determines that the development is not complying with the relevant acquisition criteria in Schedule 4, but that more than one mine is responsible for the exceedance, then upon receiving a written request from the landowner, the Applicant must acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s in accordance with the procedures in Conditions 7 and 8 below.</li> </ul>	Not triggered	Not triggered
S4 C7	<ul> <li>Land Acquisition</li> <li>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on: <ul> <li>a. the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the: <ul> <li>existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>presence of improvements on the land and/or any approved building or structure which has been physically commenced on the land at the date of the landowner's written request, and is due to be completed subsequent to that date;</li> </ul> </li> <li>the reasonable costs associated with: <ul> <li>relocating within the Singleton or Muswellbrook local government areas, or to any other local government area determined by the Secretary; and</li> </ul> </li> </ul></li></ul>	Not triggered	Not triggered

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and</li> <li>c. reasonable compensation for any disturbance caused by the land</li> </ul>			
	acquisition process. However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.			
	Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to:			
	<ul> <li>consider submissions from both parties;</li> <li>determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;</li> </ul>			
	<ul> <li>prepare a detailed report setting out the reasons for any determination; and</li> </ul>			
	• provide a copy of the report to both parties. Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.			
	However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's determination, and any other relevant submissions.			
	Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Secretary determines otherwise.			
S4 C8	The Applicant must pay all reasonable costs associated with the land acquisition process described in Condition 7 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	Not triggered	Not triggered	
SCHED	ULE 5 – ENVIRONMENTAL MANAGEMENT, MONITOR	ING, AUDITING & REPORTIN	IG	
ENVIRON	MENTAL MANAGEMENT			
S5 C1	<ul> <li>Environmental Management Strategy</li> <li>If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: <ul> <li>a. be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;</li> <li>b. provide the strategic framework for the environmental management of the development;</li> <li>c. identify the statutory approvals that apply to the development;</li> <li>d. describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>e. describe the procedures that would be implemented to: <ul> <li>keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>resolve any disputes that may arise during the course of the development;</li> <li>respond to any non-compliance; and</li> <li>respond to emergencies; and</li> </ul> </li> </ul></li></ul>	Document Number: N/A Version: 4.0 Effective: 08/01/2019 The EMS was approved on 8/01/2019 by Howard Reed as nominee of the Secretary. The EMS was found to satisfy the relevant requirements of the current consents and has been prepared by suitably qualified and experienced person and was submitted to the Planning Secretary for approval. The EMS provides a range of procedures that are implemented to manage communication, complaints, incidents, and monitoring. Review of the communication, complaints, incidents registers found that HVO was implementing these procedures. The EMS references the various management plans for specific details for plans, programs, and monitoring requirements.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> <li>The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.</li> </ul>	During the site inspection and following review of associated management plans it was noted that HVO is satisfactorily implementing the EMS.		
S5 C2	<ul> <li>Management Plan Requirements</li> <li>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: <ul> <li>a. detailed baseline data;</li> <li>b. a description of:</li> <li>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>any relevant limits or performance measures/criteria; and</li> <li>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> <li>a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</li> <li>a program to monitor and report on the: <ul> <li>impacts and environmental performance of the development; and</li> <li>effectiveness of any manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</li> </ul> </li> <li>a program to investigate and implement ways to improve the environmental performance of the development over time;</li> <li>a protocol for managing and reporting any: <ul> <li>incidents;</li> <li>complaints;</li> <li>non-compliances with statutory requirements; and</li> </ul> </li> </ul></li></ul>	Refer to Section 3 of the audit report for comment on Management Plans.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	h. a protocol for periodic review of the plan; and			
	<ul> <li>a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of people who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.</li> </ul>			
	Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.			
S5 C2A	Relationships Between Management Plans	Refer to PA 06_0261 Sch 5 Cond 1B	Compliant	
	With the agreement of the Secretary, the Applicant may combine any strategy, plan, program or Annual Review required by this consent with any similar strategy, plan, program or Annual Review required for HVO South and Mt Thorley Warkworth mines or any other adjoining operation in common ownership or management.			
S5 C3	Updating & Staging Submission of Strategies, Plans or Programs	Refer to PA 06_0261 Sch 5 Cond 1C	Non-compliant	Refer to PA 06_0261 Sch 5
	To ensure the strategies, plans or programs under this consent are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis. With the agreement of the Secretary, the Applicant may revise any strategy, plan or program approved under this consent without undertaking consultation with all parties nominated under the applicable conditions in this consent.			Cond 1C
	<ul> <li>Notes:</li> <li>While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the existing operations associated with the development are covered by suitable strategies, plans or programs at all times.</li> </ul>			
	<ul> <li>If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.</li> </ul>			
S5 C4	Revision of Strategies, Plans & Programs	Observed CMO system, which	Compliant	
	Within 3 months of the:	includes tasks on a recurring basis for		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>a. submission of an incident report under condition 7 below;</li> <li>b. submission of an Annual Review under condition 9 below; or</li> <li>c. submission of an audit report under condition 10 below; and</li> <li>d. approval of a modification to this consent,</li> <li>the Applicant must review and if necessary revise, the strategies, plans and programs required under this consent, to the satisfaction of the Secretary.</li> <li>Within 6 weeks of conducting any such review, the Applicant must advise the Secretary of the outcomes of the review, and provide any documents that have been revised to the Secretary for review and approval.</li> <li>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and to incorporate any recommended measures to improve the environmental performance of the development.</li> </ul>	monthly management review, and reviews in response to incidents. Annual reports during the audit period identify status of management plans, indicating regular revisions and submission of management plans.		
S5 C5	<ul> <li>Adaptive Management The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:  <ul> <li>a. take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;</li> <li>b. 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; and </li> <li>c. implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</li> </ul></li></ul>	Approved management plans and annual reviews include review of environmental performance and regular updates.	Compliant	
COMMUNI	TY CONSULTATIVE COMMITTEE			
S5 C6	The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the Secretary. This CCC must be operated in general accordance with the <i>Community Consultative Committee (CCC) Guidelines for State Significant Projects</i> (Department of Planning, 2016, or its latest version)	Refer to PA 06_0261 Sch 5 Cond 8	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	Notes:		
	• The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.		
	• In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community.		
	• With the approval of the Secretary, the CCC may be combined with any similar CCC for the HVO Mine Complex.		
REPORTIN	NG		
S5 C7	Incident Reporting The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	A review of incident reports identified that incidents and non-compliances have been notified.	Compliant
S5 C8	<b>Regular Reporting</b> The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	A review of incident reports identified that incidents and non-compliances have been notified.	Compliant
S5 C9	<ul> <li>Annual Review</li> <li>By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must: <ul> <li>a. describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;</li> <li>b. include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the: <ul> <li>relevant statutory requirements, limits or performance measures/criteria;</li> <li>requirements of any plan or program required under this consent;</li> </ul> </li> </ul></li></ul>	Copies of annual reviews and monitoring reports are available on the website.	Compliant
	<ul> <li>monitoring results of previous years; and</li> </ul>		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>relevant predictions in the documents listed in condition 2 of Schedule 3;</li> </ul>			
	c. identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;			
	<ul> <li>identify any trends in the monitoring data over the life of the development;</li> </ul>			
	e. identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and			
	f. describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.			
	The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 6 of Schedule 6) and any interested person upon request.			
INDEPEND	DENT ENVIRONMENTAL AUDIT			
S5 C10	Prior to 1 December 2019, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:	Refer to PA 06_0261 Sch 5 Cond 5	Compliant	
	a. be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;			
	b. include consultation with the relevant agencies and the CCC;			
	<ul> <li>assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licences (including any assessment, plan or program required under these approvals);</li> </ul>			
	<ul> <li>review the adequacy of strategies, plans or programs required under the abovementioned approvals;</li> </ul>			
	e. recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals; and			
	f. be conducted and reported to the satisfaction of the Secretary. Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
S5 C11	Within 12 weeks of commencing each audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures proposed to address the recommendations.	Refer to PA 06_0261 Sch 5 Cond 5	Compliant	
ACCESS 1	O INFORMATION			
S5 C12	<ul> <li>By 31 December 2016, unless otherwise agreed by the Secretary, the Applicant must: <ul> <li>a. make the following information publicly available on its website:</li> <li>the documents listed in condition 2 of Schedule 3;</li> <li>current statutory approvals for the development;</li> <li>approved strategies, plans or programs required under the conditions of this consent;</li> <li>a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li> <li>a complaints register, updated quarterly;</li> <li>the Annual Reviews (over the last 5 years);</li> <li>any independent environmental audit, and the Applicant's response to the recommendations in any audit;</li> <li>any other matter required by the Secretary; and</li> </ul> </li> <li>keep this information up-to-date, to the satisfaction of the Secretary.</li> </ul>	Refer to PA 06_0261 Sch 5 Cond 9	Compliant	
APPEN	DIX 3 - NOISE COMPLIANCE ASSESSMENT			
Applicable	Meteorological Conditions			
APP3 1	<ul> <li>The criteria in Table 9 and 10 apply under all meteorological conditions except:</li> <li>a. during periods of rain or hail;</li> <li>b. when average wind speed at microphone height exceeds 5 m/s;</li> <li>c. when wind speeds greater than 3 m/s are measured at 10 m above ground level; or</li> <li>d. during temperature inversion conditions greater than 3°C/100 m.</li> </ul>	Noted and agreed by HVO.	Noted	

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations					
Determina	etermination of Meteorological Conditions							
APP3 2	Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be those recorded by the meteorological station located on the site.	Monthly Monitoring Reports identify that meteorological data acquired from HVO Cheshunt AWS and HVO Corporate AWS. Confirmed with Environmental Services.	Compliant					
Complian	ce Monitoring							
APP3 3	Attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.	Monthly Monitoring Reports and AERs identify that compliance is evaluated through attended monitoring as per the relevant conditions of approval.	Compliant					
APP3 4	<ul> <li>Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended or replaced from time to time), including the requirements relating to: <ul> <li>a. monitoring locations for collection of representative noise data;</li> <li>b. meteorological conditions during which collection of noise data is not appropriate;</li> <li>c. equipment used to collect noise data, and conformation with relevant Australian Standards for such equipment; and</li> <li>d. modifications to noise data collected, including the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.</li> </ul> </li> </ul>	<ul> <li>a) Reviewed noise monitoring locations shown on Figure 8.1 and representation of private receptors shown on Figure 8.2. Satisfied that attended monitoring locations are representative of receptors.</li> <li>b) Monthly Monitoring Reports detail meteorological conditions during attended noise monitoring events, including periods where noise limits do not apply.</li> <li>c. Sighted example of noise consultant's reports. Equipment, including calibration certificates provided.</li> <li>d. Reported noise monitoring event data in Monthly Monitoring Reports and AERs show corrections for low frequency noise and tonality.</li> <li>Reported noise monitoring event data in Monthly Monitoring Reports and</li> </ul>						

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		AERs show corrections for low frequency noise as required.		

## B.3 EPL640



## **EPL640 AUDIT CHECKLIST – HVO IEA 2022**

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Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
1 Admiı	nistrative Cond	litions				
A1 What t	he licence authorise	es and regulates				
A1.1	below at the premis their scheduled acti the scale of the ope Unless otherwise fu	urther restricted by a condition o	s are listed according to tivity classification and f this licence, the scale	Review of the annual reviews for the audit period indicates that works were within the scale specified in this condition.	Compliant	
	Scheduled Activity	ed Activity Fee Based Activity Scale				
	Coal works	Coal works	> 5000000 T annual handing capacity			
	Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity			
	Chemical production	Dangerous goods production	> 25000 T annual production capacity			
	Extractive activities	Extractive activities	<ul> <li>&gt; 50000 - 100000 T annually extracted or processed</li> </ul>			
	Mining for coal	Mining for coal	> 5000000 T annual production capacity			
		this licence, the licensee must c e limits imposed by this licence;				
	2. the activity scale this licence; and	e limits which apply for the repo	rting period specified in			
		e limits imposed by other legal in ntly in force under the <i>Environn</i> et 1979.				
A2 Premis	ses or plant to which	n this licence applies				
A2.1	The licence applies	to the following premises:		Noted	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Premises Details			
	HUNTER VALLEY OPERATIONS			
	LEMINGTON RD			
	SINGLETON			
	NSW 2330			
	PREMISES DEFINED BY PLAN TITLED "HVO EPL 640" DATED 17/2/2020 AND SHAPE FILES EPA REFERENCE DOC20/126645.			
A3 Other a	activities			
A3.1	This licence applies to all other activities carried on at the premises, including:	Noted	Compliant	
	Ancillary Activity			
	Sewage Treatment Systems			
A4 Inform	ation supplied to the EPA			
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:	Noted. HVO carry out the mining operation in accordance with approval requirements.	Compliant	
	<ol> <li>the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</li> </ol>			
	<ol><li>the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</li></ol>			
2 Disch	arges to Air and Water and Applications to Land			
P1 Locatio	on of monitoring/discharge points and areas			
P1.1	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or setting of limits for the emission of pollutants to the air from the point.	Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	

Cond No.	Condition	า			Comments & Evidence	Audit Findings	Recommendations
	EPA identi- fication no.	Type of Monitoring Point	Air Type of Discharge Point	Location Description	Missed TEOM Sample – 23 January 2020		
	13	Particulate Matter Monitoring		PM10 TEOM "Howick" at co-ordinates 308512 6411424 (Easting Northing) shown as 13 on Figure 1.	The daily environmental monitoring data validation checks on the 24th		
	15	Particulate Matter Monitoring		PM10 TEOM "Wandewoi" at co-ordinates 306985 6402010 (Easting Northing) shown as 15 on Figure 1. PM10 TEOM "Knodlers Lane" at	January confirmed that only 25.5% and 62.1% of data was captured at the		
	17	Particulate Matter Monitoring Particulate Matter		co-ordinates 317939 6397821 (Easting Northing) shown as 16 on Figure 1. PM10 TEOM "Golden Highway" at	Jerrys Plains and Wandewoi TEOM's respectively.		
	44	Monitoring Particulate Matter		co-ordinates 317439 6393199 (Easting Northing) shown as 17 on Figure 1. PM10 TEOM at co-ordinates 310986	It had been noted the previous day that the Jerrys Plains and Wandewoi dust		
		Monitoring		6406853 (Easting, Northing) shown as Proposed New Downwind TEOM on Figure 4.	monitors were showing offline due to a power outage in the area which was confirmed by the Ausgrid		
	Note: The EPA notes that Licensee will also use monitoring data from the Upper Hunter Air Quality Monitoring Network monitors at Maison Dieu and Warkworth when deriving a differential between upwind and downwind PM <sub>10</sub> concentrations.				website showing a map of power outage locations.		
		entrations.			Missed TEOM Sample – 2 December 2020		
					On 2 December 2020, the Warkworth and Knodlers Lane monitors failed to obtain a valid sample, resulting		
					in a sample capture percentage of 38.9% and 45.8% for the day respectively.		
					This was a result of an electrical storm on the evening of 1 December 2020 that resulted in a localised		
					power outage. The unit was inspected by the environmental contractor who reset the power and restored		
					full functionality at 1:10pm 02 December 2020.		
P1.2	this licence	e for the purpose		able below are identified in g and/or the setting of limits tilisation area.	Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	

Cond No.	Conditio	on			Comments & Evidence	Audit Findings	Recommendations
1.3	the purpo	the purposes of the monitoring and/or the setting of limits for discharges of			Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	
	-		Water and land				
	EPA Identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description			
	3	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge Quality Volume Monitoring	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge Quality Volume Monitoring	HRSTS discharge pipe from Dam 11 at co-ordinates 312977 6403914 (Easting Northing) shown as 3 on Figure 1.			
	4	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge Quality Volume Monitoring	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge Quality Volume Monitoring	Discharge end of outlet pipe on Parnell's Dam at co-ordinates 305730 6407150 (Easting, Northing) shown as 4 on Figure 1.			
	5	Alluvial Lands Discharge Point; Discharge quality and volume monitoring	Alluvial Lands Discharge Point; Discharge quality and volume monitoring	At the discharge end of the alluvial lands discharge pipeline at co-ordinates 310188 6400941 (Easting, Northing) shown as 5 on Figure 1.			
	8	Discharge of saline water under the Hunter River Salinity Trading Scheme Discharge Quality Volume Monitoring	Discharge of saline water under the Hunter River Salinity Trading Scheme Discharge Quality Volume Monitoring	Outlet of discharge pipe from Lake James storage dam at co-ordinates 317013 6400200 (Easting, Northing) shown as 8 on Figure 1.			
	23	Effluent quality monitoring Discharge to utilisation area	Effluent quality monitoring Discharge to utilisation area	Howick STP at co-ordinates 308701 6411439 (Easting, Northing) shown as 19 on Figure 2.			
	24	area	Discharge to utilisation area	Howick primary lagoon at co-ordinates 308736 6411486 (Easting, Northing) shown as 20 on Figure 2.			
	25	Effluent quality monitoring Discharge to utilisation area	Effluent quality monitoring Discharge to utilisation area	Howick secondary lagoon at co-ordinates 308786 6411432 (Easting, Northing) shown as 21 on Figure 2.			
	26	Effluent quality monitoring Discharge to utilisation area	Effluent quality monitoring Discharge to utilisation area	HVO North STP at co-ordinates 310586 6405945 (Easting, Northing) shown as 22 on Figure 2.			
	27	ulou	Discharge to utilisation area	HVO South STP at co-ordinates 316314 6399296 (Easting, Northing) shown as 26 On Figure 2.			

Cond No.	Condit	tion			Comments & Evidence	Audit Findings	Recommendations
	28	Effluent quality monitoring	Discharge to utilisation area Effluent quality monitoring	HVO South Primary Lagoon at co-ordinates 316450 6399332 (Easting, Northing) shown as 27 on Figure 2. HVO South secondary lagoon at			
	20	Discharge to utilisation area	Discharge to utilisation area	co-ordinates 316483 6399328 (Easting, Northing) shown as 28 on Figure 2.			
	45	Ambient water quality monitoring		Hunter River at co-ordinates 317420 6400253 (Easting Northing) shown as H1 Hunter River (upstream K Dam) on Figure 5.			
	46	Ambient water quality monitoring		Hunter River at co-ordinates 316709 6398332 (Easting Northing) shown as H2 Hunter R on Figure 5.			
	47	Ambient water quality monitoring		Hunter River at co-ordinates 318210 6396710 (Easting Northing) shown as H3 Hunter River downstream Wollombi on Figure 5.			
	48	Ambient water quality monitoring		Hunter River at co-ordinates 309084 6402481 (Easting Northing) shown as W1 Hunter River (Carrington) on Figure 5.			
	49	Ambient water quality monitoring		Hunter River at co-ordinates 306257 6400452 (Easting Northing) shown as W109 Hunter R. Moses Crossing on Figure 5.			
	50	Ambient water quality monitoring		Wollombi Brook at co-ordinates 314916 6396358 (Easting Northing) shown as W2 Wollombi Bk on Figure 5.			
	51	Ambient water quality monitoring		Hunter River at co-ordinates 312791 6402614 (Easting Northing) shown as W3 Hunter River on Figure 5.			
	52	Ambient water quality monitoring		Hunter River at co-ordinates 314040 6403837(Easting Northing) shown as W4 Hunter River (Oaklands) on Figure 5.			
	53	Ambient water quality monitoring		Wollombi Brook at co-ordinates 314314 6395044 (Easting Northing) shown as Warkworth Bridge Wollombi Brook on Figure 5.			
	54	Ambient water quality monitoring		Wollombi Brook at co-ordinates 317735 6396942 (Easting Northing) shown as WL1 Wollombi Bk on Figure 5.			
	55	Ambient water quality monitoring		Dam 19s at co-ordinates 314670 6397563 (Easting Northing)			
P1.4	licence	lowing points referred for the purposes of w or the emission of nois	eather and/or noise	monitoring and/or setting	The following points referred to in the table were used for the purposes of weather and/or noise monitoring and/or	Compliant	
			Noise/Weather				

d No.	Conditio	n		Comments & Evidence	Audit Findings	Recommendations
	EPA identi- fication no.	Type of monitoring point	Location description	setting limits for the emission of noise during the audit period.		
	9	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor at co-ordinates 303675 6402725 (Easting, Northing) shown as 9 on Figure 1.			
	11	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor at co-ordinates 314317 6394906 (Easting, Northing) shown as 11 on Figure 1.			
	18	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor at co-ordinates 305930 6399599 (Easting, Northing) shown as 18 on Figure 1.			
	19	Meteorological Station – to determine meteorological conditions for noise monitoring	Meterological Station at HVO Corporate at co-ordinates 310315, 6406189 (Easting, Northing) identified as Yellow Square at HVO Corporate on Figure 1.			
	21	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor at co-ordinates 317913 6399741 (Easting, Northing) shown as TBA on Figure 1.			
	22	Meteorological Station – to determine meteorological conditions for noise monitoring	Meteorological station in Cheshunt Pit at co-ordinates 314770 6398500 (Easting, Northing) shown as Yellow Square in Cheshunt Pit on Figure 1.			
	36	Noise monitoring	NMP 1A at co-ordinates 317994 6399021 (Easting, Northing) shown as NM1A on Figure 3.			
	37	Noise monitoring	NMP 1B at co-ordinates 318535 6398157 (Easting, Northing) shown as NM1B on Figure 3.			
	38	Noise monitoring	NMP 1C at co-ordinates 318570 6399332 (Easting, Northing) shown as NM1C on Figure 3.			
	39	Noise monitoring	NMP 2 at co-ordinates 321128 6396863 (Easting, Northing) shown as NM2 on Figure 3.			
	40	Noise monitoring	NMP 3 at co-ordinates 306014 6399906 (Easting, Northing) shown as NM3 on Figure 3.			
	41	Noise monitoring	NMP 4 at co-ordinates 305485 6401177 (Easting, Northing) shown as NM4 on Figure 3.			
	42	Noise monitoring	NMP 5 at co-ordinates 303718 6402475 (Easting, Northing) shown as NM5 on Figure 3.			
	43	Noise monitoring	NMP 6 at co-ordinates 303120 6403452 (Easting, Northing) shown as NM6 on Figure 3.			
5		urposes of Condition P1.1, P1.3 d "HVO EPL 640 Monitors" dated		Noted. HVO has installed monitoring equipment in accordance with this	Compliant	
	DOC20/1		THZIZOZO LI A NEIEIEIILE	requirement.		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
P1.6	For the purposes of Condition P1.1, P1.3 and P1.4 Figure 2 refers to the plan titled "HVO EPL640 Sewage Treatment Points and Mine Water Transfer Points" dated 17/2/2020 EPA Reference DOC20/126645.	Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	
P1.7	For the purposes of Condition P1.4 Figure 3 refers to the plan title "HVO EPL 640 Receptors" dated 17 February 2020, EPA Reference DOC20/126645.	Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	
P1.8	For the purposes of Condition P1.1 Figure 4 refers to the plan titled "Hunter Valley Operations Attachment 2 - Proposed Location for Downwind TEOM (EPA Point 20)" EPA Reference DOC20/790499.	Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	
P1.9	For the purposes of Condition P1.3 Figure 5 refers to the plan titled "Attachment 1 - HVO Ambient Water Quality Monitoring" dated 24/9/2020, EPA Reference DOC20/790499.	Noted. HVO has installed monitoring equipment in accordance with this requirement.	Compliant	
P.10	The datum for grid references in this Licence is the Geodetic Datum of Australia 1994 (GDA94), Zone 56.	Noted.	Compliant	
P1.11	The Licensee is authorised to transfer saline mine water to United Colliery, Wambo Mine, Liddell Coal Mine, Ravensworth Mine and Warkworth Coal Mine.	Noted. During the audit period saline mine water was transferred to Liddell Coal and reported in the site water balance and annual reviews in 2020, 2021 and 2022.	Compliant	
3 Limit	Conditions			
L1 Polluti	on of waters			
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Refer to response to Sch. 3 Cond. 20 of DA 450-10-2003 and Sch. 3 Cond. 25 of PA_06_0261. All uncontrolled discharges are claimed to have not caused environmental harm as outlined in the respective incident reports prepared by HVO.	Compliant	
L2 Conce	ntration limits			
L2.1	For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	HRSTS TSS exceedance – 23 March 2021 Parnells Dam exceeded discharge limits for Total Suspended Solids	Non-compliant	

Cond No.	Con	dition						Comments & Evidence	Audit Findings	Recommendations
								(TSS) during HRSTS discharge on 24 March. The sample returned a TSS of 266 mg/L vs EPL limit of 120mg/L. Due to Flood Flow in the Hunter River at the time there was no potential for environmental harm. An investigation was undertaken however a cause was not able to be confirmed. TSS samples taken up to and after the 24 March were well below the limit. Continuous Turbidity monitoring was occurring and did not indicate an increasing trend. Notified to DPE and EPA with an incident report.		
L2.2			uality limit is s ust be within t			he specifie	d percentage	Compliant with all recorded pHs within limits	Compliant	
L2.3			doubt, this co pollutant othe					Noted.	Noted	
L2.4	Wate POINT		Land Concen	tration Limit	ts			Noted	Noted	
		Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit			
		рН	рН				6.5 - 9.5			
		Total suspended solids	milligrams per litre				120			

Cond No.	Con	dition						Comments & Evidence	Audit Findings	Recommendations
	POINT	r 5								
		Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit			
		Conductivity	microsiemens per centimetre				400			
	POINT	POINT 8								
		Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit			
		рН	рН				6.5 - 9.5			
		Total suspended solids	milligrams per litre				120	_		
L2.5	abov of th	ve, waste v ne waste w	water must n	ot be disch er than the	arged from	Point 5 if the	5 in the table he conductivity eiving waters	No discharge from point 5 has occurred during the audit period.	Compliant	
L3 Volume	e and	mass limi	its							
L3.1	<ul> <li>For each discharge point or utilisation area specified below (by a point number), the volume/mass of:</li> <li>1. liquids discharged to water; or;</li> <li>2. solids or liquids applied to the area; must not exceed the volume/mass limit specified for that discharge point or area.</li> </ul>							Compliant with volumes within limits specified. It is noted on 20 <sup>th</sup> March 2021, that an inaccurate, elevated reading of discharge occurring from Point 4 due to a weir plate blocking the flume. This non-compliance was detailed in the Annual Return where it	noted on 20 <sup>th</sup> March inaccurate, elevated charge occurring from a weir plate blocking the on-compliance was	
	Point		Unit of Measure		Volum	e/Mass Limit		is stated that the actual discharge rate		
	3		megalitres per day		100			was less than the EPL limit.		
	4		megalitres per day megalitres per day		130 7					
	8		megalitres per day		200					
L4 Waste										
L4.1	the   "Wa	premises, ste" and m		astes expre efinition, if a	essly referre	ed to in the	e received at column titled d	Dockets were sighted for the receipt of gypsum plasterboard on site in April 2021, September 2021 during the audit. Analytical results and letter of compliance for land application of these materials were also available.	Compliant	

Cond No.	Condi	ition				Comments & Evidence	Audit Findings	Recommendations
	referre below. Any w if any, "Other	aste received at the ed to in relation to th aste received at the referred to in relation Limits" in the table ondition does not lin	nat waste in the co e premises is subje on to that waste co e below.	lumn titled "Active ect to those limits ontained in the co	vity" in the table s or conditions, plumn titled			
	Code	Waste	Description	Activity	Other Limits			
	NA	Compost (The compost exemption 2016-NSW EPA)	Application of compost as soil ameliorant for mine rehabilitation.	As specified in each particular resource recovery exemption	The Licensee must comply with The compost exemption 2016.			
	NA	Gypsum plaster board	Application of recovered plasterboard as soil ameliorant for mine rehabilitation	As specified in each particular resource recovery exemption	The Licensee must comply with The recovered plasterboard exemption 2014			
L4.2		censee must not di ised to do so by a d			es unless	No evidence of waste disposal outside these licence conditions was observed during the site inspection.	Compliant	
L4.3	Liddell	censee is authorise I Coal Mine, Wamb /line for storage and	o Coal Mine, Rave	ensworth Mine ar	nd Warkworth	Noted. No mine water transfers to HVO were noted on the site water balances during the audit period.	Compliant	
L4.4	and m	censee is authorise ust comply with the ery Order 2014.				Not triggered.	Not triggered	
L5 Noise I	limits							
L5.1	Noise generated at the premises must not exceed the noise limits presented in the table below.					One LA1,1min exceedance (22 July 2020) from dragline at EPA ID 41. Dragline shut down and progressively restarted while measurements taken. Follow-up monitoring was below the criteria with five additional 1-minute measurements on the night and additional measurements taken the following week with no exceedances recorded. EPA and DPE notified. Constitutes non-compliance with EPL.	Non-compliant	

Cond No.	Condition					Comments & Evidence	Audit Findings	Recommendations
	Location	Day LAeq(15min)	Evening LAeq(15min)	Night LAeq(15min)	Night LA1(1min)			
	EPA Point 36 in NMG 1A			41	46			
	EPA Point 37 in NMG 1B			40	46			
	EPA Point 38 in NMG 1C			39	46			
	EPA Point 39 in NMG 2			37	46			
	EPA Point 40 in NMG 3			39	46			
	EPA Point 41 in NMG 4			39	46			
	EPA Point 42 in NMG 5			40	46			
	EPA Point 43 ini NMG 6			40	46			
	Residence 160 - Bowman in NMG 1A	41	41	41	45			

Cond No.	Condition					Comments & Evidence	Audit Findings	Recommendations
	Residence 256 - Moxey in NMG 1A	41	41	41	45			
	Residence 161 - Shearer in NMG 1A	41	41	41	45			
	Residence 162, 163, 258, 260 & 261 on Shearers Lane in NMG 1A	41	41	41	45			
	Residence 121 - Ernst in NMG 1B	40	40	40	45			
	Residence 123 - Nelson in NMG 1B	40	40	40	45			
	Residence 120 - Clifton and Edwards in NMG 1B and residences within 250m of this residence, not otherwise listed in this table	40	40	40	45			
	Maison Dieu residences 244, 245,246 & 247 in NMG 1C within 1km if Shearers Lane, not otherwise listed in this table	39	39	39	45			
	Residence 127 - Riley in NMG 2	37	37	37	45			
	All other Maison Dieu residences not listed in this table	35	35	35	45			
	Residence 323 - Bennett in NMG 4	40	40	40	46			
	Residence 322 - Nichols in NMG 4	40	40	40	46			
	Residence 308 - Cooper in NMG 4	39	39	39	46			
	Residence 310 - Northcote in NMG 4	39	39	39	45			
	Residence 311 - Elisnore in NMG 4	39	39	39	46			
	Residence 317 - Gee in NMG 4	39	39	39	46			
	Residence 434 - Murphy in NMG 4	39	39	39	46			
	Residence 436 - Skinner in NMG 4	39	39	39	46			
	Residence 321 - Hayes in NMG 4	40	40	40	46			

Cond No.	Condition					Comments & Evidence	Audit Findings	Recommendations
	Jerrys Plains Village and Jerrys Plains West residences 399, 379, 376, 378, 380-383, 387-409, 411, 413-415, 419-423, 362 - 375, 377, 384, 385, 417, 418, 424, 354, 339-353, 355-361, 334, 328, 329, 331-333, 335-338, 326, 327, 330, 437, 8 438	40	40	40	46			
	All Jerrys Plains Road residences not otherwise listed in this table All other privately owned land in	35 43	35 43	35 43	46 45			
	Warkworth Village All other privately owned land	35	35	35	45			
L5.2	<ul> <li>For the purposes of Condition L5.1:</li> <li>1. Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,</li> <li>2. Evening is defined as the period from 6pm to 10pm, and</li> <li>3. Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays</li> </ul>				n, and	Noted and acknowledged by HVO.	Noted	
L5.3	<ol> <li>Conditions exc 1. Wind spee ground lev         2. Stability ca greater that         </li> </ol>	ept for the ds greater el; ategory F te an 2 metres ategory G te	following: than 3 metres emperature inv s/second at 10 emperature inv	/second at 10 m		Noted and acknowledged by HVO. Noise monitoring and assessment has been undertaken in accordance with the specified meteorological conditions.	Compliant	
L5.4	at EPA Ide	ded by the entification	meteorologica Point 19 or 22		ed on the premises nore representative, ns; and	Monitoring reports identify that meteorological data acquired from EPA Point 19 (HVO Corporate) or 22 (Cheshunt Pit).	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ol> <li>Temperature inversion conditions (stability category) are to be determined by the methods referred to in Fact Sheet D of the Noise Policy for Industry (2017).</li> </ol>	NMP states that temperature inversion will be determined by the methods referred to in Fact Sheet D of the NPfI. Confirmed with Environmental Services that stability class determined from onsite meteorological monitoring using sigma theta method as per Fact Sheet D of the NPfI.		
L5.5	For the purposes of Condition L5.1 noise limits and sensitive receiver numbers have been consolidated from HVO North DA 450-10-2003 Modification 7 dated July 2017, HVO South PA 06_0261 Modification 5 dated 28 February 2018 and the report titled " <i>Hunter Valley Operations</i> <i>Noise Management Groups for Environment Protection Licence 640</i> " dated January 202 Revision B prepared by Global Acoustics Pty Ltd (EPA Reference DOC20/126645-7).	Noted	Compliant	
L6 Blasting	9			
L6.1	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.	Blasting occurred between 7am and 6pm Monday to Saturday only. No blasting on Sundays or public holidays. No more than 3 blasts per day and max per week of 9.	Compliant	
L6.2	The airblast overpressure level from blasting operations in or on the premises must not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; at either monitoring point 9, 11, 18 or 21 in Condition P1.4.	The airblast overpressure level from blasting operations did not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period during the audit period.	Compliant	
L6.3	The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; at either monitoring point 9, 11, 18 or 21 in Condition P1.4.	The airblast overpressure level from blasting operations did not exceed: 120 dB (Lin Peak) during each reporting period during the audit period.	Compliant	
L6.4	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: 5 mm/second for more than 5% of the total number of blasts during each reporting period; at either monitoring point 9, 11, 18 or 21 in Condition P1.4.	Ground vibration peak particle velocity from blasting operations within specified limits.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
L6.5	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: 10 mm/second at any time; at either monitoring point 9, 11, 18 or 21 in Condition P1.4.	Ground vibration peak particle velocity from blasting operations within specified limits.	Compliant	
L6.6	<ul> <li>Offensive blast fume must not be emitted from the premises.</li> <li>Definition:</li> <li>Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:</li> <li>1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or</li> <li>2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.</li> </ul>	A complaint was received regarding odour following 3 blasts from the Cheshunt P2 area on 26 May 2021. Investigation of this incident identified that the complainant was located approximately 8.5km distant from the site, and given the scale of the blasts, the weather conditions, that the odour was unlikely to have been caused by the blasts.	Compliant	
L7 Potent	ially offensive odour			
L7.1	No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of Environment Operation Act 1997. Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.	A complaint was received regarding odour following 3 blasts from the Cheshunt P2 area on 26 May 2021. Investigation of this incident identified that the complainant was located approximately 8.5km distant from the site, and given the scale of the blasts, the weather conditions, that the odour was unlikely to have been caused by the blasts.	Compliant	
L8 Other I	imit conditions			•
L8.1	Ammonium Nitrate Emulsion Plant The licensee must not produce more than 116,000 tonnes per annum of ammonium nitrate emulsion product at the premises.	Since the ANE plant commenced production, 18kt ANE has been produced.	Compliant	
4 Opera	ating Conditions			
O1 Activit	ies must be carried out in a competent manner			
01.1	Licensed activities must be carried out in a competent manner.	HVO maintains an effective management system to track and	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ol> <li>This includes:</li> <li>the processing, handling, movement and storage of materials and substances used to carry out the activity; and</li> <li>the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</li> </ol>	ensure compliance, maintenance and monitoring requirements.		
O2 Mainte	nance of plant and equipment			
O2.1	<ul><li>All plant and equipment installed at the premises or used in connection with the licensed activity:</li><li>1. must be maintained in a proper and efficient condition; and</li><li>2. must be operated in a proper and efficient manner.</li></ul>	Plant and equipment used on site is subject to regular maintenance.	Compliant	
O2.2	Sewage Treatment System The licensee is responsible for the correct operation of the sewage treatment system on the premises.	Noted	Noted	
O2.3	Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.	Observations of operations and maintenance records on site indicated that the sewage treatment system was appropriately operated and maintained at the time of the audit.	Compliant	
O2.4	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Observations of operations and maintenance records on site indicated that the sewage treatment system was appropriately operated and maintained at the time of the audit.	Compliant	
O2.5	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.4.	Observations of operations and maintenance records on site indicated that the sewage treatment system was appropriately operated and maintained at the time of the audit.	Compliant	
O2.6	<ul> <li>The licensee must prepare a sewage treatment system maintenance program. The program must include:</li> <li>1. Certification from the system provider that the sewage treatment system is operating within its capacity;</li> <li>2. Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and</li> <li>3. Provide written records of each quarterly inspection.</li> </ul>	Observations of operations and maintenance records on site indicated that the sewage treatment system was appropriately operated and maintained at the time of the audit.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
O3 Dust				
03.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Observations on site during the audit inspection, the AQGGMP and real time monitoring system indicate that reasonable and feasible measures are in place to minimise the emission of dust from the premises.	Compliant	
O3.2	Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind- blown or traffic generated dust.	Observations on site during the audit inspection, the AQGGMP and real time monitoring system indicate that reasonable and feasible measures are in place to minimise the emission of dust from the premises.	Compliant	
O3.3	All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	Observations on site during the audit inspection, the AQGGMP and real time monitoring system indicate that reasonable and feasible measures are in place to minimise the emission of dust from the premises.	Compliant	
03.4	Trucks transporting coal from the premises must be covered immediately after loading to prevent wind blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	Observations on site during the audit inspection, the AQGGMP and real time monitoring system indicate that reasonable and feasible measures are in place to minimise the emission of dust from the premises.	Compliant	
O3.5	The tailgates of all haulage trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of material.	Observations on site during the audit inspection, the AQGGMP and real time monitoring system indicate that reasonable and feasible measures are in place to minimise the emission of dust from the premises.	Compliant	
O4 Efflue	nt application to land			
O4.1	The licensee must ensure that the effluent discharge utilisation area perimeter is fenced and signposted and controlled in a manner to ensure exclusion of persons from that area.	The site does not operate an effluent discharge utilisation area. All effluent is pumped out.	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
O4.2	The licensee must ensure that sprays or mists from irrigation do not drift beyond the boundary of the effluent discharge utilisation area and that no ponding occurs.	The site does not operate an effluent discharge utilisation area. All effluent is pumped out.	Not triggered	
O4.3	Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.	The site does not operate an effluent discharge utilisation area. All effluent is pumped out.	Not triggered	
O5 Emerg	ency response			
O5	Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.	Pollution Incident Response Management Plan is in place, current version 8.0 effective 09/03/2022 to 09/03/2023	Compliant	
O6 Waste	management			
O6.1	<ul> <li>Heavy Plant-Tyre Disposal</li> <li>The Licensee is authorised to dispose of heavy Plant-tyre waste generated on the premises, in the pit. The Licensee must:</li> <li>1. ensure that heavy Plant waste tyres are re-used on the premises as much as practical;</li> </ul>	Heavy plant tyre disposal reports were observed for the site and submitted with annual returns.	Compliant	
	<ol> <li>ensure that any surplus heavy Plant waste tyres can be emplaced by being spread out on the pit-floor and buried as deep as practical, but, covered by at least 20m of inert material beneath any final rehabilitated surface;</li> <li>place heavy Plant waste tyres at least 10m away from coarse reject</li> </ol>			
	material or tailings emplacement areas;			
	4. not place any heavy Plant waste tyres near heated material;			
	5. not place any heavy Plant waste tyres in an area likely to leach to any water-course.			

Cond No	. Condition	Comments & Evidence	Audit Findings	Recommendations
O7 Othe	r operating conditions			
07.1	There must be no incineration or open burning of any material(s) on the premises, except as specifically authorised by the EPA.	No burning undertaken during the audit period.	Compliant	
07.2	All above-ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.	Observations on site indicated storage areas were appropriately bunded.	Compliant	
5 Moni	itoring and Recording Conditions			
M1 Moni	toring records			
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Copies of annual reviews and monitoring reports are available on the web site, and records are maintained on site	Compliant	
M1.2	<ul> <li>All records required to be kept by this licence must be:</li> <li>1. in a legible form, or in a form that can readily be reduced to a legible form;</li> <li>2. kept for at least 4 years after the monitoring or event to which they relate took place; and</li> <li>3. produced in a legible form to any authorised officer of the EPA who asks to see them.</li> </ul>	Copies of annual reviews and monitoring reports are available on the web site, and records are maintained on site	Compliant	
M1.3	<ul> <li>The following records must be kept in respect of any samples required to be collected for the purposes of this licence:</li> <li>1. the date(s) on which the sample was taken;</li> <li>2. the time(s) at which the sample was collected;</li> <li>3. the point at which the sample was taken; and</li> <li>4. the name of the person who collected the sample.</li> </ul>	Copies of annual reviews and monitoring reports are available on the web site, and records are maintained on site	Compliant	
M2 Requ	irement to monitor concentration of pollutants discharged			•
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Noted	Noted	
M2.2	Air Monitoring Requirements	Noted	Noted	

Cond No	D. Conditio					Comments & Evidence	Audit Findings	Recommendations	
			•			_			
	Pollu PM10		Units of measure	Frequency	Sampling Method AM-22				
			micrograms per cubic metre	Continuous	AW-22				
M2.3	Water ar POINT 3,4	nd/ or Lar	nd Monitoring Requir	ements		Sighted 2019, 2020, 2021 Annual Reviews, monthly environmental			
	Pollut	tant	Units of measure	Frequency	Sampling Method	monitoring reports from January 2022		a scour pool located in front o	
	Condu	uctivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm	until November 2022 and 2020 and		the discharge pipe during the audit site inspection. This poo	
	рН		рН	Daily during any	Grab sample	2021 Annual Returns which stated one		contained turbid water so it we appear that it is susceptable t	
	Total s	suspended	milligrams per litre	discharge Daily during any	Grab sample	non-compliance with this this condition.		erosion. Suggest that the area	
	POINT 3,4,8			discharge	and and a	On 24 <sup>th</sup> March 2021, there was a		stabilised (i.e. rock/concrete)	
			Unite of more service		On the Mathead	period where the Conductivity was not		prevent released water from creating erosion and becoming turbid once leaving the outlet pipe.	
	Pollut		Units of measure nephelometric turbidity units	Frequency Continuous during	Sampling Method Probe	continuously recorded due to the water			
	Turbic	arty	hephelometre tarbiaty anto	discharge	TIODE	level dropping below the level of the			
	POINT 5					sensor. Discharge was stopped until			
	Pollut	tant	Units of measure	Frequency	Sampling Method	the sensor was relocated.			
	Condu	Conductivity microsiamens per Special Frequency 1 Probe	The calculation spreadsheets were						
	POINT 8					sighted for all discharges over the			
	Pollut	tant	Units of measure	Frequency	Sampling Method	reporting period for Points 3, 4 and 8.			
	Condu	uctivity	microsiemens per centimètre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm				
	pН		рН	Daily during any discharge	Grab sample				
	Total s	suspended	milligrams per litre	Daily during any discharge	Grab sample				
	POINT 23,25,	26,29							
	Pollut	tant	Units of measure	Frequency	Sampling Method				
		al Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample				
	pH         pH         Quarterly         Grab sample           POINT         45.46.47.48.49.50.51.52.53.54			_					
				-					
	Pollut		Units of measure microsiemens per	Frequency Sampling Method Quarterly Grab sample					
	condu		centimetre						
	pH Total solids	suspended	pH milligrams per litre	Quarterly Quarterly	Grab sample Grab sample				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	POINT 55 Pollutant	11-:		On marking a Mathead			
	Ammonia	Units of measure milligrams per litre	Frequency Every 6 months	Sampling Method Grab sample			
	Nitrogen (total) Total petroleum hydrocarbons	milligrams per litre milligrams per litre	Every 6 months Every 6 months	Grab sample Grab sample			
	Note: Special Fre	equency 1 means:					
		ery 10 minutes dur	0 0				
		EPA after review o		t 3, 4 and 8 will be iring HRSTS			
M2.4	has been commi	ust advise the EPA ssioned. Until that 44 to monitor partic	time the Licensee	ne TEOM at EPA 44 may use an E-	The TEOM at EPA 44 was commissioned 16/03/2022.	Compliant	
M3 Testing	g methods – conc	centration limits					
M3.1	be conducted by 1. any methodol	licence must be do logy which is requi	one in accordance red by or under th	e Act to be used for	Monitoring methodologies were reviewed and consistent with the requirements.	Compliant	
	2. if no such req		ed by or under the				
	of this licence		approved in writi	Act or by a condition ng by the EPA for the place.			
	2021 requires test with test methods	sting for certain pu	poses to be cond publication "Appro	Clean Air) Regulation ucted in accordance ved Methods for the			
M3.2	for the concentra utilisation area m Publication unles	ition of a pollutant of	discharged to wate ordance with the has been approve	Approved Methods	Monitoring methodologies were reviewed and consistent with the requirements.	Compliant	
M3.3				vity by grab sample is M Australia Method:	Noted	Noted	

Cond No.	Condition					Comments & Evidence	Audit Findings	Recommendations
	Conductivity by classical using APHA 2510 B (EPA approval DOC18/17513-08).							
M3.4	undertaken in	accordance with	is pf pH by grab sa n AECOM Australi Approval DOC18/1	a Method: pH		Noted	Noted	
M4 Weath	ner monitoring							
M4.1	and obtaining the table below measure, aver	results by analy v, using the corr	y, the licensee mus sis) the parameter responding sampli d sampling freque pectively.	s specified in (	Column 1 of its of	Monitoring methodologies were reviewed and consistent with the requirements.	Compliant	
	Parameter Siting	Sampling method	Units of measure	Averaging period	Frequency			
		AM-1 & AM-4	-	-	-			
	Temperature a 10 metres		degrees Celsius	10 minutes	Continuous			
	Relative humidity	AM-4	percent	10 minutes	Continuous			
	Rainfall	AM-4	millimetres per hour	10 minutes	Continuous			
	Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous			
	Wind Direction at 10 metres	AM-2 & AM-4	Degrees	10 minutes	Continuous			
	Sigma Theta	AM-2 & AM-4	Degrees	10 minutes	Continuous			
	Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous			
M5 Recor	ding of pollutio	n complaints				3		
M5.1	licensee or an	y employee or a	ble record of all co gent of the license ch this licence ap	ee in relation to		A complaints register is maintained on site, and records for the audit period were observed during the site audit.	Compliant	
M5.2	<ul> <li>The record must include details of the following:</li> <li>1. the date and time of the complaint;</li> <li>2. the method by which the complaint was made;</li> <li>3. any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;</li> <li>4. the nature of the complaint;</li> <li>5. the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and</li> </ul>				that effect;	A complaints register is maintained on site, and records for the audit period were observed during the site audit.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	6. if no action was taken by the licensee, the reasons why no action was taken.			
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	A complaints register is maintained on site, and records for the audit period were observed during the site audit.	Compliant	
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Not triggered during the audit period.	Not triggered	
M6 Teleph	none complaints line			
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Review of website indicated these requirements are met	Compliant	
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Review of website indicated these requirements are met	Compliant	
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Noted	Noted	
M7 Requir	rement to monitor volume or mass			
M7.1	<ul> <li>For each discharge point or utilisation area specified below, the licensee must monitor:</li> <li>1. the volume of liquids discharged to water or applied to the area;</li> <li>2. the mass of solids applied to the area;</li> <li>3. the mass of pollutants emitted to the air;</li> <li>at the frequency and using the method and units of measure, specified below.</li> </ul>	Discharges from Points 3, 4 and 8 occurred during the audit period. The HRSTS Discharge Reports and calculation spreadsheets were sighted showing compliance with this condition	Compliant	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	POINT 3 Frequency Unit of Measure Sampling Method						
	Continuous during discharge	megalitres per day	Flow meter and conti	inuous logger			
	POINT 4						
	Frequency Continuous during discharge	Unit of Measure megalitres per day	Sampling Method Flow meter and conti	inuous logger			
	POINT 5						
	Frequency Special Frequency 1	Unit of Measure megalitres per day	Sampling Method Special Method 1				
	POINT 8						
	Frequency Continuous during discharge	Unit of Measure megalitres per day	Sampling Method Flow meter and conti	inuous logger			
	Note: The Licensee n and Continuous Logg the Licensee may use	er at EPA 4 has b	een commissioned.	Until that time			
M7.2	Special Frequency 1 discharge. Special Method 1 me			C C	Discharges from Points 3, 4 and 8 occurred during the audit period. The HRSTS Discharge Reports and calculation spreadsheets were sighted showing compliance with this condition	Compliant	
M8 Blastin	ng						
M8.1	<ul> <li>To determine compliance with conditions L6.2, L6.3, L6.4 and L6.5:</li> <li>1. Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring 8, 11, 18 and 21 for the parameters specified in Column 1 of the table below; and</li> </ul>				Blast monitoring was undertaken in accordance with Conditions L6.2 to L6.5 during the audit period.	Compliant	
	sample at the free	quency specified o	pposite in the other	columns.	Observed blast on 29 November 2022.		
		Units of Measure	Frequency	Sampling Method	Confirmed measurement of airblast		
		Decibels (Linear Peak) millimetres/second		Australian Standard AS 2187.2-2006 Australian Standard AS	overpressure and ground vibration for monitors 8, 11, 18 and 21.		
	Particle Velocity			2187.2-2006			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		Units of measure, sampling method and frequency noted from blast reports and AERs.		
M9 Other	monitoring and recording conditions			
M9.1	HRSTS Monitoring The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 3, 4 and 8 available to the "Service Coordinator" within one hour of those measurements being taken and makes them available in the format specified in the "Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification - Rev V1.0" released 4 October 2018 by Water NSW.	Sighted WaterNSW Real time data spreadsheets covering the audit period.	Compliant	
M9.2	The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.	Sighted monthly calibration reports covering the audit period	Compliant	
M9.3	The licensee must mark monitoring point(s) 3, 4 and 8 with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.	Sighted signs at point 3 and 4 during inspection and photo supplied for point 8.	Compliant	
M9.4	<b>Requirement to Monitor Particulate Matter</b> The Licensee must record the average PM <sub>10</sub> concentration at monitoring points 13, 15, 16 17 and 44 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.	Noted – no request made during the audit period.	Compliant	
M10 Noise	e monitoring			
M10.1	To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring point in accordance with the table below: POINT 36,37,38,39,40,41,42,43 Assessment period Minimum frequency in a Minimum duration within Minimum number of	Attended noise monitoring was undertaken in accordance with Conditions L3.2 to L3.5 and M9.1 during the audit period.	Compliant	
	reporting period         assessment period         assessment period           Night         Monthly         15 minutes         1 operation day	-		
M10.2	<ul> <li>To assess compliance with condition L5.1, attended noise monitoring must be undertaken in accordance with Conditions L5.2 to L5.4:</li> <li>1. At EPA points 36, 37, 38, 39, 40, 41, 42 and 43 identified in P1.4; and</li> </ul>	Attended noise monitoring was undertaken in accordance with	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ol> <li>Occur every calendar month in a reporting period; and</li> <li>Occur during one night time period as defined in the Noise Policy for Industry 2017 for a minimum of 15 minutes at each location from a).</li> </ol>	Conditions L5.2 to L5.4 during the audit period.		
		<ul><li>a) Monitoring undertaken at EPA points identified in P1.4.</li><li>b) Occurred during each calendar</li></ul>		
		month in a reporting period. Monitoring undertaken during a night period for a minimum of 15minutes.		
M10.3	Where required in writing by the EPA, the Licensee must carry out attended monitoring at any sensitive receivers referred to in condition L5.1 in addition to the monitoring required by Condition M10.1.	No request received during the audit period.	Not triggered	
6 Repoi	rting Conditions			
R1 Annua	l return documents			
R1.1	<ul> <li>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</li> <li>1. a Statement of Compliance,</li> <li>2. a Monitoring and Complaints Summary,</li> <li>3. a Statement of Compliance – Licence Conditions,</li> <li>4. a Statement of Compliance – Load based Fee,</li> <li>5. a Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan,</li> <li>6. a Statement of Compliance – Requirement to Publish Pollution Monitoring Data; and</li> <li>7. a Statement of Compliance – Environmental Management Systems and Practices.</li> <li>At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.</li> </ul>	Annual returns for 2019, 2020 and 2021 were viewed during the audit.	Compliant	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Annual returns for 2019, 2020 and 2021 were viewed during the audit.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
R1.3	<ul> <li>Where this licence is transferred from the licensee to a new licensee:</li> <li>1. the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and</li> <li>2. the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.</li> <li>Note: An application to transfer a licence must be made in the approved form for this purpose.</li> </ul>	Not triggered.	Not triggered	
R1.4	<ul> <li>Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</li> <li>1. in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</li> <li>2. in relation to the revocation of the licence - the date from which notice revoking the licence operates.</li> </ul>	Not triggered.	Not triggered	
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect <i>EPA</i> or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Annual returns for 2019, 2020 and 2021 were viewed during the audit.	Compliant	
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Annual returns for 2019, 2020 and 2021 were viewed during the audit.	Compliant	
R1.7	<ul> <li>Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</li> <li>1. the licence holder; or</li> <li>2. by a person approved in writing by the EPA to sign on behalf of the licence holder.</li> </ul>	Annual returns for 2019, 2020 and 2021 were viewed during the audit.	Compliant	
R2 Notific	ation of environmental harm			
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Evidence provided for spill from Dam 15N on 6 <sup>th</sup> July 2022 stating phone call made to EPA. Other spills not reported by HVO as water sampling concluded		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
		receiving water quality poorer than water spilling from sediment dams.		
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.	Sighted letter (dated 23 July 2021) to EPA regarding notification of exceedance of noise criteria for event on 22 July 2021. Notification provided within 7 days of incident. Refer to response to Sch. 3 Cond. 20 of DA 450-10-2003 and Sch. 3 Cond. 25 of PA_06_0261 outlining incident reports and compliance with this condition.	Compliant	
R2.3	The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Evidence provided for spill from Dam 15N on 6 <sup>th</sup> July 2022 stating phone calls made to EPA, Fire and Rescue, Ministry of Health, Safework NSW and Singleton Shire Council. Other spills not reported by HVO as water sampling concluded receiving water quality poorer than water spilling from sediment dams.	Compliant	
R3 Writter	n Report			
R3.1	<ul> <li>Where an authorised officer of the EPA suspects on reasonable grounds that:</li> <li>1. where this licence applies to premises, an event has occurred at the premises; or</li> <li>2. where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,</li> <li>and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.</li> </ul>	Not triggered.	Not triggered	
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	Not triggered.	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
R3.3	<ul> <li>The request may require a report which includes any or all of the following information:</li> <li>1. the cause, time and duration of the event;</li> <li>2. the type, volume and concentration of every pollutant discharged as a result of the event;</li> <li>3. the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;</li> <li>4. the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;</li> <li>5. action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</li> <li>6. details of any measure taken or proposed to be taken to prevent or</li> </ul>	Not triggered.	Not triggered	
	mitigate against a recurrence of such an event; and			
	7. any other relevant matters.			
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Not triggered.	Not triggered	
R4 Other	notifications			
R4.1	Notification of Pollution of Waters The Licensee must notify the EPA by telephoning the Environment Line service on 131555 immediately after the Licensee becomes aware of any contravention or potential contravention of Condition L1 of the Licence.	Evidence provided for spill from Dam 15N on 6 <sup>th</sup> July 2022 stating phone call made to EPA.	Compliant	
R4.2	The Licensee must provide written details of the notification to the EPA within seven days of the date of the notification.	Refer to response to Sch. 3 Cond. 20 of DA 450-10-2003 and Sch. 3 Cond. 25 of PA_06_0261 outlining incident reports and compliance with this condition.	Compliant	
R4.3	Blast Exceedance Notification and Reporting The Licensee must report any exceedance of Licence blasting limits to the EPA by telephoning the Environment Line service on 131555 or emailing info@epa.nsw.gov.au as soon as practicable after the exceedance	No exceedances during audit period.	Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	becomes known to the Licensee or to one of the Licensee's employees or agents.			
R4.4	Within seven days of notifying the EPA of an exceedance of Licence blast limits, the Licensee must provide the EPA a report in writing that explains the cause of the exceedance and the actions taken to prevent future exceedances of blast limits.	No exceedances during audit period.	Not triggered	
R4.5	Noise Exceedance Notification and Reporting The Licensee must report any exceedance of Licence noise limits to the EPA by telephoning the Environment Line service on 131555 or emailing info@epa.nsw.gov.au as soon as practicable after the exceedance becomes known to the Licensee or to one of the Licensee's employees or agents.	Sighted letter (dated 23 July 2021) to EPA regarding notification of exceedance of noise criteria for event on 22 July 2021. Notification provided within 7 days of incident.	Compliant	
R4.6	Within seven days of notifying the EPA of an exceedance of Licence noise limits, the Licensee must provide the EPA a report in writing that explains the cause of the exceedance and the actions taken to prevent future exceedances of noise limits.	Sighted letter (dated 23 July 2021) to EPA regarding notification of exceedance of noise criteria for event on 22 July 2021. Notification provided within 7 days of incident.	Compliant	
R4.7	An authorised officer of the EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the Licensee at Condition R4.6. The Licensee must provide such further details to the EPA within the time specified in the request.	Sighted letter (dated 23 August 2021) addressing RFI for noise exceedance on 22 July 2021.	Compliant	
R5 Other	reporting conditions			
R5.1	HRSTS Reporting The Licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA's regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.	The HRSTS Discharge Reports were sighted for 2020/2021 and 2021/2022 period. There were no discharges during the 2019/2020 reporting period with a letter stating this addressed to the EPA sighted.	Compliant	
R5.2	Turbidity Report           The Licensee must provide a Report to the EPA with the Annual Return that shows graphical analysis of continuous turbidity against continuous	Requirement commenced in 2021. Sighted spreadsheets for 2021 and 2022 showing graphical analysis of	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	discharge volume measured at EPA Point 3 and 4 for the length of any discharges from EPA Point 3 and 4.	continuous turbidity against continuous discharge volume and points 3 and 4.		
R5.3	<b>Blast Monitoring Report</b> The results of the blast monitoring required by the licence must be submitted to the EPA, with each Annual Return, at the end of each reporting period. The monitoring results must identify any exceedance of licence limits.	Sighted AER for 2019, 2020 and 2021 periods. Sighted "EPL 640 Monitoring Data" for each month during audit period to the current reporting period.	Compliant	
R5.4	<b>Noise Monitoring Report</b> The Licensee must provide the EPA with its Annual Return an annual noise compliance assessment report prepared by an appropriately qualified acoustic consultant. The report must include an assessment of any exceedance of noise limits and justification that the noise monitoring points identified in Condition P1.4 are still representative of the sensitive receivers within the noise monitoring groups on Figure 2.	Sighted AER for 2019, 2020 and 2021 periods. Sighted "EPL 640 Monitoring Data" for each month during audit period to the current reporting period.	Compliant	
R5.5	Sewage Treatment Systems The sewage treatment system maintenance program required by Condition O2.6 must be submitted annually to the EPA with the Annual Return.	Observed sewage treatment system maintenance records during site inspections and noted these included with annual returns.	Compliant	
R5.6	The licensee must retain a copy of each report required by Condition O2.5 for 3 years from the date each record is made.	Observed sewage treatment system maintenance records during site inspections and noted these included with annual returns.	Compliant	
R5.7	<ul> <li>Heavy Plant Tyre Disposal Report</li> <li>The Licensee must provide the EPA with the Annual Return a Heavy Plant Tyre Disposal Report. The Report must include:</li> <li>1. a plan of the disposed heavy plant waste tyres on the premises for the period that includes: <ul> <li>i. each tyre serial number;</li> <li>ii. supplier of each tyre;</li> <li>iii. purchase date of each tyre;</li> <li>iv. disposal date of each tyre;</li> </ul> </li> </ul>	Heavy plant tyre disposal reports were observed for the site and submitted with annual returns.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>v. co-ordinates (easting and northings) of the disposal of each tyre;</li> <li>vi. the Real Level (RL) in metres AHD of each tyre placed in the pit;</li> <li>vii. the number of tyres buried in a particular area; and</li> <li>viii. the total number of tyres and tonnage of tyres disposed of at the premises in each annual return year.</li> </ul>			
R5.8	Water Quality Monitoring Report	Sighted 2021 and 2022 Annual Return	Compliant	
	<ul> <li>The licensee must provide the EPA with its Annual Return an annual water quality monitoring report prepared by an appropriately qualified and experienced person that includes the following:</li> <li>1. for the monitoring required by the licence during the reporting period to which the Annual Return relates: <ul> <li>i. a summary of results for all ambient water quality monitoring required by the licence in table form and graphical form;</li> <li>ii. total daily rainfall records from the premises meteorological monitoring required by the licence on the day that the sampling was undertaken in table form;</li> <li>iii. total daily continuous rainfall records in graphical form; and iv. a plan with the monitoring locations.</li> </ul> </li> <li>2. A graphical presentation of the trends of monitoring results required by the licence for the reporting period to which the Annual Return relates and the preceding data for the period of record the licensee has monitoring results for the licensee location.</li> <li>3. A graphical representation of total daily continuous rainfall records required by the licence for the reporting period to which the annual Return relates and the preceding data for the period of record the licensee has monitoring results for the licensee location.</li> </ul>	Water Quality Monitoring Reports meeting this condition.		
7 Gener	al Conditions			
	f licence kept at the premises or plant			
G1.1	A copy of this licence must be kept at the premises to which the licence	Copy of the licence is available on site.	Compliant	
51.1	applies.		Compliant	

Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.			Copy of the licence is available on site.	Compliant	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.			Copy of the licence is available on site.	Compliant	
G2 Other	general conditions					
G2.1	Completed Progra	ams		Noted	Noted	
	Program <sup>12</sup> Description <sup>12</sup> Completed D					
	Saline-Discharge- Dispersion-Investigation¤	Saline-Discharge-Dispersion-Investigation. Minimise risk of saline discharge to downstream- irrigators.(@)¤	18-June-2008¤			
	High-Level-Alarm-and¤ InterlocksDam-17N-and¤ associated-water¤ management-system¤ ¤	Install and operate High-Level Alarm and a interlock on water management systems a associated with Dam $17N_{-}Upgraded$ system will allow for the better management of mine a water and prevent <u>unauthorised</u> discharges to a local creek system.(@) a	29-April-2011¤ ° ° °			
	Coal-Mine Particulate¤ Matter Control Best¤ Practice¤ ¤	Requires licensee to conduct a site specific <sup>a</sup> Best Management Practice (BMP) <sup>a</sup> determination to identify ways to reduce particle <sup>a</sup> emissions. <sup>a</sup>	13-July-2012∝ ∝ ⊭			
	Particulate-Matter-Control¤ Best-Practice¤ Implementation—Wheel¤ Generated-Dust¤	Implementation of particulate matter besta management practices to addressa wheel-generated dust.a	15-August-2014∞ ∞ ⊭			
	Particulate Matter Control¤ Best-Practice¤ Implementation -¤ Disturbing and Handling¤ Overburden-under¤ Adverse Weather¤	Implementation of particulate matter besta management practices to address the handling of overburden during adverse weathera	15-August-2014¤			
	Conditions <sup>®</sup> Particulate Matter Control <sup>®</sup> Best Practice <sup>®</sup> Implementation — Trial of <sup>®</sup> Best Practice Measures <sup>®</sup> for Disturbing and <sup>®</sup> Handling:Overburden <sup>®</sup>	Investigation to establish best practice <sup>a</sup> measures for the handling of overburden. <sup>a</sup>	30-July-2014∝			
	Coal Mine Wind Erosion of Exposed Land¶ Assessment¤	Assessment of predicted vs actual exposed lands¤	31-March-2015¤			
	North Void Tailings Facility Seepage Study≖	Investigation into the North-Void Tailings Facility- Groundwater Seepage (30-March 2020 has- been completed) and Options Report to mitigate- and manage environmental impacts (30 Nov- 2019 has been completed). Ongoing annual- pollution-study requirements into perpetuity¶ until the issues has been mitigated <sup>a</sup>	30-March-2020¤			
	Water Management Infrastructure Upgrade¶ Assessment and Report¤	Audit of water management infrastructure and Reporting¤	27-September-2019∞			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
8 Pollu	tion Studies and Reduction Programs			
U1 Newde	ell Load Point Water Containment Upgrade			
U1.1	<ul> <li>The Licensee must design, install and commission upgrades to the Newdell Load Point Water Management system to mitigate overflows from water storages and pipe leakages to Pikes Creek and Bayswater Creek. The works must be designed, installed and commissioned by appropriately qualified and experienced persons and:</li> <li>1. include the high risk priority outcomes of the report titled "HV Operations Pty Ltd Water Management Infrastructure Upgrade Assessment Hunter Valley Operations" dated September 2019 by Engeny; and</li> <li>2. be completed by 31 December 2022.</li> </ul>	An email to the EPA from HVO on 18 <sup>th</sup> November 2022 was sighted. The email stated that the project had been delayed and HVO would shortly be submitting a licence variation to extend the completion date of the works until the end of 2023. During the audit site inspection on 27/28/29 November 2022, works had recently commenced with clearing/mulching works underway.	Compliant	
U1.2	<ul> <li>The Licensee must provide the EPA with a design report prior to installation and commissioning of the upgrade. The report must be prepared by an appropriately qualified and experienced person and:</li> <li>1. include details of the increased capacity of water storage on the site (and design rainfall capacity) compared to existing; and</li> <li>2. a description of the upgrades and how they will deliver better environmental outcomes to mitigate water discharges off the premises.</li> <li>The design report must be provided to the EPA by 31 December 2022.</li> </ul>	An email to the EPA from HVO on 18 <sup>th</sup> November 2022 was sighted. The email included a Design Report prepared by Engeny Water Management as an attachment outlining the proposed upgrade works and included the requested details of this condition.	Compliant	
U1.3	<ul> <li>A report upon completion of the upgrade and commissioning of the site must be provided to the EPA by 31 March 2023. The report must include:</li> <li>1. descriptions of the increased capacity of water storage on the site (and design rainfall capacity) compared to existing; and</li> <li>2. a description of the upgrades, including photos.</li> </ul>	Not-triggered (works yet to be completed)	Not triggered	
	r Valley Load Point Water Containment Upgrade			
U2.1	The Licensee must design, install and commission upgrades to the Hunter Valley Load Point Water Management system to mitigate overflows from water storages and pipe leakages to Pikes Creek and Bayswater Creek.	An email to the EPA from HVO on 18 <sup>th</sup> November 2022 was sighted. The	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>The works must be designed, installed and commissioned by appropriately qualified and experienced persons and:</li> <li>1. include the high risk priority outcomes of the report titled "HV Operations Pty Ltd Water Management Infrastructure Upgrade Assessment Hunter Valley Operations" dated September 2019 by Engeny; and</li> <li>2. be completed by 31 December 2022.</li> </ul>	email stated that the project had been delayed and HVO would shortly be submitting a licence variation to extend the completion date of the works until the end of 2023. During the audit site inspection on 27/28/29 November 2022, works had recently commenced with clearing/mulching works underway.		
U2.2	<ul> <li>The Licensee must provide the EPA with a design report prior to installation and commissioning of the upgrade. The report must be prepared by an appropriately qualified and experienced person and:</li> <li>1. include details of the increased capacity of water storage on the site (and design rainfall capacity) compared to existing; and</li> <li>2. a description of the upgrades and how they will deliver better environmental outcomes to mitigate water discharges off the premises.</li> <li>The design report must be provided to the EPA by 31 December 2022.</li> </ul>	An email to the EPA from HVO on 18 <sup>th</sup> November 2022 was sighted. The email included a Design Report prepared by Engeny Water Management as an attachment outlining the proposed upgrade works and included the requested details of this condition.	Compliant	
U2.3	<ul> <li>A report upon completion of the upgrade and commissioning of the site must be provided to the EPA by 31 March 2023. The report must include:</li> <li>1. descriptions of the increased capacity of water storage on the site (and design rainfall capacity) compared to existing; and</li> <li>2. a description of the upgrades; including photos.</li> </ul>	Not-triggered (works yet to be completed)	Not triggered	
U3.1	Void Tailings Storage Facility Barrier         The Licensee must engage an appropriately qualified and experienced person to design, assess and install a barrier wall to the north void tailings storage facility (TSF). The design, assessment and works must be completed by 23 February 2023 and must:         i.       be consistent with the recommendations of the "North Void Tailings Storage Facility, Barrier Wall Construction Feasibility Assessment PS122997-CIV-LTR-002 Rev A dated 25 June 2021" by WSP;	HVO staff advised during the audit inspection in late November, that the geotechnical drilling had been completed and HVO were awaiting the preparation of the design report from their consultant.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>ii. be keyed into bedrock;</li> <li>iii. be of sufficient height and depth to prevent or mitigate saline and sulfate seepage from the TSF to groundwater during continued life of mine, remediation and after capping; and</li> <li>iv. include a report to the EPA on completion of the works that includes an assessment of the permeability of the wall.</li> <li>Note: The intention of this barrier wall is to prevent pollution of waters. This timeline is dependent upon engineering assessments and approvals, with approvals the responsibility of the Licensee.</li> </ul>			
U4 Lake J	ames Dam Saline Mixing Investigation			
U4.1	As part of the increase to the licensed discharge volume limit from 120 ML/day to 200 ML/day at the Lake James Dam HRSTS discharge - EPL point 8, the licensee must undertake conductivity sampling during the next discharge event which exceeds 120 ML/day at the nearest downstream sampling location - coordinates 316696 6398312 (easting and northing). Note: The intent is to demonstrate adequate mixing of salts to achieve a downstream water quality less than 900 uS/cm. The licensee must provide a report with monitoring results to the EPA by email at <u>info@epa.nsw.gov.au</u> .	Not-Triggered with no discharge exceeding 120ML/day.	Compliant	
9 Speci	al Conditions			
E1 Hunter	River Salinity Trading Scheme			
E1.1	This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.</i>	The calculation spreadsheets were observed for all discharges over the reporting period.	Compliant	
E1.2	For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.	The calculation spreadsheets were observed for all discharges over the reporting period.	Compliant	
E1.3	The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)":	The calculation spreadsheets were observed for all discharges over the reporting period.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	H = V / RRT			
	Where: <i>H</i> is the hourly volume discharge limit (in megalitres per hour),			
	<i>V</i> is the licence holder's volume discharge limit for the block (in megalitres) calculated in accordance with clause 23 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation (2002); and			
	<b>RRT</b> is the difference between the discharge stop and start times shown on the river register for that block (in hours)			
	<i>Note 1:</i> The intent of this condition is to prevent spikes of saline water in the Hunter River as a result of discharges of less than the duration permitted by the river register.			
	<i>Note 2:</i> A river register is issued by the Service Co-ordinator and allows participants of the Hunter River Salinity Trading Scheme (HRSTS) to discharge saline to the Hunter River during a discharge period.			
E2 Mine W	/ater Pipelines Burst Detection			
E2.1	The Licensee must install and commission burst detection monitoring on pipelines that are located within the premises boundary but outside of the mine water containment system by 30 June 2022. The burst detection monitoring system must be installed by an appropriately qualified and experienced person.	Email from HVO to EPA dated 30 June 2022 sighted. The email included an attached report detailing the works completed by qualified personnel.	Compliant	
	<ol> <li>The Licensee must provide written notification to the EPA on completion of the works by 30 June 2022 and provide a description of the extent of the works.</li> </ol>			
	Note: Upon installation of burst detection, the Licensee must consider secondary containment of pipelines in areas at high risk of polluting waters, in the event of break.			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
E3 Dam W	ater Level Monitoring			
E3.1	<ul> <li>The Licensee must install and commission water level sensors on erosion and sediment control dams and mine water dams that are located within the premises boundary and which have the potential to overflow or spill into areas that are outside the mine water containment system by 30 June 2022. The water level sensors:</li> <li>2. must be installed by appropriately qualified and experienced persons; and</li> <li>3. be incorporated into an upgrade of the water management system to prevent discharges of mine water from the premises, and prevent or mitigate discharges from sediment control dams from the premises; and</li> <li>4. the Licensee must provide written notification to the EPA upon completion of the works, that include a description of the extent of the works including photos.</li> </ul>	Email from HVO to EPA dated 30 June 2022 sighted. The email included an attached report detailing the works completed by qualified personnel and stated that supporting documentation have been developed (TARPs, maintenance schedules etc).	Compliant	
E4 North V	oid Tailings Facility Seepage Monitoring			
E4.1	<ul> <li>The Licensee must implement a North Void Tailings Facility monitoring program. This monitoring program must be implemented and undertaken by a suitably qualified and experienced person. The program must include:</li> <li>i. installation of a groundwater and surface water monitoring network to monitor the extent of the plume of polluted water to estimate the volume of seepage from the North Void Tailings Facility and the flux of salt and sulphate difference from baseline alluvial groundwater and to monitor seepage changes;</li> <li>ii. a groundwater surface water model to demonstrate attenuation time and mixing if the polluted groundwater is not remediated;</li> <li>iii. development of milestones or thresholds that would trigger consideration for the introduction of works or other options to mitigate seepage from the North Void Tailings Facility;</li> <li>iv. an ecological risk assessment;</li> <li>v. an assessment of tailings consolidation, permeability and strength testing;</li> <li>vi. likely timeframes involved for filling, capping and rehabilitating of the North Void Tailings Facility;</li> <li>vii. daily rainfall;</li> </ul>	Monitoring reports for the audit period were available on site for 2020, 2021 and 2022.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	<ul> <li>viii. estimates of rainfall ingress into the North Void Tailings Facility; and</li> <li>ix. volumetric monitoring of the decant of surface waters from the North Void Tailings Facility.</li> </ul>			
	The Licensee must provide an analysis report of this monitoring data and any modelling prepared by an appropriately qualified and experienced person. The Licensee must submit this report to the EPA by 30 March 2020 and annually thereafter. The report must demonstrate progress in mitigating seepage from the North Void Tailings Facility. The report must report against the following objectives:			
	<ol> <li>prevent pollution of waters at all times;</li> <li>mitigate degradation of groundwater beneficial use;</li> <li>prevent impact to endangered ecological communities; and</li> <li>capping and rehabilitation to produce a free draining final landform.</li> </ol>			
E4.2	The Licensee must submit an interim report to the EPA at each quarter, within one month of the completion of quarterly monitoring required by Condition U1.1. The interim report must be prepared by an appropriately qualified and experienced person and include:	Copies of quarterly reports were observed on site.	Compliant	
	<ol> <li>an assessment of rainfall data for the quarterly period;</li> <li>an estimate of rainfall ingress to the North Void Tailings Facility for the quarterly period; and</li> <li>the volume of decant water removed from the North Void Tailings Facility in the quarterly period.</li> </ol>			

# B.4 Mining Leases



#### CCL714 - AUDIT CHECKLIST – HVO IEA 2022

CCL714 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	3
Special conditions	
5. Dams Safety – Mining Leases	3
6. Petroleum (Mining Operations By-Product Only)	5
7. Exploration Reporting	5

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions						
1. Notice t	o Landholders						
1	the lease holder (i) that this minin (ii) whether the The notice must landholder and (b) If there are t lease holder will complying with	I be taken to have co	dholder notice in ranted or renewer urface. Ifying the lease a within the lease ers to which notic omplied with cond lished in a newsp	writing: d; and rea and each area. e must be given, the	Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2	The security deposit to be provided and maintained for this mining lease is				Assessed security equals held security - all certificates saved at Item 140.	Compliant	
	Lease type	Lease Number	Act Year				
	CL	327	1973				
	CL	398	1973				
	ML	1465	1992				
	ML	1634	1992				
	ML	1682	1992				
	ML	1734	1992				
	ML	1753	1992				
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
3. Coopera	tion Agreement			
3	demonstrate its attempts to the satisfaction of the Secretary, to enter into a	There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currently in place for production leases	Compliant	
Special	conditions			
5. Dams Sa	afety – Mining Leases			
5	(a) The lease holder must not mine within any part of the lease area which is within the notification area of the Warkworth North Pit Tailings Dam	No mining activity within notification area.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.		
	(b) Where the lease holder desires to mine within the notification area, the lease holder must:		
	(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and		
	(ii) provide such information as the Minister may direct.		
	(c) The Minister must not, except in the circumstances set out in sub- paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.		
	(i) This sub-paragraph is complied with if:		
	(a) Dams Safety NSW as constituted by section 6 of the Dams Safety Act 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).		
	(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.		
	(c) the Secretary has complied with any reasonable request made by Dams Safety NSW or the owner of the dam for further information in connection with the mining proposal.		
	(d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and		
	(e) where Dams Safety NSW has made recommendations the approval is in terms that are:		
	- in accordance with those recommendations; or		
	- where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.		
	(ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms		
	that are, in relation to matters dealing with the safety of the dam: - as determined by agreement between the Minister and the Minister administering the Dams Safety Act 2015; or		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	- in the event of failure to reach such agreement - as determined by the Premier.			
	(d) The Minister, on notice from Dams Safety NSW, may at any time or times:			
	(i) cancel any approval given where a notice pursuant to section 19 of the Dams Safety Act 2015 is given.			
	(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.			
6. Petroleu	um (Mining Operations By-Product Only)			
6	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
7. Explora	tion Reporting			
7	Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered	

### CCL755 - AUDIT CHECKLIST – HVO IEA 2022

CCL755 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	4
Special conditions	4
5. Petroleum (Mining Operations By-Product Only)	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	I conditions						
1. Notice t	o Landholders						
1	the lease holder m (i) that this mining (ii) whether the lea The notice must in landholder and ind (b) If there are ten lease holder will be complying with cor	ust give each landholde lease has been granted ise includes the surface clude a plan identifying lividual land parcel withi or more landholders to e taken to have complie	l or renewed; and the lease area and each	en, the notice	Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2				Assessed security equals held security - all certificates saved at Item 140	Compliant		
	Lease type	Lease Number	Act Year				
	CL	359	1973				
	CL	360	1973				
	CL	584	1973				
	CML	4	1992				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992				
	ML	1406	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
-	ration Agreement					1	
3	demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping		Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant			
	• timing of drilling						
	<ul> <li>potential resource</li> <li>rehabilitation issues</li> </ul>	ce extraction conflict	s; and				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4. Assessa	able Prospecting Operations			
4	(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:	Relevant DC currently in place for production leases	Compliant	
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	m (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	

# CL 327 - AUDIT CHECKLIST – HVO IEA 2022

CL 327 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	3
5. Petroleum (Mining Operations By-Product Only)	3
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions						
1. Notice t	o Landholders						
1	the lease holde (i) that this mini (ii) whether the The notice mus landholder and (b) If there are t lease holder wil complying with	I be taken to have co	Aholder notice in ranted or renewed urface. Ifying the lease a within the lease ers to which notic omplied with cond lished in a newsp	writing: d; and rea and each area. e must be given, the	Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$66,291,000.</li> <li>The leases covered by the group security include this CCL 714 (1973) and:</li> </ul>			Assessed security equals held security - all certificates saved at Item 140	Compliant		
	Lease type	Lease Number	Act Year				
	CL	327	1973				
	CL	398	1973				
	ML	1465	1992				
	ML	1634	1992	-			
	ML	1682	1992				
	ML	1734	1992				
	ML	1753	1992				
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
3. Coopera	ation Agreement			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	<ul> <li>operational interaction procedures</li> </ul>			
	dispute resolution			
	• information exchange			
	well location			
	<ul> <li>timing of drilling</li> <li>potential resource extraction conflicts; and</li> </ul>			
	rehabilitation issues.			
4. Assessa	able Prospecting Operations		<u>.</u>	
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currently in place for production leases	Compliant	
Special	conditions			
5. Petroleu	m (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations				
6. Explora	6. Exploration Reporting							
6	Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered					

# CL 359 - AUDIT CHECKLIST – HVO IEA 2022

CL 359 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	4
6. Exploration Reporting	

Cond No	o. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al conditions	;					
1. Notic	e to Landholders						
1	<ul> <li>(a) Within 90 d the lease holds</li> <li>(i) that this min</li> <li>(ii) whether the</li> <li>The notice must landholder and</li> <li>(b) If there are</li> <li>lease holder w</li> <li>complying with</li> </ul>	er must give each la ing lease has been e lease includes the st include a plan ide l individual land par ten or more landho ill be taken to have	andholder notice granted or rene surface. entifying the leas cel within the leas Idders to which n complied with cu ublished in a new	wed; and e area and each	Only triggered on grant/renewal	Compliant	
2. Group	o Security				1		<u> </u>
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.</li> <li>The leases covered by the group security include this CL 359 (1973) and:</li> </ul>			Assessed security equals held security - all certificates saved at Item 140	Compliant		
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	584	1973				
	CML	4	1992				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992				
	ML	1406	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping			Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		

Cond No.	Condition	Comments & Evidence A	udit Findings	Recommendations				
4. Assess	4. Assessable Prospecting Operations							
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	C	Compliant					
<b>Special</b>	conditions							
5. Petrole	um (Mining Operations By-Product Only)							
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.	1	Not triggered					
6. Explora	tion Reporting							
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.	1	Not triggered					

## CL 360 - AUDIT CHECKLIST – HVO IEA 2022

CL 360 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	3
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	4
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	I conditions						
1. Notice	to Landholders						
1	the lease hold (i) that this min (ii) whether the The notice mu landholder and (b) If there are lease holder w complying with	er must give each la ning lease has beer e lease includes the st include a plan id d individual land par ten or more landho ill be taken to have	andholder notice granted or rene e surface. entifying the lease rcel within the le olders to which r complied with c ublished in a ne	ewed; and se area and each	Only triggered on grant/renewal	Compliant	
2. Group	Security						
2	part of a group The lease hold secure funding covered by the mining lease th The amount of deposit has be	e security deposit. der is required to pro- g for the fulfilment of g group security dep nat may arise in the the security depos- the assessed at \$1	ovide and maint f obligations und bosit, including c future. it to be provided <b>50,882,000</b> .	ed for this mining lease is ain a security deposit to der the mining leases obligations under each d as a group security this <b>CL 360 (1973)</b> and:	Assessed security equals held security - all certificates saved at Item 140	Compliant	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992	]			
	ML	1474	1992	1			
	ML	1482	1992	1			
	ML	1500	1992	]			
	ML	1526	1992	]			
	ML	1560	1992				
	ML	1589	1992	]			
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992	]			
	ML	1710	1992				
	ML	1732	1992	]			
	ML	1748	1992	1			
	ML	1811	1992	]			
3. Coopera	tion Agreement						
3				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
4. Assessa	ble Prospecting	Operations					
4				essable prospecting en granted unless:	Relevant DC currenlty in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	Im (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

## CL 398 - AUDIT CHECKLIST – HVO IEA 2022

CL 398 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No	b. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al conditions	;					
1. Notice	e to Landholders						
1	the lease hold (i) that this mir (ii) whether the The notice mu landholder and (b) If there are lease holder w complying with	er must give each l ning lease has been e lease includes the st include a plan id d individual land pa ten or more landh ill be taken to have	andholder notice of granted or rene e surface. entifying the leas rcel within the leas olders to which n e complied with coublished in a net	ewed; and se area and each	Only triggered on grant/renewal	Compliant	
2. Group	Security						
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$66,291,000.</li> <li>The leases covered by the group security include this CL 398 (1973) and:</li> </ul>			Assessed security equals held security - all certificates saved at Item 140	Compliant		
	Lease type	Lease Number	Act Year				
	CCL	714	1973	1			
	CL	327	1973				
	ML	1465	1992				
	ML	1634	1992				
	ML	1682	1992				
	ML	1734	1992				
	ML	1753	1992	1			
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
3. Coopera	ation Agreement			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	operational interaction procedures     dispute resolution			
	information exchange			
	• well location			
	• timing of drilling			
	<ul> <li>potential resource extraction conflicts; and</li> </ul>			
	rehabilitation issues.			
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> </ul>	Relevant DC currenlty in place for production leases	Compliant	
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	Im (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations					
6. Explora	6. Exploration Reporting								
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered						

## CL 584 - AUDIT CHECKLIST – HVO IEA 2022

CL 584 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Dam Safety – Mining Leases	
6. Petroleum (Mining Operations By-Product Only)	
7. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	I condition	S					
1. Notice	to Landholders	5					
1	the lease hold (i) that this mi (ii) whether th The notice mu landholder an (b) If there are lease holder v complying wit	der must give each ning lease has be e lease includes th ust include a plan d individual land p e ten or more land will be taken to hav	n landholder not en granted or re he surface. identifying the le varcel within the holders to whic ve complied witi published in a	enewed; and ease area and each	Only triggered on grant/renewal	Compliant	
2. Group	Security						
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit.The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.The leases covered by the group security include this CL 584 (1973) and:Lease NumberAct YearCCL7551973CL3601973CL3591973				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	CML ML ML	4 1324 1337 1359	1992 1992 1992 1992				
	ML	1406	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement	:					
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting	Operations					
4				essable prospecting en granted unless:	Relevant DC currenlty in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Dam Sa	fety – Mining Leases			
5	<ul> <li>(a) The lease holder must not mine within any part of the lease area which is within the notification area of the Liddell Cooling Water Dam without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.</li> <li>(b) Where the lease holder desires to mine within the notification area, the lease holder must:</li> <li>(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and</li> <li>(ii) provide such information as the Minister may direct.</li> <li>(c) The Minister must not, except in the circumstances set out in subparagraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.</li> <li>(i) This sub-paragraph is complied with if:</li> <li>(a) Dams Safety NSW as constituted by section 6 of the Dams Safety Act 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).</li> <li>(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.</li> <li>(c) the Secretary has complied with any reasonable request made by</li> </ul>	This facility is 35km from our operation. No listed notification area.	Compliant	
	<ul><li>2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).</li><li>(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.</li></ul>			

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	<ul> <li>(d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and</li> <li>(e) where Dams Safety NSW has made recommendations the approval is in terms that are: <ul> <li>in accordance with those recommendations; or</li> <li>where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.</li> <li>(ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: <ul> <li>as determined by agreement between the Minister and the Minister administering the Dams Safety Act 2015; or</li> <li>in the event of failure to reach such agreement - as determined by the Premier.</li> </ul> </li> <li>(d) The Minister, on notice from Dams Safety NSW, may at any time or times: <ul> <li>(i) cancel any approval given where a notice pursuant to section 19 of the Dams Safety Act 2015 is given.</li> </ul> </li> </ul></li></ul>		Addit Findings Recommendations
	(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.		
6. Petroleu	um (Mining Operations By-Product Only)		
6	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered
7. Explora	tion Reporting		
7	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.		Not triggered

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

## CML 4 - AUDIT CHECKLIST – HVO IEA 2022

CML 4 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	condition	S					
1. Notice to	o Landholders	5					
1	<ul> <li>(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing:</li> <li>(i) that this mining lease has been granted or renewed; and</li> <li>(ii) whether the lease includes the surface.</li> <li>The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area.</li> <li>(b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice complying with condition 1(a) is published in a newspaper circulating in the region where the lease area is situated.</li> </ul>				Only triggered on grant/renewal.	Compliant	
2. Group S	ecurity						
2	part of a grou The lease hol secure fundin covered by th mining lease The amount of deposit has b	p security deposit der is required to g for the fulfilmen e group security of that may arise in to of the security dep een assessed at s	:. provide and marked t of obligations deposit, includin the future. posit to be provis \$150,882,000.	ained for this mining lease is aintain a security deposit to under the mining leases ng obligations under each ded as a group security ude this <b>CML 4 (1992)</b> and:	Assessed security equals held security - all certificates saved at Item 140.	Compliant	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	demonstrate its cooperation agre authorisations is issued under the agreement shou • access arrange • operational inte • dispute resolut • information exc • well location • timing of drilling	attempts to the sa eement with the h sued under the M e Petroleum (Onsl ld address but no ements eraction procedure ion change	atisfaction of the S older(s) of any ov lining Act 1992 ar hore) Act 1991. Th hore) imited to: es	nd petroleum titles	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currently in place for production leases	Compliant	
<b>Special</b>	conditions			
5. Petroleu	ım (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explorat	tion Reporting			
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered	

## ML 1324 - AUDIT CHECKLIST – HVO IEA 2022

ML 1324 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only	
6. Dams Safety – Mining Leases	
7. Exploration Reporting	

Cond No	o. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al conditions	;					
1. Notice	e to Landholders						
1	the lease hold (i) that this mir (ii) whether the The notice mu landholder and (b) If there are lease holder w complying with	er must give each la ning lease has beer e lease includes the st include a plan id d individual land pa ten or more landho ill be taken to have	andholder notice granted or rene esurface. entifying the lea rcel within the le olders to which r complied with o ublished in a ne	ewed; and se area and each	Only triggered on grant/renewal	Compliant	
2. Group	o Security				·		
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit.The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.The lease covered by the group security include this ML 1324 (1992) and:Lease typeLease Number			Assessed security equals held security - all certificates saved at Item 140.	Compliant		
	CCL	755	1973				
	CL	360	1973	-			
	CL	359	1973				
	CML	4	1992				
	CL	584	1972				
	ML	1337	1992				
	ML	1359	1992	100			
	ML	1406	1992	-			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992	]			
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a				There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	<ul> <li>potential resou</li> </ul>	-	onflicts; and				
	<ul> <li>rehabilitation is</li> </ul>		, -				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4. Assess	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currenity in place for production leases	Compliant	
Special	l conditions			
5. Petrole	um (Mining Operations By-Product Only			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Dams S	Safety – Mining Leases			
6	<ul> <li>(a) The lease holder must not mine within any part of the lease area which is within the notification area of the SE Tailings Storage Dam and SE Tailing Notification Area without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.</li> <li>(b) Where the lease holder desires to mine within the notification area, the lease holder must:</li> <li>(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and</li> <li>(ii) provide such information as the Minister may direct.</li> <li>(c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.</li> <li>(i) This sub-paragraph is complied with if:</li> </ul>	Not triggered No mining activity within notification area.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings Recommendations
	(a) Dams Safety NSW as constituted by section 6 of the Dams Safety Act 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).		
	(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.		
	(c) the Secretary has complied with any reasonable request made by Dams Safety NSW or the owner of the dam for further information in connection with the mining proposal.		
	(d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and		
	(e) where Dams Safety NSW has made recommendations the approval is in terms that are:		
	- in accordance with those recommendations; or		
	- where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.		
	(ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam:		
	- as determined by agreement between the Minister and the Minister administering the Dams Safety Act 2015; or		
	- in the event of failure to reach such agreement - as determined by the Premier.		
	(d) The Minister, on notice from Dams Safety NSW, may at any time or times:		
	(i) cancel any approval given where a notice pursuant to section 19 of the Dams Safety Act 2015 is given.		
	(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.		
7. Explora	tion Reporting	·	
7	Note: Exploration Reports (Geological and Geophysical)		Not triggered
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

### ML 1337 - AUDIT CHECKLIST – HVO IEA 2022

ML 1337 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Dams Safety – Mining Leases	4
7. Exploration Reporting	

Cond N	o. Condition			Comments & Evidence	Audit Findings	Recommendations
Gener	ral conditions	S				
1. Notic	e to Landholders	;				
1	the lease hold (i) that this min (ii) whether the The notice mu landholder and (b) If there are lease holder w complying with	ler must give each ning lease has bee e lease includes th ust include a plan i d individual land p e ten or more land vill be taken to hav	dentifying the lease area and each arcel within the lease area. holders to which notice must be given, the re complied with condition 1(a) if a notice published in a newspaper circulating in the	Only triggered on grant/renewal	Compliant	
2. Grou	p Security					
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.</li> <li>The leases covered by the group security include this ML 1337 (1992) and:</li> </ul>			Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year			
	CCL	755	1973			
	CL	360	1973			
	CL	359	1973			
	CML	4	1992			
	CL	584	1972			
	ML	1324	1992			
	ML	1359	1992			
	ML	1406	1992			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the <i>Mining Act 1992</i> and petroleum titles issued under the <i>Petroleum (Onshore) Act 1991</i> . The cooperation agreement should address but not be limited to:			Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
	• access arrange	ements					
	• operational inte	eraction procedu	es				
	dispute resolution     information exchange						
	<ul> <li>well location</li> </ul>						
	• timing of drilling	9					
	• potential resou	rce extraction co	nflicts; and				
	<ul> <li>rehabilitation is</li> </ul>	sues.					

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currenity in place for production leases	Compliant	
Special	conditions			
5. Petroleu	Im (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Dams S	afety – Mining Leases			
6	<ul> <li>(a) The lease holder must not mine within any part of the lease area which is within the notification area of the Cumnock Tailings Storage Facility and the Cumnock Notification Area without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.</li> <li>(b) Where the lease holder desires to mine within the notification area, the lease holder must:</li> <li>(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and</li> <li>(ii) provide such information as the Minister may direct.</li> <li>(c) The Minister must not, except in the circumstances set out in subparagraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.</li> <li>(i) This sub-paragraph is complied with if:</li> </ul>	Not triggered - mining activities only Mining activities have occurred within this notification area - Communication with dam owner is ongoing (Ravensworth) regarding our activities. No vibration limits have been comminucated from Ravensworth.	Choose an item.	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(a) Dams Safety NSW as constituted by section 6 of the <i>Dams Safety Act</i> 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).			
	(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.			
	(c) the Secretary has complied with any reasonable request made by Dams Safety NSW or the owner of the dam for further information in connection with the mining proposal.			
	(d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and			
	(e) where Dams Safety NSW has made recommendations the approval is in terms that are:			
	- in accordance with those recommendations; or			
	- where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.			
	(ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam:			
	- as determined by agreement between the Minister and the Minister administering the <i>Dams Safety Act 2015</i> ; or			
	- in the event of failure to reach such agreement - as determined by the Premier.			
	(d) The Minister, on notice from Dams Safety NSW, may at any time or times:			
	(i) cancel any approval given where a notice pursuant to section 19 of the <i>Dams Safety Act 2015</i> is given.			
	(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.			
7. Explora	tion Reporting			
7	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1359 (1992) - AUDIT CHECKLIST – HVO IEA 2022

ML 1359 (1992) - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	4
Special conditions	4
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	4

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions						
1. Notice to	o Landholders						
1	<ul> <li>(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing:</li> <li>(i) that this mining lease has been granted or renewed; and</li> <li>(ii) whether the lease includes the surface.</li> <li>The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area.</li> <li>(b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice complying with condition 1(a) is published in a newspaper circulating in the region where the lease area is situated.</li> </ul>				Only triggered on grant/renewal	Compliant	
2. Group S	ecurity						
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit. The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future. The amount of the security deposit to be provided as a group security deposit has been assessed at <b>\$150,882,000</b> . The leases covered by the group security include this <b>ML 1359 (1992)</b> and:				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973	-			
	CL	359	1973				
	CML	4	1992				
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992				
	ML	1406	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992	-			
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement	1	1	•			
3	demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping			Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
		raction procedure	S				
	dispute resolution						
	<ul> <li>information excl</li> </ul>	hange					
	well location						
	<ul> <li>timing of drilling</li> </ul>						
		ce extraction conf	licts; and				
	<ul> <li>rehabilitation iss</li> </ul>	sues.					

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations					
4. Assess	4. Assessable Prospecting Operations								
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>		Not triggered						
<b>Special</b>	conditions								
5. Petroleu	um (Mining Operations By-Product Only)								
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered						
6. Explora	tion Reporting								
6	Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered						

# ML 1406 - AUDIT CHECKLIST – HVO IEA 2022

ML 1406 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	4
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions	5					
I. Notice to	o Landholders						
1	<ul> <li>(a) Within 90 of the lease hold</li> <li>(i) that this minipart (ii) whether the notice multipart (iii) whether</li></ul>	er must give each ning lease has bee e lease includes th st include a plan in d individual land pa ten or more landh rill be taken to hav	landholder noti- en granted or re- ne surface. dentifying the le arcel within the holders to which re complied with published in a n	newed; and ase area and each	Only triggered on grant/renewal	Compliant	
2. Group S							
2	part of a group The lease hold secure funding covered by the mining lease t The amount o deposit has be	b security deposit. der is required to p g for the fulfilment e group security de hat may arise in th f the security depo sen assessed at \$	provide and main of obligations un eposit, including the future. soit to be provide <b>150,882,000</b> .	ned for this mining lease is ntain a security deposit to nder the mining leases obligations under each ed as a group security e this <b>ML 1406 (1992)</b>	Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755 360	1973 1973				
	CL	359	1973				
	CML	4	1973				
	CL	584	1972				
	ML	1324	1992	-			
	ML	1337	1992				
	ML	1359	1992	-			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1428	1992	]			
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992	]			
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992	]			
	ML	1811	1992				
3. Coopera	tion Agreement						
3	The lease holder must make every reasonable attempt, and be able to				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	<ul> <li>well location</li> <li>timing of drilling</li> <li>potential resou</li> <li>rehabilitation is</li> </ul>	g rce extraction co	nflicts; and				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations					
4. Assessa	4. Assessable Prospecting Operations								
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currenity in place for production leases	Compliant						
<b>Special</b>	conditions								
5. Petroleu	ım (Mining Operations By-Product Only)								
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered						
6. Explora	tion Reporting								
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered						

# ML 1428 - AUDIT CHECKLIST – HVO IEA 2022

ML 1428 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No.	. Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	al conditions	5					
1. Notice	to Landholders						
1	the lease hold (i) that this mir (ii) whether the The notice mu landholder and	er must give each ning lease has bea e lease includes th st include a plan i d individual land p	n landholder notion en granted or rep he surface. identifying the le parcel within the	newed; and ase area and each lease area.	Only triggered on grant/renewal	Compliant	
	lease holder w complying with region where t	ill be taken to hav	ve complied with published in a n	notice must be given, the condition 1(a) if a notice ewspaper circulating in the			
2. Group	Security				1		
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit. The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future. The amount of the security deposit to be provided as a group security deposit has been assessed at <b>\$150,882,000</b> . The leases covered by the group security include this <b>ML 1428 (1992)</b> and:				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972	-			
	ML	1324	1992	-			
	ML	1359	1992	_			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992	_			
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement	t					
3				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
4. Assessa	ble Prospecting	g Operations					
4	(a) The lease he operation on lar	older must not ca nd over which th	arry out any ass is lease has bee	essable prospecting n granted unless:	Relevant DC currenlty in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	um (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1465 - AUDIT CHECKLIST – HVO IEA 2022

ML 1465 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions						
1. Notice t	o Landholders						
1	the lease holde (i) that this mini (ii) whether the The notice mus landholder and (b) If there are lease holder wi complying with	r must give each lar ng lease has been g lease includes the s it include a plan ider individual land parce ten or more landhold ll be taken to have c	idholder notice in granted or renewe surface. Itifying the lease a el within the lease ders to which noti omplied with con plished in a news	ed; and area and each	ML1465 renewal November 7 being prepared	Compliant	
2. Group S	Security						
2	part of a group The lease hold secure funding covered by the mining lease th The amount of deposit has bee	security deposit.	vide and maintain obligations under sit, including oblig uture. to be provided as 291,000.	gations under each s a group security	Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year	-			
	CCL	714	1973	2			
	CL	327	1973				
	CL	398	1973				
	ML	1634	1992				
	ML	1682	1992				
	ML	1734	1992				
	ML	1753	1992				
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations					
3. Coopera	3. Cooperation Agreement								
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant						
	<ul> <li>information exchange</li> <li>well location</li> <li>timing of drilling</li> <li>potential resource extraction conflicts; and</li> <li>rehabilitation issues.</li> </ul>								
4. Assessa	able Prospecting Operations								
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currently in place for production leases	Compliant						
Special	conditions								
5. Petroleu	m (Mining Operations By-Product Only)								
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered						

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations						
6. Explora	6. Exploration Reporting									
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered							

# ML 1474 - AUDIT CHECKLIST – HVO IEA 2022

ML 1474 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	
- 11	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
Genera	I conditions			
1. Notice	to Landholders			
1	<ul> <li>(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing:</li> <li>(i) that this mining lease has been granted or renewed; and</li> <li>(ii) whether the lease includes the surface.</li> <li>The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area.</li> <li>(b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice complying with condition 1(a) is published in a newspaper circulating in the region where the lease area is situated.</li> </ul>	Only triggered on grant/renewal Renewal 10 August 2022 – only one does not register as delivered. Correspondence sent to Australia Post.	Compliant	
2. Group	Security			
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit. The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future. The amount of the security deposit to be provided as a group security deposit has been assessed at <b>\$150,882,000</b> . The leases covered by the group security include: Consolidated Coal Lease 755 (Act 1973) (Head Lease) Coal Lease 359 (Act 1973) Coal Lease 584 (Act 1973) Coal Lease 584 (Act 1973) Consolidated Mining Lease 4 (Act 1992) Mining Lease 1324 (Act 1992) Mining Lease 1359 (Act 1992) Mining Lease 1406 (Act 1992)	Assessed security equals held security - all certificates saved at Item 140	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	Mining Lease 1428 (Act 1992)			
	Mining Lease 1474 (Act 1992)			
	Mining Lease 1482 (Act 1992)			
	Mining Lease 1500 (Act 1992)			
	Mining Lease 1526 (Act 1992)			
	Mining Lease 1560 (Act 1992)			
	Mining Lease 1589 (Act 1992)			
	Mining Lease 1622 (Act 1992)			
	Mining Lease 1704 (Act 1992)			
	Mining Lease 1705 (Act 1992)			
	Mining Lease 1706 (Act 1992)			
	Mining Lease 1707 (Act 1992)			
	Mining Lease 1710 (Act 1992)			
	Mining Lease 1732 (Act 1992)			
	Mining Lease 1748 (Act 1992)			
	Mining Lease 1811 (Act 1992)			
3. Coopera	tion Agreement			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting Operations			
4	(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:	Relevant DC currenity in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	um (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the <i>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.</i>			

# ML 1482 - AUDIT CHECKLIST – HVO IEA 2022

ML 1482 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	l condition	S					
1. Notice	to Landholders	5					
1	<ul> <li>(a) Within 90</li> <li>the lease hold</li> <li>(i) that this mi</li> <li>(ii) whether th</li> <li>The notice mi</li> <li>landholder and</li> <li>(b) If there are</li> <li>lease holder with</li> <li>complying with</li> </ul>	days from the date ler must give each ning lease has be e lease includes th ust include a plan d individual land p e ten or more land will be taken to hav	n landholder no en granted or r he surface. identifying the l parcel within the holders to whic ve complied wit published in a	enewed; and ease area and each	Only triggered on grant/renewal	Compliant	
2. Group	Security						
2	part of a grou The lease hol secure fundin covered by th mining lease The amount of deposit has b	p security deposit. der is required to g g for the fulfilment e group security d that may arise in th of the security dep een assessed at \$	provide and ma of obligations leposit, includin he future. osit to be provio 5 <b>150,882,000</b> .	ained for this mining lease is aintain a security deposit to under the mining leases g obligations under each ded as a group security ide this <b>ML 1482 (1992)</b>	Assessed security equals held security - all certificates saved at Item 140	Compliant	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Cond No.	Condition ML	1406         1428         1474         1500         1526         1560         1589         1622         1704         1705         1706         1770         1710         1732         1748         1811	1992         1992		Comments & Evidence	Audit Findings	Recommendations
3. Coopera	tion Agreemen	- -	- <u> </u>	1			
3	eration Agreement         The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to:         • access arrangements       • operational interaction procedures         • dispute resolution       • information exchange         • well location       • timing of drilling         • potential resource extraction conflicts; and       • rehabilitation issues.				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting	g Operations					
4	(a) The lease h operation on la	older must not nd over which t	carry out any as this lease has be	sessable prospecting een granted unless:	Relevant DC currenlty in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	um (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1500 - AUDIT CHECKLIST – HVO IEA 2022

ML 1500 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	l conditions	5					
I. Notice	to Landholders						
1	the lease hold (i) that this min (ii) whether the The notice mu	er must give each ning lease has bee e lease includes th	landholder notion of granted or rer ne surface. dentifying the lea	newed; and	Only triggered on grant/renewal	Compliant	
	(b) If there are lease holder w complying with	ten or more landh vill be taken to hav	nolders to which re complied with published in a n	notice must be given, the condition 1(a) if a notice ewspaper circulating in the			
2. Group	Security						
2					Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year	-			
	CCL	755 360	1973 1973				
	CL	359	1973				
	CML	4	1973	_			
	CL	584	1972				
	ML	1324	1992	-			
	ML	1337	1992				
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992	]			
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1526	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992	_			
	ML	1706	1992	_			
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992	_			
3. Coopera	tion Agreement	•	·	-			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting	Operations					
4				ssable prospecting granted unless:	Relevant DC currently in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	um (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1526 - AUDIT CHECKLIST – HVO IEA 2022

ML 1526 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Exploration Reporting	

Cond No	. Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	al condition	S					
1. Notice	to Landholders	•					
1	<ul> <li>(a) Within 90</li> <li>the lease hold</li> <li>(i) that this mi</li> <li>(ii) whether th</li> <li>The notice mi</li> <li>landholder ar</li> <li>(b) If there are</li> <li>lease holder with</li> </ul>	days from the dat ler must give each ning lease has be e lease includes t ust include a plan d individual land p e ten or more lanc vill be taken to ha h condition 1(a) is	h landholder no een granted or r he surface. identifying the parcel within the holders to whice ve complied wi published in a	renewed; and lease area and each	Only triggered on grant/renewal	Compliant	
2. Group		the lease area is	situated.				
2. Group 2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit.The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.The lease covered by the group security include this ML 1526 (1992) and:Lease typeLease NumberAct Year				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	ML	1324	1972				
	ML	1337	1992				
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1622	1992	4			
	ML	1704	1992	4			
	ML	1705	1992				
	ML	1706	1992	-			
	ML	1707	1992	4			
	ML	1710	1992	-			
	ML	1732 1748	1992 1992	-			
	ML	1748	1992	-			
	ML	1011	1992				
3. Coopera	tion Agreemen	t					
3	The lease holder must make every reasonable attempt, and be able to				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospectin	g Operations					
4	(a) The lease h operation on la	older must not nd over which t	carry out any a this lease has b	ssessable prospecting een granted unless:	Relevant DC currenlty in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Explorat	tion Reporting			
5	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1560 - AUDIT CHECKLIST – HVO IEA 2022

General conditions	
	2
1. Notice to Landholders	
2. Group Security	.2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	.4
Special conditions	.4
5. Petroleum (Mining Operations By-Product Only)	.4
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	l conditions						
1. Notice t	o Landholders						
1	the lease holder (i) that this minin (ii) whether the The notice must landholder and (b) If there are t lease holder will complying with	I be taken to have co	Aholder notice in v ranted or renewed urface. I within the lease a within the lease ers to which notic omplied with cond lished in a newsp	writing: d; and rea and each area. e must be given, the	Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.</li> <li>The leases covered by the group security include this ML 1560 (1992) and:</li> </ul>				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992	-			
	ML	1482	1992				
	ML	1526	1992				
	ML	1500	1992				
	ML	1589	1992	-			
	ML	1622	1992	-			
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992	-			
	ML	1707	1992	-			
	ML	1710	1992	-			
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992	-			
3. Coopera	tion Agreement		ł	-			
	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping				Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currenity in place for production leases	Compliant	
<b>Special</b>	conditions			
5. Petroleu	ım (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered	

# ML 1589 - AUDIT CHECKLIST – HVO IEA 2022

ML 1589 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only)	4
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions						
1. Notice to	o Landholders						
1	the lease holde (i) that this min (ii) whether the The notice must landholder and (b) If there are lease holder with complying with	er must give each la ing lease has been lease includes the st include a plan ide individual land pare ten or more landhol Il be taken to have	Indholder notice i granted or renew surface. entifying the lease cel within the lease lders to which no complied with co ublished in a new	ved; and	Only triggered on grant/renewal	Compliant	
2. Group S	ecurity						
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit. The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future. The amount of the security deposit to be provided as a group security deposit has been assessed at <b>\$150,882,000</b> . The leases covered by the group security include this <b>ML 1589 (1992)</b> and:				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972	-			
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992	•			
	ML	1474	1992				
	ML	1482	1992	•			
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1622	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	demonstrate its a cooperation agre authorisations iss issued under the agreement shoul • access arrange • operational inte • dispute resoluti • information exc • well location • timing of drilling	attempts to the sa eement with the he sued under the M Petroleum (Onsh Id address but no ements eraction procedure on thange	tisfaction of the S older(s) of any ov ining Act 1992 ar nore) Act 1991. The t be limited to:	nd petroleum titles	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currenity in place for production leases	Compliant	
<b>Special</b>	conditions			
5. Petroleu	Im (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered	

# ML 1622 - AUDIT CHECKLIST – HVO IEA 2022

ML 1622 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	4
5. Petroleum (Mining Operations By-Product Only)	4
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	l conditions	5					
1. Notice t	o Landholders						
<ul> <li>(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing:</li> <li>(i) that this mining lease has been granted or renewed; and</li> <li>(ii) whether the lease includes the surface.</li> <li>The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area.</li> <li>(b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice</li> </ul>			Only triggered on grant/renewal	Compliant			
2 Group S	complying with region where		published in a ne	ewspaper circulating in the			
2					Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1704	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
	demonstrate its cooperation agre authorisations is issued under the agreement shou • access arrange • operational inte • dispute resolut • information exe • well location • timing of drilling • potential resou	attempts to the s eement with the sued under the l e Petroleum (Ons ild address but n ements eraction procedu ion change g urce extraction co ssues.	satisfaction of the holder(s) of any Mining Act 1992 shore) Act 1991. ot be limited to: res	ttempt, and be able to e Secretary, to enter into a overlapping and petroleum titles The cooperation	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting	Operations					
4	(a) The lease ho operation on lan			ssable prospecting granted unless:	Relevant DC currenlty in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petrole	um (Mining Operations By-Product Only)			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1634 - AUDIT CHECKLIST – HVO IEA 2022

ML 1634 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Dams Safety – Mining Leases	
6. Petroleum (Mining Operations By-Product Only)	
7. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	l conditions						
1. Notice t	o Landholders						
1	<ul> <li>(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing:</li> <li>(i) that this mining lease has been granted or renewed; and</li> <li>(ii) whether the lease includes the surface.</li> <li>The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area.</li> <li>(b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice complying with condition 1(a) is published in a newspaper circulating in the region where the lease area is situated.</li> </ul>				Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2	2 The security deposit to be provided and maintained for this mining lease is				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year	-			
	CCL	714	1973				
	CL	327	1973				
	CL	398	1973				
	ML	1465	1992				
	ML	1682	1992				
	ML	1734	1992				
	ML	1753	1992				
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
3. Coopera	ation Agreement			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	<ul> <li>operational interaction procedures</li> <li>dispute resolution</li> <li>information exchange</li> <li>well location</li> </ul>			
	<ul> <li>timing of drilling</li> <li>potential resource extraction conflicts; and</li> <li>rehabilitation issues.</li> </ul>			
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currently in place for production leases	Compliant	
Special	conditions			
5. Dams Sa	afety – Mining Leases			
5	(a) The lease holder must not mine within any part of the lease area which is within the notification area of the Warkworth North Pit Tailings Dam	Not triggered No mining activity within notification area.	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.			
	(b) Where the lease holder desires to mine within the notification area, the lease holder must:			
	(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and			
	(ii) provide such information as the Minister may direct.			
	(c) The Minister must not, except in the circumstances set out in sub- paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.			
	(i) This sub-paragraph is complied with if:			
	(a) Dams Safety NSW as constituted by section 6 of the Dams Safety Act 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).			
	(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.			
	(c) the Secretary has complied with any reasonable request made by Dams Safety NSW or the owner of the dam for further information in connection with the mining proposal.			
	(d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and			
	(e) where Dams Safety NSW has made recommendations the approval is in terms that are:			
	- in accordance with those recommendations; or			
	- where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.			
	(ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms			
	that are, in relation to matters dealing with the safety of the dam: - as determined by agreement between the Minister and the Minister administering the Dams Safety Act 2015; or			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	- in the event of failure to reach such agreement - as determined by the Premier.			
	(d) The Minister, on notice from Dams Safety NSW, may at any time or times:			
	(i) cancel any approval given where a notice pursuant to section 19 of the Dams Safety Act 2015 is given.			
	(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.			
6. Petroleu	um (Mining Operations By-Product Only)			
6	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
7. Explora	tion Reporting			
7	Note: <u>Exploration Reports (Geological and Geophysical)</u> The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation. Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.		Not triggered	

# ML 1682 - AUDIT CHECKLIST – HVO IEA 2022

ML 1682 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No	o. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al conditions	5					
1. Notice	e to Landholders	;					
1	the lease hold (i) that this min (ii) whether the The notice mu landholder and	ler must give each ning lease has bee e lease includes th ust include a plan id d individual land pa	landholder notic en granted or rer ne surface. dentifying the lea arcel within the l	newed; and	Only triggered on grant/renewal	Compliant	
	lease holder w complying with region where	vill be taken to hav	e complied with published in a n	condition 1(a) if a notice ewspaper circulating in the			
2. Group	o Security				1		
2	The security deposit to be provided and maintained for this mining lease is				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	and: Lease type	Lease Number	Act Year	-			
	CCL	714	1973				
	CL	327	1973	-			
	CL	398	1973	1			
	ML	1465	1992				
	MPL	270	1972				
	ML	1734	1992				
	ML	1753	1992				
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
3. Coopera	ation Agreement			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	

# ML 1704 - AUDIT CHECKLIST – HVO IEA 2022

ML 1704 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	condition	5					
1. Notice t	o Landholders	;					
1		days from the date ler must give each		wal of this mining lease, ce in writing:	Only triggered on grant/renewal	Compliant	
	. ,	ning lease has bee e lease includes th	•	newed; and			
	The notice mu		dentifying the le	ase area and each ease area.			
	lease holder v complying wit	vill be taken to hav	e complied with published in a n	notice must be given, the condition 1(a) if a notice ewspaper circulating in the			
2. Group S	Security						
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit.				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	secure funding	g for the fulfilment	of obligations un eposit, including	ntain a security deposit to nder the mining leases obligations under each			
	The amount o deposit has be	f the security depo een assessed at \$	osit to be provide 1 <b>50,882,000</b> .	ed as a group security e this <b>ML 1704 (1992)</b>			
	and:	vered by the grou	p security includ				
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992	-			
	ML	1482	1992				
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1682	1992				
	ML	1705	1992				
	ML	1706	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	demonstrate its cooperation agr authorisations is	attempts to the eement with the ssued under the e Petroleum (On uld address but r ements eraction procedu- tion change g urce extraction co	satisfaction of th holder(s) of any Mining Act 1992 shore) Act 1991 not be limited to: ures	2 and petroleum titles I. The cooperation	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	

# ML 1705 - AUDIT CHECKLIST – HVO IEA 2022

ML 1705 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only	
6. Exploration Reporting	

Cond No	o. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al conditions	S					
1. Notice	e to Landholders	;					
1	<ul> <li>(a) Within 90 (a)</li> <li>(b) the lease hold</li> <li>(c) that this minimum (c)</li> <li>(c) whether the the notice mum landholder and the lease holder with the complying with the lease holder with the lease holder with the notice mum lease holder with the lease holder with t</li></ul>	days from the date ler must give each ning lease has be e lease includes th ust include a plan i d individual land p e ten or more land vill be taken to hav	I landholder noti- en granted or re- ne surface. dentifying the le arcel within the holders to which ve complied with published in a r	newed; and ase area and each	Only triggered on renewal	Compliant	
2. Group	Security		induted.				
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.</li> <li>The leases covered by the group security include this ML 1705 (1992) and:</li> </ul>				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973	1.			
	CL	360	1973	1			
	CL	359	1973 1992				
	CML	584	1992				
	ML	1324	1972				
	ML	1337	1992	_			
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992	-			
	ML	1482	1992	-			
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1704	1992	-			
	ML	1622	1992	-			
	ML	1706	1992	-			
	ML	1707	1992				
	ML	1710	1992	-			
	ML	1732	1992	1			
	ML	1748	1992	-			
	ML	1811	1992	-			
3. Coopera	tion Agreement						
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping			Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
4. Assessa	ble Prospecting	Operations					
4				ssable prospecting granted unless:	Relevant DC currently in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petroleu	um (Mining Operations By-Product Only			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1706 - AUDIT CHECKLIST – HVO IEA 2022

ML 1706 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	conditions	5					
1. Notice t	o Landholders						
1	the lease hold (i) that this mir (ii) whether the The notice mu landholder and (b) If there are lease holder w complying with	er must give each ning lease has bee e lease includes th st include a plan ic d individual land pa ten or more landh rill be taken to hav	landholder notice on granted or rene e surface. dentifying the lease arcel within the lease nolders to which r e complied with o published in a ne	ewed; and se area and each	Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2	Dup SecurityThe security deposit to be provided and maintained for this mining lease is part of a group security deposit.The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.The leases covered by the group security include this ML 1706 (1992) and:Lease typeLease NumberAct YearCL7551973CL3601973CL5841972ML13241992ML13371992ML13591992		Assessed security equals held security - all certificates saved at Item 140	Compliant			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992	-			
	ML	1474	1992	-			
	ML	1482	1992	-			
	ML	1526	1992	-			
	ML	1500	1992	-			
	ML	1560	1992	-			
	ML	1589	1992				
	ML	1682	1992	-			
	ML	1705	1992				
	ML	1704	1992	1			
	ML	1707	1992	-			
	ML	1710	1992				
	ML	1732	1992	-			
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement					•	
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping			Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
	<ul> <li>access arrange</li> </ul>						
	<ul> <li>operational interview</li> </ul>		res				
	<ul> <li>dispute resolut</li> </ul>						
	<ul> <li>information exc</li> </ul>	change					
	<ul> <li>well location</li> </ul>						
	<ul> <li>timing of drilling</li> </ul>						
	<ul> <li>potential resource</li> </ul>	rce extraction co	onflicts; and				
	<ul> <li>rehabilitation is</li> </ul>	sues.					

# ML 1707 - AUDIT CHECKLIST – HVO IEA 2022

ML 1707 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	2
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
Special conditions	
5. Petroleum (Mining Operations By-Product Only	
6. Exploration Reporting	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	l conditions	5					
1. Notice	to Landholders						
1	<ul> <li>(a) Within 90 of the lease hold</li> <li>(i) that this minipart (ii) whether the The notice multipart (iii) whether the landholder and (b) If there are lease holder with complying with</li> </ul>	er must give each ning lease has bee e lease includes th ist include a plan i d individual land p e ten or more land il be taken to hav n condition 1(a) is	I landholder notic en granted or rer ne surface. dentifying the lea arcel within the l holders to which ve complied with published in a no	newed; and	Only triggered on grant/renewal	Compliant	
2. Group		the lease area is s	situated.				
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit.         The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.         The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.         The leases covered by the group security include this ML 1707 (1992) and:				Assessed security = held security – all certificates saved at item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972 1992	-			
	ML	1324	1992				
	ML	1359	1992				

Cond No.	Condition			Comments & Evidence	Audit Findings	Recommendations
	ML 1406	1992				
	ML 1428	1992				
	ML 1474	1992				
	ML 1482	1992				
	ML 1526	1992				
	ML 1500	1992				
	ML 1560	1992				
	ML 1589	1992				
	ML 1704	1992				
	ML 1622	1992				
	ML 1706	1992				
	ML 1705	1992				
	ML 1710	1992				
	ML 1732	1992				
	ML 1748	1992				
	ML 1811	1992				
3. Coopera	tion Agreement					
3	The lease holder must make ever demonstrate its attempts to the sis cooperation agreement with the authorisations issued under the issued under the Petroleum (On- agreement should address but no access arrangements • operational interaction procedur • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction con • rehabilitation issues.	satisfaction of the holder(s) of any of Mining Act 1992 a shore) Act 1991. Not be limited to:	Secretary, to enter into a overlapping and petroleum titles	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting Operations					
4	(a) The lease holder must not ca operation on land over which this	arry out any asses s lease has been	ssable prospecting granted unless:	Relevant DC currently in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
Special	conditions			
5. Petrole	um (Mining Operations By-Product Only			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	
6. Explora	tion Reporting			
6	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1710 - AUDIT CHECKLIST – HVO IEA 2022

ML 1710 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
5. Exploration Reporting.	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	conditions	5					
1. Notice to	o Landholders						
1		days from the date er must give each		wal of this mining lease, e in writing:	Only triggered on grant/renewal	Compliant	
	.,	ning lease has bee e lease includes th	•	ewed; and			
	The notice mu		dentifying the lea	ase area and each ease area.			
	lease holder w complying with	ill be taken to hav	e complied with published in a ne	notice must be given, the condition 1(a) if a notice ewspaper circulating in the			
2. Group S	Security						
2		eposit to be provic security deposit.	led and maintair	ed for this mining lease is	Assessed security equals held security - all certificates saved at Item 140	Compliant	
	secure funding covered by the	g for the fulfilment	of obligations ur posit, including	tain a security deposit to der the mining leases obligations under each			
	The amount o deposit has be	f the security depo een assessed at <b>\$</b> *	osit to be provide 150,882,000.	d as a group security e this <b>ML 1710 (1992)</b>			
	and:	·····	-				
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973				
	CL	359	1973				
	CML	4	1992				
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992	21			
	ML	1359	1992	-			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992	-			
	ML	1474	1992	-			
	ML	1482	1992	-			
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1704	1992				
	ML	1622	1992	-			
	ML	1706	1992	-			
	ML	1705	1992				
	ML	1707	1992	-			
	ML	1732	1992				
	ML	1748	1992				
	ML	1811	1992				
3. Coopera	tion Agreement						
3	demonstrate its cooperation agr authorisations is issued under the	attempts to the s eement with the ssued under the l e Petroleum (Ons ild address but n ements eraction procedu cion change g urce extraction co	satisfaction of the holder(s) of any Mining Act 1992 shore) Act 1991. ot be limited to: res	ttempt, and be able to e Secretary, to enter into a overlapping and petroleum titles The cooperation	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
4. Assessa	ble Prospecting	Operations					
4				ssable prospecting granted unless:	Relevant DC currently in place for production leases	Compliant	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
5. Explora	tion Reporting			
5	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1732 - AUDIT CHECKLIST – HVO IEA 2022

ML 1732 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	condition	S					
I. Notice to	o Landholders	;					
1		days from the date ler must give each		val of this mining lease,	Only triggered on grant or renewal	Compliant	
	.,	ning lease has bee e lease includes th	•	ewed; and			
	The notice mu	ust include a plan i d individual land p	dentifying the leas				
	(b) If there are lease holder v complying wit	e ten or more landh vill be taken to hav	nolders to which n re complied with c published in a ne	otice must be given, the ondition 1(a) if a notice wspaper circulating in the			
2. Group S	ecurity						
2		leposit to be provid p security deposit.	ded and maintaine	ed for this mining lease is	Assessed security equals held security - all certificates saved at Item 140	Compliant	
	secure funding covered by the	g for the fulfilment	of obligations und eposit, including o	ain a security deposit to ler the mining leases bligations under each			
	The amount o	•	sit to be provided	as a group security			
	The leases co and:	overed by the group	p security include	this ML 1732 (1992)			
	Lease type	Lease Number	Act Year	1			
	CCL	755	1973	-			
	CL	360	1973	1			
	CL	359	1973	1			
	CML	4	1992				
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992	-			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1526	1992				
	ML	1500	1992	_			
	ML	1560	1992	-			
	ML	1589	1992				
	ML	1682	1992				
	ML	1705	1992				
	ML	1704	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1706	1992				
	ML	1748	1992	_			
	ML	1811	1992				
3. Coopera	tion Agreement						
3	demonstrate its cooperation agre authorisations is issued under the agreement should	attempts to the seement with the sound under the Petroleum (On III) address but r	satisfaction of the holder(s) of any of Mining Act 1992 shore) Act 1991.	tempt, and be able to e Secretary, to enter into a overlapping and petroleum titles The cooperation	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	<ul> <li>access arrange</li> </ul>						
	<ul> <li>operational inte</li> </ul>		ures				
	<ul> <li>dispute resolut</li> </ul>						
	<ul> <li>information exc</li> </ul>	change					
	<ul> <li>well location</li> </ul>						
	• timing of drilling	g					
	<ul> <li>potential resource</li> </ul>	rce extraction c	onflicts; and				
	<ul> <li>rehabilitation is</li> </ul>	sues.					

# ML 1734 - AUDIT CHECKLIST – HVO IEA 2022

Cond N	o. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al condition	S					
1. Notic	e to Landholders	;					
1	the lease hold	days from the date ler must give each ning lease has bee	landholder notic	•	Only triggered on grant/renewal	Compliant	
	.,	e lease includes th	•	ieweu, anu			
	The notice mu landholder an	ust include a plan i d individual land p	dentifying the lea arcel within the l				
	lease holder v complying with	vill be taken to hav	ve complied with published in a n	notice must be given, the condition 1(a) if a notice ewspaper circulating in the			
2. Grouj	p Security						
2		leposit to be provio p security deposit.		ned for this mining lease is	Assessed security equals held securit - all certificates saved at Item 140	y Compliant	
	secure funding	g for the fulfilment	of obligations ur eposit, including	tain a security deposit to der the mining leases obligations under each			
	deposit has be	een assessed at \$	66,291,000	d as a group security			
	The leases co and:	overed by the grou	p security includ	e this <b>ML 1734 (1992)</b>			
	Lease type	Lease Number	Act Year				
	CCL	714	1973				
	CL	327	1973				
	CL	398	1973				
	ML	1634	1992				
	ML	1682	1992				
	ML	1465	1992				
	ML	1753	1992				
	ML	1810	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
3. Coopera	ation Agreement			
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	
	<ul> <li>operational interaction procedures</li> </ul>			
	dispute resolution			
	information exchange			
	well location			
	<ul> <li>timing of drilling</li> <li>potential resource extraction conflicts; and</li> </ul>			
	rehabilitation issues.			
4. Assessa	able Prospecting Operations			
4	<ul> <li>(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless:</li> <li>(i) it is carried out in accordance with any necessary development consent; or</li> <li>(ii) if development consent is not required, the prior written approval of the Minister has been obtained.</li> <li>(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.</li> <li>(c) An approval granted by the Minister under this condition may be granted subject to terms.</li> <li>(d) The lease holder must comply with the approval granted to the holder under this condition.</li> </ul>	Relevant DC currently in place for production leases	Compliant	
Special	conditions			
5. Petroleu	m (Mining Operations By-Product Only			
5	For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of carrying out mining operations.		Not triggered	

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
6. Dams S	Safety – Mining Leases			
6	<ul> <li>(a) The lease holder must not mine within any part of the lease area which is within the notification area of the Warkworth Notification Area without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.</li> <li>(b) Where the lease holder desires to mine within the notification area, the lease holder must:</li> </ul>	Not triggered No mining activity within notification area.	Compliant	
	(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and			
	(ii) provide such information as the Minister may direct.			
	(c) The Minister must not, except in the circumstances set out in sub- paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.			
	(i) This sub-paragraph is complied with if:			
	(a) Dams Safety NSW as constituted by section 6 of the Dams Safety Act 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).			
	(b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.			
	(c) the Secretary has complied with any reasonable request made by Dams Safety NSW or the owner of the dam for further information in connection with the mining proposal.			
	(d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and			
	(e) where Dams Safety NSW has made recommendations the approval is in terms that are:			
	- in accordance with those recommendations; or			
	- where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this			
	paragraph. (ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam:			
	- as determined by agreement between the Minister and the Minister administering the Dams Safety Act 2015; or			
	- in the event of failure to reach such agreement - as determined by the Premier.			
	(d) The Minister, on notice from Dams Safety NSW, may at any time or times:			
	(i) cancel any approval given where a notice pursuant to section 19 of the Dams Safety Act 2015 is given.			
	(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.			
7. Explorat	tion Reporting			
7	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			

# ML 1748 - AUDIT CHECKLIST – HVO IEA 2022

ML 1748 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No	o. Condition				Comments & Evidence	Audit Findings	Recommendations
Gener	al conditions	5					
1. Notice	to Landholders						
1	<ul> <li>(a) Within 90 (a) the lease hold</li> <li>(i) that this minimum (ii) whether the notice mum landholder and (b) If there are lease holder with complying with</li> </ul>	days from the date er must give each ning lease has bee e lease includes th ist include a plan i d individual land p e ten or more landl vill be taken to hav	landholder notic en granted or ren ne surface. dentifying the lea arcel within the lea holders to which ve complied with published in a no	ewed; and ase area and each	Only triggered on grant/renewal	Compliant	
2. Groun	Security						
2				tain a security deposit to der the mining leases obligations under each d as a group security	Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	755	1973				
	CL	360	1973 1973				
	CML	4	1973				
	CML	584	1972				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992	-			

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1682	1992				
	ML	1705	1992				
	ML	1704	1992				
	ML	1707	1992				
	ML	1710	1992				
	ML	1706	1992				
	ML	1732	1992				
	ML	1811	1992				
3. Cooperat	tion Agreement						
3	demonstrate its cooperation agre authorisations is	attempts to the s eement with the sued under the e Petroleum (On ild address but n ements eraction procedu ion change g irce extraction co	satisfaction of the holder(s) of any Mining Act 1992 shore) Act 1991. ot be limited to: rres	ttempt, and be able to e Secretary, to enter into a overlapping and petroleum titles . The cooperation	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant	

# ML 1753 - AUDIT CHECKLIST – HVO IEA 2022

ML 1753 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No	. Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	al condition	S					
1. Notice	to Landholders	;					
1	the lease hold (i) that this mi (ii) whether th The notice mu landholder an	ler must give each ning lease has bea e lease includes th ust include a plan i d individual land p	I landholder notion an granted or report ne surface. dentifying the le arcel within the	newed; and ase area and each	Only triggered on grant/renewal	Compliant	
	complying wit region where		published in a n	condition 1(a) if a notice ewspaper circulating in the			
2. Group	-				Γ		
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit. The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future. The amount of the security deposit to be provided as a group security deposit has been assessed at <b>\$66,291,000</b> . The leases covered by the group security include this <b>ML 1748 (1992)</b>				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	and:						
	Lease type	Lease Number	Act Year				
	CCL	714	1973				
	CL	327	1973	-			
	CL	398	1973				
	ML	1682	1992				
	ML	1734	1992				
	ML	1465	1992				
	ML	1810	1992	-			

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations						
3. Coopera	. Cooperation Agreement									
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant							

# ML 1810 - AUDIT CHECKLIST – HVO IEA 2022

ML 1810 - AUDIT CHECKLIST – HVO IEA 2022	1
General conditions	2
1. Notice to Landholders	2
2. Group Security	
3. Cooperation Agreement	

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
General	l conditions						
1. Notice t	o Landholders						
1	<ul> <li>(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing:</li> <li>(i) that this mining lease has been granted or renewed; and</li> <li>(ii) whether the lease includes the surface.</li> <li>The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area.</li> <li>(b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice complying with condition 1(a) is published in a newspaper circulating in the region where the lease area is situated.</li> </ul>				Only triggered on grant/renewal	Compliant	
2. Group S	Security						
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit.The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.The amount of the security deposit to be provided as a group security deposit has been assessed at \$66,291,000.The leases covered by the group security include this ML 1810 (1992) and:				Assessed security equals held security - all certificates saved at Item 140	Compliant	
	Lease type	Lease Number	Act Year				
	CCL	714	1973				
	CL	327	1973	-			
	CL	398	1973	1			
	ML	1465	1992	1			
	MPL	270	1972				
	ML	1734	1992				
	ML	1753	1992				
	ML	1682	1992				

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations						
3. Coopera	Cooperation Agreement									
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.	Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant							

# ML 1811 - AUDIT CHECKLIST – HVO IEA 2022

ML 1811 - AUDIT CHECKLIST – HVO IEA 2022	.1
General conditions	.2
1. Notice to Landholders	.2
2. Group Security	
3. Cooperation Agreement	
4. Assessable Prospecting Operations	
5. Exploration Reporting	

Cond No.	. Condition				Comments & Evidence	Audit Findings	Recommendations
Genera	al conditions	S					
1. Notice	to Landholders	;					
1	the lease hold (i) that this mi	days from the date ler must give each ning lease has bee e lease includes th	landholder notion	•	Only triggered on grant/renewal	Compliant	
	The notice mu landholder an (b) If there are lease holder w complying wit	ust include a plan i d individual land p e ten or more landl vill be taken to hav	dentifying the le arcel within the holders to which ve complied with published in a n	ase area and each lease area. notice must be given, the condition 1(a) if a notice ewspaper circulating in the			
2. Group	Security						
2	<ul> <li>The security deposit to be provided and maintained for this mining lease is part of a group security deposit.</li> <li>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future.</li> <li>The amount of the security deposit to be provided as a group security deposit has been assessed at \$150,882,000.</li> <li>The leases covered by the group security include this ML 1811 (1992) and:</li> </ul>			Assessed security equals held security - all certificates saved at Item 140	Compliant		
	Lease type	Lease Number	Act Year				
	CCL	755 360	1973 1973				
	CL	359	1973				
	CML	4	1973	_			
	CL	584	1972				
	ML	1324	1992				
	ML	1337	1992				
	ML	1359	1992				

Cond No.	Condition				Comments & Evidence	Audit Findings	Recommendations
	ML	1406	1992				
	ML	1428	1992				
	ML	1474	1992				
	ML	1482	1992				
	ML	1526	1992				
	ML	1500	1992				
	ML	1560	1992				
	ML	1589	1992				
	ML	1704	1992				
	ML	1622	1992				
	ML	1706	1992				
	ML	1705	1992				
	ML	1707	1992				
	ML	1732	1992				
	ML	1748	1992				
3. Coopera	tion Agreement						
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the Mining Act 1992 and petroleum titles issued under the Petroleum (Onshore) Act 1991. The cooperation agreement should address but not be limited to: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.			Not triggered There are no overlapping licences or leases for other minerals across the HVO footprint	Compliant		
4. Assessa	4. Assessable Prospecting Operations						
4				Relevant DC currently in place for production leases	Compliant		

Cond No.	Condition	Comments & Evidence	Audit Findings	Recommendations
	(i) it is carried out in accordance with any necessary development consent; or			
	(ii) if development consent is not required, the prior written approval of the Minister has been obtained.			
	(b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval.			
	(c) An approval granted by the Minister under this condition may be granted subject to terms.			
	(d) The lease holder must comply with the approval granted to the holder under this condition.			
5. Explora	tion Reporting			
5	Note: Exploration Reports (Geological and Geophysical)		Not triggered	
	The lease holder must lodge reports in accordance with the requirements in section 163C of the Mining Act 1992 and clauses 59, 60 and 61 of the Mining Regulation 2016 as well as any further requirements issued by the Secretary under clause 62 of the Mining Regulation.			
	Guidelines for the structure, content and data format requirements for reports are set out in the Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.			





### **REGULATOR CONSULTATION CHECKLIST – HVO IEA 2022**

REGULATOR CONSULTATION CHECKLIST – HVO IEA 2022	1
NSW Department of Planning and Environment	2
NSW Resources Regulator	2
Singleton Shire Healthy Environment Group	3

IEA No.	Stakeholder Comment	Comments & Evidence	Recommendations
NSW D	epartment of Planning and Environment		
SC1	<ul> <li>Correspondence was received from DPE by email from Joel Curran clarifying audit schedule, scope regarding water management and confirmation of additional audit team specialist. These items were noted as follows: <ol> <li>Audit Schedule – noted, the department has no concerns with bringing the site inspection component forward</li> <li>Surface Water Management structures – as per the Planning Secretary's audit team endorsement letter dated 28 August 2022, the Planning Secretary requires the Surface Water specialist to carry out an assessment of current water management structures on site and confirm compliance with the currently approved Water Management Plan.Including, but not limited to, what dams are where and their reporting routes (pumping, drainage). This compliance assessment can be extended to the most recently submitted Water Management Plan. The Surface Water specialist should also provide any high level recommendations to improve environmental performance relating to water management on site.</li> </ol> </li> <li>The department has reviewed the information you have provided and is satisfied that Dale Redwood is suitably qualified, experienced, and independent. Consequently, in accordance with Schedule 5, Condition 10 of DA450- 10-2003 as modified and Schedule 5, Condition 5 of MP06_0261 as modified (the consents), the Planning Secretary endorses Dale Redwood as a noise specialist for the 2022 HVO IEA.</li> </ul>	<ol> <li>Noted</li> <li>This item is addressed in the audit checklists in Section 4.6 of the report and in audit checklists in Appendix B</li> <li>Noted</li> </ol>	
NSW R	esources Regulator		
SC2	The independent audit is required to assess compliance against the relevant environmental management conditions of the mining leases up to 1 July 2022, including the mining operations plan.	Compliance with relevant conditions of mining leases was considered and addressed in the audit checklists in Appendix B.	
SC3	From 2 July 2022, the independent environmental audit should provide an assessment of compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016.	Compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016 was considered and addressed in the audit checklists in Appendix B.	
SC4	The audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.	Refer to comments on environmental performance in Section 4 of the audit report	

IEA No.	Stakeholder Comment	Comments & Evidence	Recommendations
		and against relevant conditions in audit checklists in Appendix B. The rehabilitation program on site is very well organised, with robust systems to track aspects from the ground disturbance permit (GDP) process through to post rehabilitation monitoring. Areas not subject to active mining were being rehabilitated, with temporary seeding of inactive areas and stockpiles in place.	
Singlet	on Shire Healthy Environment Group		
SC5	An email was received from Dr Neville Hodkinson of the Singleton Shire Healthy Environment Group, with an attached SSHEG Community Heritage Audit document. Dr Hodkinson noted that this document has not been released by the NSW Government and is not in the Public Domain.	The document addressed a wide range of general concerns about the impact of mining in the Hunter Valley, however a number of the topics were not related to the scope of this HVO audit. RPS advised Dr Hodkinson that the Independent Environmental Audit (IEA) can only assess compliance with the relevant approvals and the EPL. It was further advised that if Dr Hodkinson could provide a summary of compliance issues, environmental performance issues, and/or complaints relating to the HVO operations, these could be considered and reviewed as part of the audit process. No further correspondence was received, however compliance is addressed in the audit report and audit checklists.	

From:	Brenton.Hubert@hvo.com.au
То:	Sam Mitchell
Cc:	Ian Richardson; Andrew.Speechly@hvo.com.au
Subject:	FW: HVO Independent Environmental Audit
Date:	Tuesday, 11 October 2022 10:52:21 AM
Attachments:	image001.png

**CAUTION:** This email originated from outside of RPS.

Hi Sam,

Please see correspondence from Joel Curran from DPE regarding Audit Schedule, Surface Water Mgt review additional scope and Audit Team endorsement.

Regards,

Brenton Hubert | Environment & Community Coordinator

#### **Hunter Valley Operations**

POSTAL:PO Box 315 Singleton NSW 2330 AustraliaMOBILE:0422 161 505EMAIL:Brenton.Hubert@hvo.com.au

From: Joel Curran < Joel.Curran@planning.nsw.gov.au>
Sent: Friday, 7 October 2022 12:56 PM
To: Hubert, Brenton (Hunter Valley Operations - AU) < Brenton.Hubert@hvo.com.au>
Cc: Speechly, Andrew (Hunter Valley Operations - AU) < Andrew.Speechly@hvo.com.au>
Subject: RE: HVO Independent Environmental Audit

External sender Hi Brenton

Responses provided below.

- 1. Audit Schedule noted, the department has no concerns with bringing the site inspection component forward.
- 2. Surface Water Management structures as per the Planning Secretary's audit team endorsement letter dated 28 August 2022, the Planning Secretary requires the Surface Water specialist to carry out an assessment of current water management structures on site and confirm compliance with the <u>currently approved</u> Water Management Plan. Including, but not limited to, what dams are where and their reporting routes (pumping, drainage). This compliance assessment can be extended to the most recently submitted Water Management Plan. The Surface Water specialist should also provide any high level recommendations to improve environmental performance relating to water management on site.
- 3. The department has reviewed the information you have provided and is satisfied that Dale Redwood is suitably qualified, experienced, and independent. Consequently, in accordance with Schedule 5, Condition 10 of DA450- 10-2003 as modified and Schedule 5, Condition 5 of MP06\_0261 as modified (the consents), the Planning Secretary endorses Dale Redwood as a noise specialist for the 2022 HVO IEA.

#### Regards

#### Joel Curran Acting Team Leader

Development Assessment | Department of Planning and Environment **T** 02 4904 2702 | **M** 0412 323 331 | **E** joel.curran@planning.nsw.gov.au PO Box 1226 | Newcastle NSW 2300 *Please direct all email correspondence to compliance@planning.nsw.gov.au* www.dpie.nsw.gov.au



The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

If you are submitting a compliance document or request as required under the conditions of consent or approval, please note that the Department is no longer accepting lodgement via <u>compliance@planning.nsw.gov.au</u>.

The Department has upgraded the Major Projects Website to improve the timeliness and transparency of its post approval and compliance functions. As part of this upgrade, proponents are now requested to submit all post approval and compliance documents online, via the Major Projects Website. To do this, please refer to the instructions available <u>here</u>.

From: Brenton.Hubert@hvo.com.au <Brenton.Hubert@hvo.com.au>
Sent: Friday, 7 October 2022 10:55 AM
To: Joel Curran <Joel.Curran@planning.nsw.gov.au>
Cc: Andrew Speechly <andrew.speechly@hvo.com.au>
Subject: HVO Independent Environmental Audit

Hi Joel,

Just following up on our phone conversation we had regarding the HVO IEA due to commence this year.

Can you please provide a response to the below points I am seeking clarification on:

#### 1. Audit schedule

IEA audit period ends 4<sup>th</sup> December. HVO proposes to commence audit inspection starting the week of the 28<sup>th</sup> November 2022 due to Auditor availability.

#### 2. Surface Water Scope

Intended scope for additional surface water component will involve a verification of the water infrastructure plan and schematic in the most recently submitted Water Management Plan. The assessment would confirm water type and connectivity of the dams.

Rationale for limiting the review to this scope is the Pollution Reduction Programme. A

comprehensive assessment was undertaken in 2019 under a PRP (and submitted to EPA) and culminated in a set of successive individual PRPs to upgrade aspects of the water management system.

#### 3. Endorsement of Audit Team

NSW DPE will send an email endorsing Dale Redwood as an additional noise specialist. (Yet to receive)

Regards,

Brenton Hubert | Environment & Community Coordinator

#### **Hunter Valley Operations**

POSTAL:PO Box 315 Singleton NSW 2330 AustraliaMOBILE:0422 161 505EMAIL:Brenton.Hubert@hvo.com.au

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AREQ0033635

Mr Sam Mitchell RPS Australia East Pty Ltd Unit 2A, 45 Fitzroy Street Carrington NSW 2294

By email: sam.mitchell@rpsgroup.com.au

Dear Mr Mitchell

### Subject: Hunter Valley Operations – Independent Environmental Audit

Thank you for your email dated 24 October 2022 requesting consultation on the independent audit to be undertaken of the Hunter Valley Operations. The mine comprises the following titles:

- CCL 714 (1973)
- CCL 755 (1973)
- CL 327 (1973)
- CL 359 (1973)
- CL 360 (1973)
- CL 398 (1973)
- CL 584 (1973)
- CML 4 (1992)
- ML 1324 (1992)
- ML 1337 (1992)
- ML 1359 (1992)
- ML 1406 (1992)
- ML 1428 (1992)
- ML 1465 (1992)
- ML 1474 (1992)
- ML 1482 (1992)
- ML 1500 (1992)

- ML 1526 (1992)
- ML 1560 (1992)
- ML 1589 (1992)
- ML 1622 (1992)
- ML 1634 (1992)
- ML 1682 (1992)
- ML 1704 (1992)
- ML 1705 (1992)
- ML 1706 (1992)
- ML 1707 (1992)
- ML 1710 (1992)
- ML 1732 (1992)
- ML 1734 (1992)
- ML 1748 (1992)
- ML 1753 (1992)
- ML 1810 (1992)
- ML 1811 (1992)

#### **NSW Resources Regulator**

516 High Street Maitland NSW 2320 | PO Box 344 HRMC NSW 2310 | Tel: 1300 814 609 | resourcesregulator.nsw.gov.au The independent audit is required to assess compliance against the relevant environmental management conditions of the mining leases up to 1 July 2022, including the mining operations plan.

From 2 July 2022, the independent environmental audit should provide an assessment of compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016.

The audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.

It would be appreciated if a copy of the final audit report could be sent to the Regulator at <u>nswresourcesregulator@service-now.com</u> upon completion of the audit.

Yours sincerely

Jenny Ehmsen Principal Compliance Auditor 26 October 2022

#### Hi Neville,

Appreciate you sending this detailed document through; however a number of the topics appear to not be related to the scope of this HVO audit.

RPS have been engaged to prepare the 2022 Independent Environmental Audit (IEA) of Hunter Valley Operations (HVO), as required by Schedule 5, Condition 10 of DA450-10-2003 as modified and Schedule 5, Condition 5 of MP06\_0261 as modified (the consents). The period the audit covers is between 1 December 2019 to 2 December 2022.

As such we can only make assessments against these approvals and the EPL. If you can please provide a dot point summary of the direct compliance issues; environmental performance issues, and/or complaints relating to these HVO approvals for us to consider that would be much appreciated.

Kind Regards

Sam Mitchell (He/Him)
Senior Environmental Scientist / Planner
RPS | Australia Asia Pacific
M +61 488 210 585
E sam.mitchell@rpsgroup.com.au
We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters
and community. We pay our respect to them and their cultures and to Elders past and present.
Click here to find out more about our Reconciliation Action Plan.

From: SSHEG Health <SSHEG@hotmail.com>
Sent: Thursday, 3 November 2022 4:35 PM
To: Sam Mitchell <Sam.Mitchell@rpsgroup.com.au>
Subject: Coal & Allied Mines Audit

**CAUTION:** This email originated from outside of RPS.

Please find attached the SSHEG Community Heritage Audit 2020 as discussed

Note this document has not been released by the NSW Government and is not in the Public Domain

For your consideration

Dr Neville Hodkinson PhD

Singleton Shire Healthy Environment Group

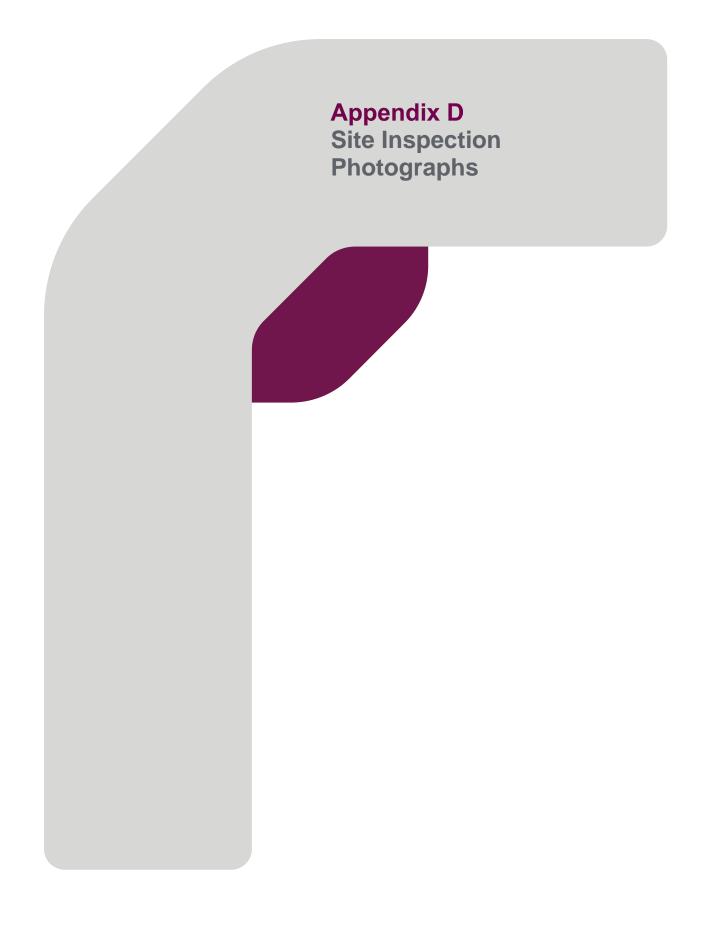




Plate 1 – HVO South Workshop



Plate 2 – HVO South Workshop apron drainage



Plate 3 – Trucks dumping overburden with minimal dust production noted



Plate 4 – Waste separation generally observed to occur throughout site



Plate 5 – Heavy vehicle wash bay



Plate 6 – Oily water separator in Southern Workshop



Plate 7 – Emergency spill kits noted throughout the site



Plate 8 – Rubbish noted in remnant bushland between North Workshop and Southern Trade Waste Dam



Plate 9 – Sediment build up following rain events in southern muster point carpark area



Plate 10 – Portable bunding utilised for barrels and other containers during inspection



Plate 11 – Permanent bunding structures sufficient with regular cleanout of bunds evident



Plate 12 – Ammonium Nitrate Plant



#### Plate 13 – Ammonium Nitrate Plant



Plate 14 – Viewing platform of Cheshunt and Riverview Pits



Plate 15 – Water truck fill point



Plate 16 – Bioremediation area suggested more formalised bays be installed



Plate 17 – Entrance to bioremediation area, improved access and drainage suggested



Plate 18 – Northern workshop area

<sup>6082 | 2022</sup> INDEPENDENT ENVIRONMENTAL AUDIT | 1 | **rpsgroup.com** 



Plate 19 – Suggested lids or cover be placed over uncovered waste containers to limit oily water generation



Plate 20 – Northern workshop oily water separator

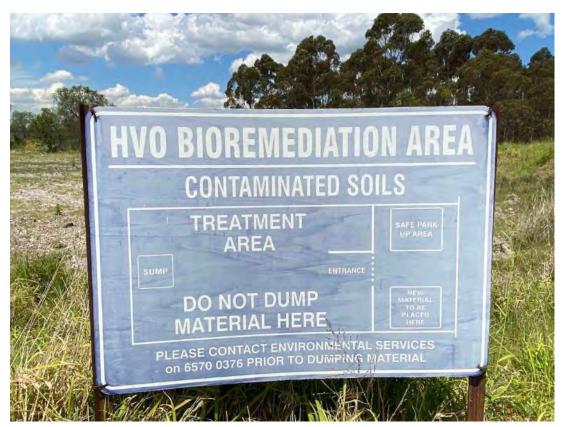


Plate 21 – Bioremediation area and signage adjacent to Bobs Dump



Plate 22 – Bioremediation area and signage adjacent to Bobs Dump



Plate 23 – Viewpoint of west pit



Plate 24 – Dam 28W



Plate 25 – Dam 21W



Plate 26 – Dam 33N



Plate 27 – HVO Loading Point Pollution Control Sump



Plate 28 – Coal stockpile



Plate 29 – Coal stockpile drainage point



Plate 30 – Evidence of initial marking for PRP implementation



Plate 31 – Evidence of initial marking and mulching for PRP implementation



Plate 32 – Dam 2W

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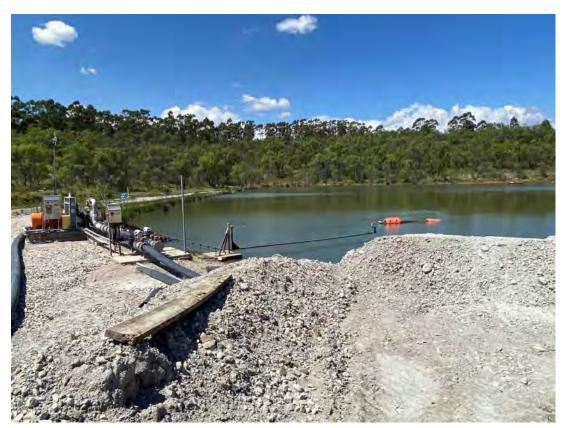


Plate 33 - Dam 5W



Plate 34 – HRSTS Discharge point Dam 9WDD



Plate 35 – EPL Monitoring Point 4



Plate 36 - Sediment control structures observed in place at spill ways



Plate 37 – Mitchell Pit Dam under construction



Plate 38 – Example of telemetry water level sensors installed at high risk dams



Plate 39 – Video monitoring and recording of blast during site inspection



Plate 40 – Contour banks and drop structures within the inspected areas of the rehabilitation appeared stable and well-constructed.



Plate 41 – Contour banks and drop structures within the inspected areas of the rehabilitation appeared stable and well-constructed.



Plate 42 – Established rehab area observed during site inspection



Plate 43 - Dam 5N



Plate 44 – Dam 5N outlet erosion

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Plate 45 – Wheel generated dust from truck traversing Hunter River crossing



Plate 46 – Hunter River crossing



Plate 47 – Hunter River crossing



Plate 48 – Unbunded container located adject Hunter River crossing (removed by HVO during audit)



Plate 49 – Heritage archive storage area



Plate 50 – Hunter River Red Gum Protection Zone entrance



Plate 51 – Groundwater monitoring point adjacent Billabong



Plate 52 – Groundwater monitoring point cap adequately installed

<sup>6082 | 2022</sup> INDEPENDENT ENVIRONMENTAL AUDIT | 1 | **rpsgroup.com** 



Plate 53 – Red River Gum Billabong Area



Plate 54 – Groundwater monitoring point with livestock protection structure



Plate 55 – Significant weed production through site noted due to current conditions



Plate 56 – Heritage exclusion zone signage missing following flood events



Plate 57 – Heritage exclusion zone



Plate 58 – Heritage exclusion zone



Plate 59 – Weed spray management adjacent to Hunter River



Plate 60 – Active rehabilitation works



Plate 61 – Active rehabilitation works topsoil spreading on contour banks



Plate 62 – Sediment and erosion systems in place for topsoil stripping



Plate 63 – Active rehabilitation works



Plate 64 – Active and established rehabilitation areas observed during inspection



Plate 65 – Air quality monitoring stations observed during site inspection



Plate 66 – Environmental noise compass observed during site inspection



Plate 67 – Air quality monitoring stations observed during site inspection



Plate 68 – Dust deposition monitoring station







## **RESPONSE TO 2019 AUDIT FINDINGS - AUDIT CHECKLIST – HVO IEA 2022**

RESPONSE TO 2019 AUDIT FINDINGS - AUDIT CHECKLIST – HVO IEA 2022	1
Response to 2019 Audit Findings	2
HVO South – PA 06_0261 Non-Compliance Recommendations	
HVO North - DA 450-10-2003 Non-Compliance Recommendations	5
EPL 640	

Cond No.	Audit Findings	Recommendations	HVO Response	Status
Response t	o 2019 Audit Findings			
HVO South – P	A 06_0261 Non-Compliance Reco	mmendations		
Sch 2 Cond 2a	Some non-compliances were identified with the conditions of this approval	Work with DPE to comply with conditions in Section of the IEA Report where practical.	Actions to address non compliances are committed to via HVO's response to recommendations.	Completed
Sch 2 Cond 15	Sch 3 Cond 60 no evidence of correspondence with Singleton Council or NSW RFS in relation to consultation on the Bush Fire Management Plan has been provided.	Ensure consultation with Singleton Council and RFS over the Bushfire Management Plan as per Schedule 3 Condition 30.	Council and RFS have been consulted on the revised version since the audit and this will be included in the plan once finalised.	Completed
Sch 3 Cond 7	Measured overpressure levels exceeded the 120dbL criterion at two locations (Moses Crossing, Jerrys Plains) on 17 January 2018.	Bridges Acoustic recommends avoiding possible overpressure reflection from the control building and resultant uncertainty regarding overpressure levels, the second Maison Dieu monitor should be considered the primary monitor in this area.	This monitor has been relocated.	Completed
Sch 3 Cond 10	One blast on Easter Saturday 2017 (which was officially considered a public holiday in 2017).	No recommendation provided	All blasting occurred during specified times during the audit period.	Completed
Sch 3 Cond 19	The measurement on 29/07/17 at the Gliding Club was determined to be non- compliant at 58 µg/m3 (with HVO contribution being 85% against the maximum contribution limit of 75% in accordance with the approved AQGHMP at the time). Incident was reported to the HVGC and DPE.	Dust deposition gauges at DL30 and Warkworth; and PM10 monitors at Knodlers Lane and Long Point be reconsidered as to their appropriateness as representative of private receivers (occur outside EA predictions of exceedance of criteria) as they are exceeding annual average results during the IEA period (however stated not due to HVO activities and not reported consistent with approved AQGHMP). As Knodlers Lane and Long Point monitoring sites occur within exceedance predictions for PM10 in the MOD5 assessment, it is likely that they will exceed on a continuous basis. HVO advises that DG will remain as internal management sites, not compliance as per Table 5 of the AQGHMP.	The current approved AQGHMP identifies which DDG are utilised as a measure of compliance, HVO considers this issue to now be addressed in the current AQGHMP.	Completed

Cond No.	Audit Findings	Recommendations	HVO Response	Status
		Internal procedures and relevant training be updated for change to AQGHMP which changes reportable circumstances for PM10 24 hr consistent with the updated AQGHMP Section 9. HVO advises this is proposed.		
Sch 3 Cond 30 31	No evidence to confirm all River Red Gum sites (as shown in Appendix 8) have addressed management practices listed in the River Red Gum Strategy (2010).	<ul> <li>River Red Gum Strategy:</li> <li>Add confirmation in the Annual Review over what areas of the Goulburn River Biodiversity areas have been addressed (in order to confirm HVO's 140 ha is compliant).</li> <li>Recommend any revision to the Strategy include consultation with Dol Water and OEH.</li> <li>Recommend holistic review of actions in light of future mining in the immediate area and likely impacts, flooding potential, climate, groundwater and surface water monitoring, and ecological monitoring to determine a realistic way forward in relation to the management of the area which has been inconclusive to date. DPE should be consulted in relation secured.</li> </ul>	HVO has addressed this in future Annual Review s The strategy is currently under review and HVO will include evidence of relevant consultation in next revision.	Completed
Sch 3 Cond 40	One compliance inspection per year has been completed rather than two as required within the approved ACHMP (2009) for 2018 and 2017.	No recommendation provided.	Inspections undertaken at required rate during audit period.	Completed
Sch 3 Cond 48	Overburden emplacement area (OEA) in the Glider Pit was approximately 10m above the Obstacle Limitation Surface without obtaining prior approval from the HVGC. This was reported and OEA reshaped to remediate issue.	No recommendation provided.	Resolved	Completed
Sch 3 Cond 53	Northstar advises that whilst a number of the actions undertaken by HVO may have some impact on the annualised GHG emission budget, these	Northstar recommends that the AQGHMP Section 7 is updated to identify opportunities for emission reductions (in the reasonable and feasible areas of electricity use, diesel and other fuels, and Land Management. The Annual Review should include a	The current AQGHMP discuss' Greenhouse Gas Management and as such no further modification to the AQGHMP is considered necessary.	Completed

Cond No.	Audit Findings	Recommendations	HVO Response	Status
	have not been presented in context of assessing all reasonable and feasible options.	summary of greenhouse gas emissions against commitments in AQGHMP.	HVO will recommence reporting in the Annual Review greenhouse gas emission summary information against the AQGHMP.	
Sch 3 Cond 60	No evidence available of consultation with Singleton Council or the RFS.	Obtain correspondence from Council and Rural Fire Service confirming consultation and add to appendix at next review of the Bushfire Management Plan.	Council and RFS have been consulted on the revised version since the audit and this will be included in the plan once finalised.	Completed
Sch 4 Cond 2	Notification of relevant landholders regarding the blasting exceedance - measured overpressure levels exceeded the 120 dB(L) criterion at two locations (Moses Crossing, Jerrys Plains) on 17 January 2018 (refer to Sch 3 Cond 7) was sent on 27/11/19, how ever was outside the required 2- week notification timeframe.	Update process to notify affected landholders for exceedances of air and blasting.	HVO has developed a post incident (exceedance) checklist which is to ensure that landowners and/or tenants are notified as required.	Completed
Sch 5 Cond 1a	Management plans do not contain all required sections. Refer to Sch 5 Cond 1a for further detail.	At the next required revision to relevant management plans (nonurgent) ensure all items within Sch 5 Cond 1a are addressed.	HVO does not consider this to be non- compliant in accordance with the footnote of the condition that the Secretary may waive some of the requirements required by the condition if they are unnecessary or unwarranted for particular management plans. HVO considers the Secretary's approval of the plans is Approval of these Waivers. Nonetheless, HVO will review this for adequacy in the next revision of each relevant management plan.	N/A
Sch 5 Cond 4a	No evidence available to confirm review s of strategies, plans and programs conducted on each occasion listed in this condition. However, all plans have been updated in the audit period except for the following:	No recommendation provided.	Resolved	Completed

Cond No.	Audit Findings	Recommendations	HVO Response	Status
	• HVO South Aboriginal Cultural Heritage Management Plan (May 2009);			
	• Amenity Management Plan- Hunter Valley Gliding Club (October 2012); and			
	River Red Gum Rehabilitation and Restoration Strategy (March 2010).			
Арр4 А.4	Bridges Acoustics notes the NMP, and noise monitoring reports do not assess and correct for (or do not report) tonal noise as required by the NSW Industrial Noise Policy and later Noise Policy for Industry.	Tonal noise should be included in the noise monitoring reports and the NMP on its next revision.	HVO's noise monitoring consultant's monitoring reports indicate that intermittent or tonal features are not typically present in mining operational noise and the assessment is not undertaken on this basis. However, HVO will request this inclusion to noise monitoring reports developed by the noise monitoring consultant.	Completed
SOC Ref 11	No evidence exists that collection and storage of River Red Gum seed from existing stands is occurring.	Collect seed from River Red Gum area or justify why not possible/required in revised BMP.	Seed collection occurred during 2020 when available.	Completed
HVO North - DA	450-10-2003 Non-Compliance Re	commendations		
Sch 2 Cond 2a	Some non-compliances were identified with the conditions of this approval.	Work with DPE to comply with non-compliances in Section 5 of the IEA Report, where practical.	Actions to address non compliances are committed to via HVO's response to recommendations.	N/A
Sch 2 Cond 15	Sch 3 Cond 61 no evidence of correspondence with Singleton Councilor NSW RFS in relation to consultation on the Bushfire Management Plan was available.	Ensure consultation with relevant regulators occurs for all management plans, or justify why not required in plan (e.g., administrative changes).	Noted.	N/A
Sch 3 Cond 4	As per PA 06_0261 Sch 3 Cond 53.	As per PA 06_0261 Sch 3 Cond 53.	The current AQGHMP discuss' Greenhouse Gas Management and as such no further modification to the AQGHMP is considered necessary.	Completed

Cond No.	Audit Findings	Recommendations	HVO Response	Status
			HVO will recommence reporting in the Annual Review greenhouse gas emission summary information against the AQGHMP.	
Sch 3 Cond 7	Exceedance of noise level criteria listed in Table 9. Refer to Appendix E DA 450-10-2003 Sch 3 Cond 7.	No recommendation provided.	N/A	N/A
Sch 3 Cond 20	The following incidents relating to pollution of waters include: Discharge from leaking pipework on Parnell's Dam to Parnell's Creek on 4 November 2016; and Discharge from the Hunter Valley Load Point Sump to Bayswater Creek on 30 March 2017.	No recommendation provided.	N/A	N/A
Sch 5 Cond 4	No evidence available to confirm reviews of strategies, plans and programs conducted on each occasion listed in this condition. However, all plans have been updated in the audit period. Action has since been added to CMO with reminders.	No recommendation provided	Resolved	Completed
Арр4 А.4	The NMP and noise monitoring reports do not assess and correct for (or do not report) tonal noise as required by the NSW Industrial Noise Policy and later Noise Policy for Industry.	Tonal noise should be included in the noise monitoring reports and the NMP on its next revision.	HVO's noise monitoring consultant's monitoring reports indicate that intermittent or tonal features are not typically present in mining operational noise and the assessment is not undertaken on this basis. However, HVO will request this inclusion to noise monitoring reports developed by the noise monitoring consultant.	Completed
SOC Ref 22	Annual visual assessments have not been completed. HVO has since purchased all properties that would have been	A written justification should be provided to DPE for approval that annual visual assessments are no longer required.	As per previous IEA, HVO's response to the recommendations was to review current relevance of completing the assessments in respect to recent property purchases to determine if private receptors would still be	Completed

Cond No.	Audit Findings	Recommendations	HVO Response	Status
	considered to have been visually impacted by HVO North (particularly the Wandewoi Property on Lemington Road).		impacted visually by HVO north since the 2010 SOC. HVO has since purchased all properties that would have been considered to have been visually impacted by HVO north particularly the Wandewoi Property on Lemington Road. Annual visual assessments are therefore no longer considered relevant. Agree with recommendation to have confirmation from DPE that these are no longer required.	
EPL 640				
L1.1	The following incidents occurred relating to the pollution of waters: Turbid water entered Farrells Creek from sediment dam overtop on 4-5/10/18 (See response to DA 450-10-2003 Sch 5 Cond 2); Turbid water entered Farrells Creek from a rehabilitation area on the 18/3/19 (See response to DA 450-10-2003 Sch 5 Cond Turbid water entered Farrells Creek from two sediment dams on 30/3/19 (See response to DA 450- 10-2003 Sch 5 Cond 2); and Discharge of mine water to Bayswater Creek 11/5/18 (See response to (PA 06_0261 Sch 3 Cond 20).	No recommendation provided	N/A	N/A
L4.1	One blast on Easter Saturday 2017 (which was officially considered a public holiday in 2017) as per PA 06_0261 Sch 3 Cond 10	No recommendation provided	As above.	Completed

Cond No.	Audit Findings	Recommendations	HVO Response	Status
L4.3	Two blasting exceedances on one occasion in 2018 at point 9 &18: Measured overpressure levels	Refer to PA 06_0261 Sch 3 Cond 7.	Relocation of this monitor has been approved by the EPA as part of the EPL update in September 2020 and has since been completed.	Completed
	exceeded the 120 dB(L) criterion at two locations (Moses Crossing, Jerrys Plains) on 17 January 2018. (See response to PA 06_0261 Sch 3 Cond 7)			
O2.1	Minor discharge of saline water to Parnells Creek due to pinhole leak on 4/11/16. See response to DA 450-10-2003 Sch 3 Cond 20.		N/A	N/A



Owner:

[Owner (Office)]

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## 2022 Hunter Valley Operations Response to Audit Recommendations

Ref	Recommendation	HVO Response	Due Date
HVO South – PA 06_0261 Non-Compliance Recommendations			
S2 C2	No Further Action Required	No Further Action Required	N/A
S2 C2A	Refer S2 C2	No Further Action Required	N/A
	Reference in Table 9 of the Monthly Environmental Monitoring Reports should be updated to reference LA1, 1-minute criteria	HVO will amend future Monthly Environmental Monitoring Reports to included updated reference	
S3 C2	Where a tonality penalty has been applied, the monthly report should include discussion and clarification on whether this constitutes an exceedance or is attributable to other sources.	HVO will amend future Noise Reports to include discussion and clarification regarding observed tonality penalties	30/03/2023
S3 C7	No Further Action Required	No Further Action Required	N/A
S3 C15	Ensure that the blasting schedule on the HVO website is maintained.	Issue with the Blasting Schedule link from the "Contacts" page has been rectified	Complete
S2 C15	It is recommended that management plans, and other necessary documents include a table itemising the matters raised during consultation with identified parties, and description of the resolution of these matters.	HVO will amend and include in future revised management plans and other necessary documents a table itemising the matters raised during consultation with identified parties, and description of the resolution of these matters.	4/07/2023 <sup>*</sup>
S3 C18	Recommend updating Section 1, Table 1 to Table 3 of the BMP to ensure correct references in column 3 ("Section of BMP which addresses this requirement", "Where Commitment is addressed", "Where Condition is addressed").	HVO will amend in the next revision of the Blast Management Plan.	4/07/2023 <sup>*</sup>
S3 C19	It is recommended that operators are provided with refresher training to ensure awareness of these TARPs and to ensure more proactive management of wheel generated and plant-generated dust.	HVO will roll out refresher training to operators to ensure awareness of Dust TARPS	30/06/2023
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[Planned Review Date]

Version:



S3 C25	Repair the eroded batter to Dam 37S or redirect flow to the existing stabilised entries. Sediment should then be removed from the basin to restore capacity	HVO will include repair works in future works programs to ensure completion. HVO will undertake a review of current sediment storage capacity compared to dam design criteria to determine whether further desilting is required.	20/06/2024
S3 C27	Version 3.4 of the WMP has been issued to the secretary and is waiting approval. Review the contents of the WMP to reflect the audit findings when next updated.	HVO will amend in the next revision of the Water Management Plan.	4/07/2023 <sup>*</sup>
S3 C58	Ensure that waste containers have lids fitted and/or are stored undercover to limit additional generation of contaminated liquid.	HVO will undertake a site inspection to ensure lids are fitted to waste containers on bunded pallets that are not undercover and reinforce this expectation with a site communication.	30/04/2023
	HVO North – DA 450-10-2003 Non-Comp	liance Recommendations	
S2 C2	No Further Action Required	No Further Action Required	N/A
S2 C2A	Refer S2 C2	No Further Action Required	N/A
S3 C2	Where a tonality penalty has been applied, the monthly report should include discussion and clarification on whether this constitutes an exceedance or is attributable to other sources.	HVO will amend future Noise Reports to include discussion and clarification regarding observed tonality penalties	30/03/023
S3 C4A	It is recommended that operators are provided with refresher training to ensure awareness of these TARPs and to ensure more proactive management of wheel generated and plant-generated dust.	HVO will roll out refresher training to operators to ensure awareness of TARPS	4/07/2023
S3 C7	Reference in Table 9 of the Monthly Environmental Monitoring Reports should be updated to reference LA1, 1-minute criteria	HVO will amend future Monthly Environmental Monitoring Reports to included updated reference	30/03/2023
S3 C10	Recommend updating Section 8.1.1, Table 8-1 to reference AS1055- 2018 (supersedes AS1055-1997), and include reference to NSW EPA Approved methods for the measurement and analysis of environmental noise in NSW, 2022.	HVO will amend in the next revision of the Noise Management Plan.	4/07/2023 <sup>*</sup>

Number: Owner:

[Document Status (Office)] Effective: [Document Version (Office)] Review: Uncontrolled when printed

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S3 C19	Recommend updating Section 1, Table 1 to Table 3 of the BMP to ensure correct references in column 3 ("Section of BMP which addresses this requirement", "Where Commitment is addressed", "Where Condition is addressed").	HVO will amend in the next revision of the Blast Management Plan.	4/07/2023 <sup>*</sup>
S3 C20	No Further Action Required	No Further Action Required	N/A
S3 C21	No Further Action Required	No Further Action Required	N/A
	Version 3.4 of the WMP has been issued to the secretary and is waiting approval. Review the contents of the WMP to reflect the audit findings when next updated.	HVO will amend in the next revision of the Water Management Plan.	4/07/2023 <sup>*</sup>
S3 C27	Repair the inlet to Dam 5N to stop ongoing sedimentation, remove	HVO will include repair works in future works programs to ensure completion.	30/12/2023
	sediment from the dam, and confirm the capacity of Dam 5N and Dam 2N meets industry guidelines.	HVO will undertake a review of current storage capacity in relation to Bluebook Standard to confirm whether current storage capacities are sufficient or additional capacity is required.	30/7/2023
S3 C28A	No Further Action Required	No Further Action Required	N/A
	EPL 640 Non-Compliance Rec	ommendations	1
L2.1	No Further Action Required	No Further Action Required	N/A
L5.1	No Further Action Required	No Further Action Required	N/A
M2.3	It is recommended that the area is stabilised (i.e. rock/concrete) to prevent released water from creating erosion and becoming turbid once leaving the outlet pipe.	HVO will undertake a stability assessment of the area to understand if further work is required.	30/07/2023

\* Date indicates when Management Plans are submitted for Department approval. Timing of approval and finalisation of the plan with the changes is outside of HVO's control.

Number: Owner: 0