# Optim<u>E</u>



### Allied Pinnacle, Picton Mill 2022/23 Annual Environmental Management Report September 2023



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## Glossary

AEMR	Annual Environmental Management Report
Allied Pinnacle	Allied Pinnacle Pty Ltd
AWTS	Aerated Wastewater Treatment System
CHMP	Cultural Heritage Management Sub-Plan
DA	Development Application DA-318-12-2004-i as modified by Mod 51-5-2007 and
	DA 318-13-2007-Mod 3
DPE	Department Planning and Environment (formally Department of Planning,
	Industry and Environment
EIS	Environmental Impact Statement for Grain Milling Facility, Picton Road, Maldon
	(KBR, December 2004)
EPA	Environment Protection Authority
EPL	Environment Protection Licence
HGV	Heavy goods vehicle
IEA	Independent Environmental Audit
LMP	Landscape Management Sub-Plan
NVMP	Noise and Vibration Management Sub-Plan
OEMP	Operational Environment Management Plan
OptimE	OptimE Pty Ltd
POEO	Protection of the Environment Operations Act 1997
SLR	SLR Consulting Australia Pty Ltd
WMMP	Water Monitoring and Management Sub-Plan
Т	Tonnes
TfNSW	Transport for NSW (formally Roads and Maritime Services)
TMP	Traffic Management Sub-Plan
WAL	Water Access Licence

### Title Page

Name of Operation	Flour and Maize Mill – Picton, NSW
Name of Operator	Allied Pinnacle Pty Ltd
Development Application	<i>DA-318-12-2004-i</i> as modified by Mod 51-5- 2007 and DA 318-13-2007-Mod 3
Name of holder of development consent	Allied Pinnacle Pty Ltd
AEMR start date	1 April 2022
AEMR end date	31 March 2023

I, **Mark Hughes** certify that this Annual Environmental Management Report is a true and accurate record of the compliance status of **Flour and Maize Mill – Picton, NSW** for the period **1 April 2022 to 31 March 2023** and that I am authorised to make this statement on behalf of **Allied Pinnacle Pty Ltd**.

Note.

a) The Annual Review is an 'environmental audit' for the purposes of section 122B (2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.

b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both)

Name of authorised reporting officer	Mark Hughes
Title of authorised reporting officer	Acting Site Manager - Picton
Signature of authorised reporting officer	
Date	

### Statement of compliance

The Annual Review is required to incorporate a statement of compliance which includes summary tables that highlight the compliance status of the operation with its relevant approval conditions, as at the end of the reporting period.

Were all conditions of the relevant approvals complied with during the reporting period?			
Development conditions	No		

The site monitors its compliance status against the Consent Conditions and records its assessment using a compliance tracking table. A copy of the 2022/23 Compliance Tracking Table for conditions applicable to the reporting period is attached as **Appendix A**.

Site operations were found to be compliant with the Consent Conditions for the reporting period with the exception of the conditions outlined below.

Condition	Compliance assessment
Condition 2.3	Non-compliant
Noise levels and assessment	As noise monitoring was not undertaken in accordance with the NVMP, Allied Pinnacle did not have data to demonstrate compliance against Conditions 2.3 hence a non-compliance has been awarded against this condition. It is noted that Allied Pinnacle had commissioned SLR to undertake the three yearly Noise Monitoring Program on 26 September 2023, hence no further action has been raised by this AEMR.
Condition 3.3	Non-compliant
Independent Environmental Audit (IEA)	The 2022 IEA was due but not undertaken within the reporting period of this AEMR. In addition, Allied Pinnacle did not seek approval from the Department, for the auditor, prior to the commencement of the IEA. <i>It is noted that the 2023 IEA report had been completed by SLR on 31 August 2023, hence no further action has been raised by this AEMR.</i>
Condition 5.4(a)	Non-compliant
Implementation of the NVMP	The Noise and Vibration Management Sub-Plan, Rev 3 dated 08/08/19 (NVMP), specified that noise monitoring will be undertaken every three (3) years. Noise monitoring was undertaken by SLR in November 2019 and was due again in November 2022, during this reporting period. No noise monitoring was undertaken during this reporting period.
	It is noted that Ailled Pinhacle had commissioned SLR to undertake the three yearly Noise Monitoring Program on 26 September 2023, hence no further action has been raised by this AEMR.

Conditions of consent - compliance exceptions for the reporting period

Condition 5.5	Non-compliant		
Updating the OEMP	The following documents were due to be updated during the reporting period but were not updated within the three-year timeframe, therefore a non-compliance has been awarded:		
	<ul> <li>OEMP Appendix A NVMP, Revision 3, 8/08/19</li> <li>OEMP Appendix D CHMP, Revision 3, 8/08/19</li> </ul>		
	It is noted that the CEMP and all associated subplans were updated on 20 July 2023, hence no further action has been raised by the AEMR.		
	However, the Secretary had not been notified of the completion of the review.		
	Refer to Action 2022/23-02.		
Condition 5.8	Non-compliant		
AWTS service report provided to DPE for each quarter.	Whilst the AWTS was serviced quarterly, only the service record for May 22 was provided to the Secretary. <i>Refer to Action 2022/23-03.</i>		
o			
Condition 5.9	Non-compliant		
Annual soil monitoring program for the irrigation	Allied Pinnacle did not undertake an annual soil monitoring program for the irrigation area in accordance with the DEC Guideline.		
area			

### 1 Introduction

### 1.1 AEMR context

Allied Pinnacle Pty Ltd (Allied Pinnacle) is required, under its development application, to prepare an Annual Environmental Management Report (AEMR) for operations at the Flour and Maize Mill – Picton, NSW (the site).

Allied Pinnacle engaged OptimE Pty Ltd (OptimE) to prepare the AEMR. This AEMR covers the reporting period from 1 April 2022 to 31 March 2023.

### **1.2** Scope of the service

The service undertaken by OptimE, for the purpose of preparing this AEMR, included:

- Collation of information (interview, emails, records and reports) provided by Allied Pinnacle, applicable to the reporting period
- Interpreting information provided by Allied Pinnacle for the purpose of fair and transparent presentation into the AEMR
- AEMR responding to *Development Application DA-318-12-2004-i* as modified by Mod 51-5-2007 and DA 318-13-2007-Mod 3, Consent Condition 6.3

This AEMR does not constitute an audit report. The information provided by Allied Pinnacle was not independently verified by OptimE. An Independent Environmental Audit (IEA) of the site is undertaken every three years in accordance with Consent Condition 3.3, as a separate process. The last IEA was undertaken in November 2019.

### **1.3** Structure of this report

This AEMR has been prepared to address the requirements of Consent Condition 6.3, as outlined in Table 1.

Clause No.	Requirement	AEMR details &
		reference
6.3	The Applicant shall, throughout the life of the development, prepare and submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 5.3 of this consent), the conditions of this consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:	Refer to sections below
6.3 (a)	details of compliance with the conditions of this consent;	Section 3
6.3 (b)	a copy of the Complaints Register (refer to condition 4.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were address and resolved;	Section 4

Table 1 – AEMR conditions

Clause No.	Requirement	AEMR details & reference
6.3 (c)	identification of any circumstances in which the environmental impacts and performance of the development during the year have not been generally consistent with the environmental impacts and performance predicted in the documents listed under condition 1.1 of this consent, with details of additional mitigation measures applied to the development to address recurrence of these circumstances;	Section 5
6.3 (d)	results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person;	Section 6
6.3 (e)	a list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.	Section 7
6.3 (cont)	The Applicant shall submit a copy of the AEMR to the Director- General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation of the development. The Director-General may require the Applicant to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Report. Any action required to be undertaken shall be completed within such period as the Director- General may require. The Applicant shall make copies of each AEMR available for public inspection on request.	This report

In addition to the requirements of Consent Condition 6.3, this AEMR also includes:

- Section 8 Status of actions arising from the Department Planning and Environment (DPE) requests.
- Section 9 Environmental Action Plan 2022/23.

### 1.4 Limitations

This report has been prepared by OptimE for Allied Pinnacle and may only be used and relied on by Allied Pinnacle for the purpose agreed between OptimE and Allied Pinnacle as set out in Section 1.1 of this report.

OptimE otherwise disclaims responsibility to any person other than Allied Pinnacle arising in connection with this report. OptimE also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by OptimE in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations in Section 1.2.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. OptimE has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by OptimE and described in this report. OptimE disclaims liability arising from any of the assumptions being incorrect.

OptimE has prepared this report on the basis of information provided by Allied Pinnacle, which OptimE has not independently verified or checked beyond the agreed scope of work. OptimE does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

### 2 Overview of operations

### 2.1 Operational activities

The Picton Mill is capable of processing up to 300,000 tonnes a year of wheat and maize, with a corresponding 300,000 tonnes a year output from the milling process (not including a small amount of moisture added to the product during the milling process).

The operations summarised in this section provide an overview of the processes occurring on site that have the most influence on the surrounding environment.

### 2.1.1 Flour and maize mill operations

#### Grain intake

The grain intake plant is one of the key elements of the milling operations, processing up to approximately 300,000 tonnes per year of grain. All grain is received through a combination of rail and road deliveries. Grain is received on site using the grain intake facility located under the rail siding, where an intake pit receives grain from either rail or road transport. The grain is transported to the bulk storage bins via an underground conduit directly connected to the elevator pit.

#### Grain bulk storage

Wheat is stored on site in wheat silos. The silos are connected to the main plant by chain conveyors. In addition to the main storage facility, the wheat cleaning plants also require separate storage bin capacity.

#### Grain cleaning process

Pre-cleaning of incoming grain involves screening (to remove metal and other impurities) and aspiration (drawing air through the grain to extract light impurities). Additionally, water is sprayed onto the grain and absorbed at a rate of up to 5% of dry grain weight (a process known as tempering) during the cleaning process. A second tempering is carried out for the cleaning process with an application of additional water at a rate of up to 3% of grain weight. Collected screenings (impurities) are graded and passed to a ground screenings bin in the screenings disposal plant.

### Milling process

Both wheat and maize are processed by wheat and maize milling technology. Wheat based products such as fine low ash flours, baker's flours, biscuit flours, wheat semolinas, general-purpose flours, noodle flours and wholemeal flours are produced on the wheat mill. The maize milling plant is designed primarily for the production of maize products (flaking grits, semolinas, polenta and residual flour).

#### Finished product storage

The finished product is stored in concrete storage bins for flour storage, flour blending bins, mill mix storage bins, specialty product storage bins, and wholemeal storage bins.

#### Out-loading

Finished product is dispatched from the plant by:

 Packing into bags and onto pallets for loading onto flat-bed trucks (approximately 20-40% of finished products)  Bulk loading into tankers for removal by truck (approximately 60-80% of finished products, including all by-products).

#### Bag packing

Bag packing is a fully automated flour packing system with an operational design capacity for 24 hours a day, seven days a week. Trucks reverse into the packaged product loading area and forklifts load product into the trucks.

#### Bulk loading

Bulk out-loading occurs using a rapid loading system where flour is deposited into tankers or waiting trucks. Approximately 80% of the production output for flour, semolina and wholemeal is in bulk. The bulk flour out-loading system can accommodate approximately 25 to 30 tanker loads a day.

#### By-product handling

The only by-product of the process is grain husks ('mill mix'), which requires storage before being loaded into open top transport trucks. From the storage bins, this by-product is transported in bulk to a pellet mill, to be turned into animal feed. Two storage and bulk out-loading silos allow rapid loading into open top trucks. The system meets a standard free of product spillage and dust emission, and the trucks are housed in a completely enclosed loading area.

#### Administration and General Maintenance facilities

Several ancillary areas within the plant have been constructed on the site, including a small onsite laboratory, control centre area, maintenance area and administrative/office area. The laboratory is used for testing the physical properties of the raw grains and the quality of the materials and finished products.

### 2.1.2 Transport operations

Operations involve the delivery of grain by rail, unless issues with the rail network result in the use of trucks for incoming grain as a contingency measure. Trains arrive at different times but only unload between the hours of 7 am and 7 pm. Typically one train arrives every two days.

Trucks are used to take the processed product from the site and operate 24 hours a day, 7 days a week depending on production flows. B-double trucks and semi-trailers transport the flour, which forms approximately 80% of the processed product. Trucks with trailers and bogies transport the mill mix, which is a by-product of the milling process and represents the other 20% of product produced by the mill. Truck movements, including deliveries, equate to approximately 30 vehicles per day making up to 60 trips in and out of the site.

### 2.1.3 Water management

The milling process at the Site consumes potable water to maintain suitable moisture content in the grain. The grain absorbs all of the water, therefore there is no liquid waste generated by this process.

Bio-swales and drainage lines have been constructed and maintained at the site to manage the surface water. Measures such as grading away from buildings and bunding assist in directing the movement of site captured surface water away from built areas. Captured surface water is directed to established offsite stormwater systems, whilst the presence of spill kits provide additional security should the prevention of contamination of product be required.

### 2.1.4 Wastewater management

Domestic wastewater is generated from the on site staff amenities. All domestic wastewater is treated on site as there is no municipal sewer connection. The wastewater is treated by means of a small package sewage treatment plant. The plant comprises of a septic tank, primary aeration tanks, and secondary aeration tanks that clarify and chlorinate the water. The sewage treatment plant is designed for a maximum daily flow of 3,000 L/day and serves as a low maintenance system that treats only domestic wastewater, preventing offensive odours in the process. The treated effluent is re-purposed through irrigation to land within the mill site.

The milling process is described as a *zero-waste process*. The process water added during the milling process is wholly consumed, and no liquid process waste streams are discharged from the mill to the stormwater drainage or to the domestic wastewater systems.

Wastewaters generated from the onsite laboratory are kept isolated from stormwater drainage and from domestic wastewater systems and are disposed off site in a controlled manner.

### 2.2 Applicable planning documents

Site operations are conducted generally in accordance with the following documents as nominated in the Consent Conditions:

- Development Application DA-318-12-2004-i as modified by Mod 51-5-2007 and DA 318-13-2007-Mod 3
- Environmental Impact Statement (EIS) for Grain Milling Facility, Picton Road, Maldon (KBR, December 2004)
- Mod 51-6-2007 (KBR, 30 May 2007)
- DA-318-12-Mod 2 (KBR, 17 October 2007)
- Visual Assessment: Additional Information Report (Garry Stanley, March 2004)
- Construction Noise Report (Heggies Australia, April 2005)
- Aboriginal Heritage Assessment, Final Report for the Proposed Allied Mills Flour Mill, Picton NSW (Austral Archaeology Pty Ltd, May 2005)
- Operational Noise Report (Heggies Australia, June 2005).
- Review of wastewater treatment and effluent application to land, Allied Mills Pty Ltd Picton Mill, prepared by Landfax Laboratory (2016)

An Operational Environmental Management Plan (OEMP) has been developed to provide an environmental management framework during operation of the mill, including practices and procedures for all site operations, as required by the Consent Condition 5.3. At the time of drafting this report, the OEMP and supporting sub-plans were updated, as described below:

- Operational Environment Management Plan, Rev 4, 15/04/20
- Appendix A Noise and Vibration Management Sub-Plan, Rev 3, 08/08/19
- Appendix B Water Monitoring and Management Sub-Plan, Rev 4, 15/04/20
- Appendix C Traffic Management Sub-Plan, Rev 4, 15/04/20
- Appendix D Cultural Heritage Management Sub-Plan, Rev 3, 08/08/19
- Appendix E Landscape Management Sub-Plan, Rev 4, 15/04/20.

DPE approved the updated OEMP on 18 May 2020.

It is further noted that the OEMP including the supporting sub-plans were updated in July 2023, outside of this reporting period.

Licences, permits and approvals relevant to site operations and referenced in this AEMR are summarised in Table 2.

### Table 2 - Site operational approvals

Title	Regulator	Details
DA-318-12-2004-I	Department of Planning, Industry and Environment	Site operations are approved subject to the Consent Conditions. The Consent Conditions are developed with reference to the planning approval documentation submitted supporting the original application.
Mod 51-5-2007	Department of Planning, Industry and Environment	Changing the design of the sewage treatment plant to an aerated tank system, which removes the need for the originally proposed settling tank and reed bed.
DA-318-12-Mod 2	Department of Planning, Industry and Environment	Changing the alignment of the proposed rail siding so that it meets the Main Southern Railway line on a curve, and refining the design of the rail crossover at the end of the siding.
DA-318-12-Mod 3	Department of Planning, Industry and Environment	Amendment to Consent Conditions in relation to the sewage treatment plant, the effluent balance tank and irrigation area.
EPL 12498	Environmental Protection Authority	The site requires an EPL under the <i>Protection of the</i> <i>Environment Operations Act 1997</i> , for undertaking the Scheduled Activity of Agricultural Processing. Scale: > 100,000 – 250,000 T processed.
WAL 26929	Department of Industry, Water	The site holds a Water Access Licence issued under the Water Management Act 2000, however site operations do not require water extraction as permitted by the Licence.

### 3 Compliance

### 3.1 Consent conditions

The site monitors its compliance status against the Consent Conditions and records its assessment using a compliance tracking table. A copy of the 2022/23 Compliance Tracking Table for conditions applicable to the reporting period is attached as **Appendix A**.

Site operations were found to be compliant with the Consent Conditions for the reporting period with the exception of the conditions outlined in Table 3.

	Table 3 - Conditions of	consent - comp	pliance exception	ns for the re	eporting	period
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Condition	Compliance assessment
Condition 2.3 Noise levels and assessment	Non-compliant As noise monitoring was not undertaken in accordance with the NVMP, Allied Pinnacle did not have data to demonstrate compliance against Conditions 2.3 hence a non-compliance has been awarded against this condition.
<b>Condition 3.3</b> Independent Environmental Audit (IEA)	Non-compliant The 2022 IEA was due but not undertaken within the reporting period of this AEMR. In addition, Allied Pinnacle did not seek approval from the Department, for the auditor, prior to the commencement of the IEA.
Condition 5.4(a) Implementation of the NVMP	Non-compliant The Noise and Vibration Management Sub-Plan, Rev 3 dated 08/08/19 (NVMP), applicable during the reporting period, specified that noise monitoring will be undertaken every three (3) years. Noise monitoring was undertaken by SLR in November 2019 and was due again in November 2022, during this reporting period. No noise monitoring was undertaken during this reporting period.
Condition 5.5 Updating the OEMP	<ul> <li>Non-compliant</li> <li>The following documents were due to be updated during the reporting period but were not updated within the three-year timeframe, therefore a non-compliance has been awarded:</li> <li>OEMP Appendix A NVMP, Revision 3, 8/08/19</li> <li>OEMP Appendix D CHMP, Revision 3, 8/08/19</li> </ul>
<b>Condition 5.8</b> AWTS service report provided to DPE for each quarter.	Non-compliant Whilst the AWTS was serviced quarterly, only the service record for May 22 was provided to the Secretary.

Condition 5.9	Non-compliant
Annual soil monitoring	Allied Pinnacle did not undertake an annual soil monitoring program for
program for the irrigation	the irrigation area in accordance with the DEC Guideline.
area	Refer to Action 2022/23-04.

### 3.2 Environmental Protection Licence

The EPA has issued an Environmental Protection Licence (EPL 12498) to the site, under the Protection of the Environment Operations (POEO) Act 1997. The premises is licensed to undertake a scheduled activity for "Agricultural Processing" at a scale of >100,000 - 250,000T annual processing capacity.

The EPL does not impose any limit criteria, operational requirements, or monitoring requirements in addition to those set by the Consent Conditions. Allied Pinnacle submitted the following annual returns to the EPA, applicable to the reporting period:

- EPA Annual Return 6/7/21 to 5/7/22 received by EPA on 2/09/22.
- EPA Annual Return 6/7/22 to 5/7/23 received by EPA on 22/08/23.

No non-compliances or environmental incidents were recorded in the annual return and no penalty notices were issued for the reporting period.

### 4 Incidents and complaints

Allied Pinnacle maintain an incident reporting database known as "RAPID", to record incidents at all sites across Australia and New Zealand, including the Picton site.

The database is accessible by all Allied Pinnacle staff, and information can be readily entered and/or retrieved.

### 4.1 Incidents

During the reporting period, no environmental incidents were recorded for the Picton site.

### 4.2 Complaints

Complaints received by Allied Pinnacle are recorded on "RAPID" and managed as an incident. During the reporting period, no environmental complaints were recorded for the Picton site.

## 5 Impacts and performance predictions

### 5.1 EIS predictions

Table 4 provides a summary of the environmental impacts and performance from the EIS and a statement of whether these performance goals are being met.

Table 4 - EIS Impacts and performance predictions

Predictions and impacts	Actual performance
Noise	
The calculated operational noise emissions from the proposed mill will comply with the noise criteria at all of the residential assessment points under all-weather scenarios.	No noise monitoring was undertaken during this reporting period. No noise complaints related to the operation of the facility were received for the site during the reporting period.
The predicted noise levels associated with the loading and unloading activities indicate that the night-time sleep disturbance criteria will not be exceeded.	
The most significant road traffic noise source (on public roads) associated with the proposed mill development will be approximately 33 additional trucks per day, accessing the site via Picton Road and the Hume Highway. The relatively small increase in the number of heavy vehicles and total traffic volume is not expected to result in any perceptible change in noise level as the change in noise level is expected to be less than 0.5 dBA.	No noise complaints related to road traffic noise were received for the site during the reporting period.
Operational vibration impacts are expected to be negligible.	There have been no recorded instances of unreasonable vibration impacts arising from site operations.
Soil and water quality	
Under developed site conditions, the reservoir will receive stormwater from an additional 20 ha catchment area, 3 ha of which will be hardstand area as a result of the development. The reservoir will potentially receive a greater pollutant load associated with the increased hardstand and total volume of inflow.	Site operational practices involve the regular sweeping and cleaning of hardstand surfaces, and the maintenance of plant and equipment, which reduces the likelihood of potential contaminants being present on hardstand areas.

Predictions and impacts	Actual performance
Traffic	
The total heavy goods vehicle (HGV) traffic generation from the site will be in the order of sixteen trips per day to and from the site.	This prediction has been superseded by a traffic study undertaken by GHD. Refer to Section 5.2 of this report.
The proposed flour mill will generate a total of 54 private car trips per day during the week.	The number of site staff is consistent with the predictions made in the EIS. Consequently, the number of daily private car trips are in the range of 50 to 60.
Air quality	
The proposed flour mill is expected to operate at the proposed location without causing any adverse effects on local air quality.	Air quality monitoring undertaken by Heggies Pty Ltd in 2009 found that through testing of all significant and accessible emission points, particulate matter concentrations were within the limits set-out in the Consent Conditions. Site operations have not substantially changed since the testing and consequently adverse impacts to air quality are not expected. There have been no reported incidents or complaints in relation to air quality.
On an annual basis, the additional load due to the flour mill would be difficult to discern above the existing background conditions.	Air quality monitoring undertaken by Heggies Pty Ltd in 2009 found that emissions at all locations were well within the emission limits, and at more than half of the monitoring locations results were below the detection limits.
Waste Predictions	
Waste generated during operation will be minor, and the milling process is a zero- waste process as all by-products (husks) are used in animal feed.	No solid waste generated from the milling process is disposed of to landfill or other offsite disposal facilities. All by-products are sold to stock feed companies and local farms as animal feed. No liquid process waste streams are discharged from the mill to the stormwater drainage or to the domestic wastewater systems.
Effluent quality will meet the 90 percentile targets set out in the EIS, and the system will achieve compliance with the NSW EPA's reuse guidelines and National Water Quality Management Strategy (NWQMS) Guidelines for Sewerage System Use of Reclaimed Water.	This prediction has been superseded by MOD3. Refer to Section 5.3 of this report.
Based on the estimated minimum uptake of nitrogen and phosphorous by pasture,	The soil monitoring data from previous years consistently indicates that the land application area

Predictions and impacts	Actual performance
there would be no excess nutrients on the site.	shows no signs of overloading. Refer to Section 6.3 of this report.
An irrigation area of over 1 hectare would be adequate to prevent nutrient imbalance and water release from the site.	This prediction has been superseded by MOD3. Refer to Section 5.3 of this report.

### 5.2 Total heavy goods vehicles per day

The total heavy goods vehicle (HGV) traffic generation from the site has been increased from sixteen trips per day to and from the site (predicted by the EIS) to thirty trips per day to and from the site. Thirty traffic movements of HGV to and from the site has been adopted in the TMP following a study by GHD of the Allied Pinnacle intersection with Picton Road, and formal advice from TfNSW to DPE that the traffic movements were considered acceptable (letter dated 22 September 2016).

During the reporting period, the number of HGV traffic movements were consistent with the TMP. The total HGV traffic generation from the site, when averaged on a monthly basis, were 30 trips per day, or less, to and from the site. HGV movement data is provided in Section 6.5 of this report.

### 5.3 Wastewater management system

To compare the performance of the wastewater management system with the estimated performance in the EIS, Allied Pinnacle commissioned Landfax Laboratory to undertake a "Review of wastewater treatment and effluent application to land, Allied Mills Pty Ltd – Picton Mill" (2016 Review). The 2016 Review was used to support MOD3, which was approved by DPE.

The 2016 Review reported that:

- The EIS estimated an effluent quantity of 3,000 L/day however monitoring of the effluent discharged from the Aerated Wastewater Treatment System (AWTS) showed the average effluent quantity was 1,950 L/day.
- The AWTS was performing well within the EIS calculated load. The AWTS was producing an effluent that reflects the high inputs of human wastes and low domestic wastes; high in nitrogen and phosphorus, but low in total alkalinity.
- The available irrigation area (1,250 m<sup>2</sup>) would assimilate the nitrogen and phosphorus as well as the hydraulic load.

The 2016 review recommended that the overall system should not be hampered by defined limits on effluent quality, except for those properties that directly relate to system function and public health.

The WMMP was subsequently updated to meet the requirements of MOD 3.

During the reporting period, performance monitoring of the AWTS and the irrigation area confirmed that the system was operating as predicted by Landfax Laboratories and the requirements of MOD 3 and the WMMP. AWTS and irrigation monitoring data is provided in Section 6.2 and 6.3 respectively, of this report.

### 6 Environmental monitoring results

### 6.1 Noise monitoring

#### Three-yearly monitoring

The Approval does not specify any noise monitoring requirements however noise monitoring data is required to assess compliance against Conditions 2.3, 2.5 and 2.6.

The Noise and Vibration Management Sub-Plan, Rev 3 dated 08/08/19 (NVMP), applicable during the reporting period, specified that noise monitoring will be undertaken every three (3) years. Noise monitoring was undertaken by SLR in November 2019 and was due again in November 2022, during this reporting period. No noise monitoring was undertaken during this reporting period.

As noise monitoring was not undertaken in accordance with the NVMP, Allied Pinnacle did not have data to demonstrate compliance against Conditions 2.3 hence a non-compliance has been awarded. Also, the NVMP has not been fully implemented hence a non-compliance has also been awarded for Condition 5.4(a).

It is noted that Allied Pinnacle had commissioned SLR to undertake the three yearly Noise Monitoring Program on 23 September 2023 so no further action has been raised by this AEMR.

### Event triggered monitoring

The NVMP also specified noise monitoring to occur:

- Within 14 days of any change to the schedule of operations.
- Following adverse comment or complaint relating to noise from the operations.

Neither of these events were triggered during the reporting period.

#### 6.2 Wastewater monitoring

Maintenance and monitoring requirements for the AWTS have been set by Consent Condition 5.8 as outlined below.

#### Quarterly maintenance and monitoring

Consent Condition 5.8 requires samples to be taken for analysis from within the AWTS irrigation chamber before commencing each service. These requirements have been incorporated in Table 7 of the Water Monitoring and Management Sub-Plan, Rev 4, 15/04/20 (WMMP).

During the reporting period, the monitoring events were undertaken on a quarterly basis, just prior to the servicing of the AWTS, and the results are presented in Table 5.

Parameter	Faecal Coliforms & E.coli (per100ml)	Dissolved oxygen (mg O₂/L)	Free Chlorine (mg/L)	Results submitted to DPE
Sample Date/Goal	<100	>5	0.01 - 2.0	-
10 May 2022 <sup>1</sup>	28	4.02	0.02	Y
10 August 2022 <sup>2</sup>	560	5.23	0.03	Y
10 November 2022 <sup>3</sup>	1200	3.94	0.21	Y
8 February 2023 <sup>4</sup>	4	5.54	0.14	Y

### Table 5 - Quarterly monitoring from within the irrigation chamber

Monitoring and service records confirm that the AWTS was monitored quarterly in accordance with Consent Condition 5.8.

The results of the monitoring indicated that the parameters were consistently within the stated goals except for:

- dissolved oxygen in May 2022
- Faecal coliforms and dissolved oxygen in November 2022.

### Six-monthly monitoring

Table 8 of the WMMP specifies that twice annually (one summer and one winter), the facility shall collect samples from the irrigation chamber of the AWTS for analysis of the parameters in Table 6. Two sampling events were undertaken during the reporting period.

Table 6 - Six-monthly monitoring from within the irrigation chamber

Parameter	Unit	Winter <sup>5</sup> August 22	Summer <sup>6</sup> Feb 23
Ammonia as N	mg/L	21.3	10.1
Nitrate as N	mg/L	0.54	1.85
Total Kjeldahl Nitrogen as N (TKN) / Total Nitrogen (TN)	mg/L	25.0 21.7	18.9 21.3
pH		7.4	7.0
Electrical conductivity	(uS/cm)	670	474
Reactive phosphorus (P)	mg/L	7.59	6.30
Total phosphorus (TP)	mg/L	8.48	7.28

<sup>&</sup>lt;sup>1</sup> Source: ALS Laboratory report EW2202154 dated 10/05/22

<sup>&</sup>lt;sup>2</sup> Source: ALS Laboratory report EW2203648 dated 17/08/22

<sup>&</sup>lt;sup>3</sup> Source: ALS Laboratory report EW2205155 dated 17/11/22

<sup>&</sup>lt;sup>4</sup> Source: ALS Laboratory report EW2300547 dated 15/02/23

<sup>&</sup>lt;sup>5</sup> Source: ALS Laboratory report EW2203648 dated 17/08/22

<sup>&</sup>lt;sup>6</sup> Source: ALS Laboratory report EW2200526 dated 22/02/22

Calcium	mg/L	33	26
Magnesium	mg/L	8	7
Sodium	mg/L	37	30
Potassium	mg/L	28	23
Calculate sodium adsorption ratio (SAR)		1.5	1.35

These parameters are quantified without limit however, a comparison of annual results can be undertaken from one year to the next. The results for this reporting period continue to be consistent with previous years.

For comparison with previous years, Appendix B of the 2021 Landfax Annual Review of Wastewater Treatment and Effluent Irrigation – Picton Mill report, 7 July 2021<sup>7</sup> has been extracted and presented in Appendix B. In previous years Landfax Laboratories<sup>7</sup> concluded that the effluent from the AWTS is one of very high quality. The system is operating as designed and has been kept in good order by the service agent.

Unfortunately, during this reporting period, Allied Pinnacle sought the services of Landfax Laboratories to analyse the data in detail however the services of Landfax Laboratories were no longer available. Allied Pinnacle advised they were in the processes of identifying an alternate soil and water specialist.

### 6.3 Effluent irrigation area monitoring

Section 5 of the WMMP, specifies the annual soil monitoring program for the irrigation area. The Plan specifies:

- Annually, explicit soil sampling is required at six designated areas within the irrigation area at targeted depths within the soil profile for targeted soil parameters
- The parameters are quantified without limit and annual results are to be maintained on a progressive spreadsheet where the changes from one year to the next can be evaluated.

Landfax Laboratories have collected annual monitoring data since 2016. Appendix C of the *Annual Review of Wastewater Treatment and Effluent Irrigation – Picton Mill report, 7 July* 2021<sup>7</sup> has been extracted and presented in **Appendix C**, containing the soil analysis results for the respective report. In previous years, Landfax Laboratories<sup>7</sup> reviewed the data and concluded that the irrigation area is adequately tasked with returning the hydraulic and nutrient load to the environment without affecting the sustainability of the enterprise.

Unfortunately, during this reporting period, Allied Pinnacle sought the services of Landfax Laboratories to undertaken the soil sampling and analysis for the irrigation areas however the services of Landfax Laboratories were no longer available. The annual soil sampling for the irrigation area has not taken place during this reporting period. Allied Pinnacle advised they were in the processes of identifying an alternate soil and water specialist.

<sup>&</sup>lt;sup>7</sup> Source: Landfax Laboratories - Annual Review of Wastewater Treatment and Effluent Irrigation – Picton Mill report, 7 July 2021

### 6.4 Solid waste and recycling monitoring

The milling process is described as a 'zero-waste process'.

No liquid process waste streams are discharged from the mill to the stormwater drainage or to the site's effluent management system.

No solid waste generated from the milling process is disposed to landfill or other offsite disposal facilities. All solid by-products from the milling process are sold to stock feed companies and local farms as animal feed.

The site also produces general solid waste from its operations including office and warehousing general refuse. The total tonnage of solid waste produced by the site for the reporting period is presented in Table 7.

Month	Tonnes April 18 to March 19	Tonnes April 19 to March 20	Tonnes April 20 to March 21	Tonnes <sup>8</sup> April 21 to March 22	Tonnes <sup>9</sup> April 22 to March 23
Apr 22	2.53	2.15	5.5	2.94	8.57
May 22	3.32	3.44	2.5	2.68	12.15
Jun 22	2.13	3.01	2.95	3.26	7.3
Jul 22	2.12	6.02	7.22	1.89	15.39
Aug 22	2.37	3.87	3.01	7.71	11.15
Sep 22	3.74	3.44	6.94	8.1	0.84
Oct 22	3.07	3.87	8.27	3.37	8.74
Nov 22	2.55	3.87	2.83	1.47	7.03
Dec 22	3.12	3.44	5.44	4.83	3.93
Jan 23	3.82	3.87	3.62	5.14	8.25
Feb 23	2.75	3.44	3.02	1.47	8.02
Mar 23	3.13	3.87	8.18	7.95	1.05
Total	34.7 T	44.29 T	59.6T	50.81T	92.4T

Table 7 – Solid waste records

Table 7 shows that solid waste generation fluctuates from year to year however the 2022/23 annual tonnage of general solid waste has increased significantly when compared to the previous four years. This is attributable to the clean-out of silos and intake tunnels. Mill mix waste has also increased.

<sup>&</sup>lt;sup>8</sup> Source: Data from Grima Recycling

<sup>&</sup>lt;sup>9</sup> Source: Data from Grima Recycling (Paper) Waste flex (skip bin waste)

### 6.5 Traffic monitoring

Heavy vehicle movements are recorded by the site using:

- the weigh bridge, grain only
- Netlogix, a third-party company, manages some logistics for Allied Pinnacle and maintains heavy vehicle movement records, that are received at the dock.

The total monthly average for heavy vehicles per day is presented in Table 8. The data confirms that the total HGV traffic generation from the site, when averaged on a monthly basis, was 30 trips per day, or less, to and from the site.

Month	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	22	22	22	22	22	22	22	22	22	23	23	23
Monthly average	27	29	28	27	27	26	26	28	24	25	30	30

Table 8 – Heavy vehicle movement data<sup>10</sup>

### 6.6 Environmental inspections

Section 5.5 of the OEMP specifies that environmental inspections using the combined implementation checklist (Appendix F of the OEMP) is undertaken quarterly and six monthly, as required by each sub-plan. The checklist includes observations to confirm conformance with mitigation measures associated with each of the sub-plans.

During the reporting period, quarterly environmental inspections were undertaken on for 16/2/23, 17/11/23, 18/5/22 and 23/8/22. The inspections confirmed that the site was implementing the mitigation measures associated with each of the sub-plans to a high degree as outlined in Table 9.

Table 9 -	Quarterly	/ environmental	inspections
		•••••••••••••••••••••••••••••••••••••••	

Sub-plan	Observations confirmed the following mitigation measures were implemented:
Appendix A - Noise and Vibration Management Sub- Plan, Rev 3, 08/08/19	<ul> <li>Operational mitigation measures including night works, bag packing works and site building facades</li> <li>Maintenance of mechanical equipment</li> <li>Bag packing works</li> </ul>
Appendix B – Water Monitoring and Management Sub-Plan, Rev 4, 15/04/20	<ul> <li>Maintenance of hardstand area and stormwater drains</li> <li>Fuel and chemical storage</li> <li>AWTS monitoring and servicing</li> <li>Irrigation area maintenance and monitoring</li> <li>Laboratory – storage and management of chemicals</li> </ul>
Appendix C - Traffic Management Sub-Plan, Rev 4, 15/04/20	<ul> <li>Routine traffic monitoring including speed, noise and load coverage</li> </ul>

<sup>&</sup>lt;sup>10</sup> Source: Weighbridge data and Netlogix Limited data processed by Allied Pinnacle

Appendix D - Cultural Heritage Management Sub-Plan, Rev 3, 08/08/19	•	Maintenance of cultural heritage zones and control of access
Appendix E - Landscape Management Sub-Plan, Rev 4, 15/04/20	•	Routine inspection of landscaped areas for noxious weeds, litter and pooled water, bushfire risk, and buffer zones.

Some improvement opportunities were recorded on the checklists. They were generally supported by corrective actions. Records supporting corrective action closure (or progress toward corrective action closure) was recorded on the checklist and signed off by the site manager.

### 7 Environmental Performance Goals

Table 10 provides a summary of the environmental performance goals from the OEMP (Section 6, Table 10) and a statement of whether these performance goals were met during the reporting period.

Performance target	Statement of performance			
Noise				
Achievement of zero non-compliance with the noise limit criteria as outlined in the Noise and Vibration Management Sub-Plan.	No noise monitoring was undertaken during this reporting period.			
Adopt best management practices and best available technology for economically achievable principles to reduce noise emissions.	Site infrastructure has been designed to reduce noise emissions, and operational protocols support the reduction of noise emissions.			
Adherence to noise mitigation measures including the adaptation where necessary of engineering measures on trucks, the implementation of operating techniques such as limited compression braking and speed limit restrictions.	The Traffic Management Plan (TMP) provides noise mitigation measures related to vehicles including site speed limits (<10km/h), restrictions on the use of compression braking, and restrictions on vehicle idling. There have been no recorded incidents or complaints related to noise generated by traffic on site.			
Maintain accurate truck movement data to establish patterns and timeframes that can assist in controlling noise impacts.	Vehicle movements to and from the site are recorded via the weigh bridge and a third-party logistics service provider. Refer to Section 6.5 of this report.			
Landscape management				
Minimal impact to visual amenity.	All landscaping works required under the Consent Conditions have been completed. Quarterly environmental inspections confirm monitoring and maintenance of landscaped areas. Refer to section 6.6 of this report.			
Water Quality				
Ensure that process water added during the milling process is wholly consumed and no liquid process waste streams are discharged from the mill during operations.	The milling process and associated infrastructure continues to operate as intended, with no liquid process waste streams discharged during operations. Refer to Section 6.4 of this report.			

Table 10 – Environmental performance goals

Performance target	Statement of performance
Retain the maximum daily flow of 3,000L / day to ensure the effective operation of the treatment plant.	In previous years, Landfax Laboratories reviewed the AWTS monitoring data and concluded that the effluent from the AWTS is one of very high quality. The system is operating as designed and has been kept in good order by the service agent. Refer to Section 6.2 of this report.
Respond to pollution incidents (such as the release of wastewater into undesignated areas) and implement control measures within 24 hours of identification of breach.	A Pollution Incident Response Management Plan (PIRMP) is in place that outlines the pollution response procedures including reporting and notification timeframes. To date, there have been no reportable pollution incidents associated with site operations.
Cultural Heritage	
Allied Pinnacle and sub-contractor compliance with Cultural Heritage Management Sub-Plan and regulatory requirements. Comply with heritage requirements of relevant stakeholders.	Heritage requirements of relevant stakeholders have been incorporated into the CHMP. The CHMP had been effectively implemented as confirmed by the quarterly environmental inspections. Refer to Section 6.6 of this report.
Traffic	
Allied Mills and sub-contractor compliance with Traffic Sub-Plan and regulatory requirements.	All Allied Pinnacle staff and regular contractors undergo an induction for transport drivers that includes site traffic rules. Quarterly environmental inspections confirm routine monitoring of sub-contractors compliance with the site's traffic rules. Refer to Section 6.6 of this report. There have been no incidents related to non-compliances with the TMP.

### 8 Status of DPE instructions

### 8.1 Independent environmental audit (IEA)

All corrective actions and improvement opportunities resulting from the 2019 IEA were closed out in the 2021/22 AEMR.

The 2022 IEA was not undertaken during the reporting period hence there are no DPE instructions associated with the 2022 IEA, to report.

### 8.2 Annual Environmental Management Report (2021/22)

Table 11 – Progress on the 2021/22 action plan

The 2021/22 AEMR established an action plan. Allied Pinnacle has not received any instruction from DPE to implement the 2021/22 AEMR Action Plan however the status of progress against the plan is presented in Table 11.

0	,
Corrective Action	Action

Action 2021/22 – 1	To alter the noise limits (or remove receptor locations due to zoning changes) in the EPL it would be best to align this change with the DPE consent for the site. As Allied Pinnacle currently have a Modification open, this could be done during the Noise Impact Assessment for the Modification and the changes made in both the EPL and Consent. <b>Finding:</b> The modification under consideration by Allied Pinnacle at the time of drafting the 2021/22 AEMR did not progress hence this action was not implemented. <b>Status:</b> This action has been superseded by Action 2022/23-01
Action 2021/22 – 2	<ul> <li>Amend the NVMP to reference section 7.1.1 of EPA's Noise Policy for Industry (2017), as an alternate to the methodology outlined in Condition 2.5 of the consent. Seek approval from DPE for the amendment.</li> <li>Finding: The NVMP was updated in July 2023 however this amendment was not captured.</li> <li>Status: OPEN</li> </ul>
Action 2021/22 - 3	Update the Water Monitoring and Management sub-plan to remove natural phosphorus sorption capacity, from the list of parameters to be tested as there is more than a century's adsorption capacity even with leaving all grass clippings in place. Seek approval for the update from DPE. <b>Finding:</b> The Water Monitoring and Management sub-plan was updated in July 2023 however this amendment was not captured. <b>Status: OPEN</b>

### 9 Environmental Action Plan (2022/23)

Table 12 lists the environmental actions arising from the 2022/23 AEMR.

Actions with the prefix of 2021/22 have been carried forward from the 2021/22 AEMR.

The first column of the table provides a "Report Reference" which can be used by the reader for context to each action proposed.

Report Reference	Action	Environmental Action
Section 8.2	Action 2021/22 – 2	Amend the NVMP to reference section 7.1.1 of EPA's Noise Policy for Industry (2017), as an alternate to the methodology outlined in Condition 2.5 of the consent. Seek approval from DPE for the amendment.
Section 8.2	Action 2021/22 - 3	Update the Water Monitoring and Management sub-plan to remove natural phosphorus sorption capacity, from the list of parameters to be tested as there is more than a century's adsorption capacity even with leaving all grass clippings in place. Seek approval for the update from DPE.
Section 8.2	Action 2022/23 – 1	The 2023 Tri-annual Noise Monitoring report should clearly identify the inconsistency between the zoning status of neighbouring properties on the statutory instruments (CoA and EPL) and the actual zoning status of neighbouring properties; and provide guidance on how to interpret the noise results in consideration of the inconsistency.
Appendix A1 Condition 5.5	Action 2022/23 – 2	Notify the Secretary of update to the OEMP and supporting subplans as required by Condition 5.5.
Appendix A1 Condition 5.8	Action 2022/23 – 3	Submit any outstanding AWTS service records to the Secretary as required by Condition 5.8.
Appendix A1 Condition 5.9	Action 2022/23 – 4	Engage a suitably qualified technical specialist to undertake the annual soil monitoring program for the irrigation area in accordance with the DEC Guideline as required by Condition 5.9.
Appendix A1 Condition 4.1	Action 2022/23 – 5	Update the documents on the Allied Pinnacle web page. In particular, the most recent versions of the IEA and the AEMR.

Table 12 – 2022/23 Environmental action plan

Appendix A – Development Application DA-318-12-2004i: Compliance tracking table 2022/23

### Development Application DA-318-12-2004-i MOD 3 Compliance Tracking Table 2022/23 Appendix A

Note: In the interest of keeping this report concise and relevant to the reporting period, only those conditions that were assessable during this reporting period have been printed. All other conditons were not triggered during the 2022/23 reporting period.

Condition Number	Condition	Compliance Level	Status	2022/23 Comments	Reference Documentation
		General - Scope	Of Development		
1.1	The Applicant must carry out the development in accordance with: a) Development Application DA-318-12-2004-i, lodged with the Department of Infrastructure, Planning and Natural Resources on 23 December 2004; b) the Environmental Impact Statement, EIS For Grain Milling Facility, Picton Road, Maldon, prepared by Kellogg Brown and Root Pty Ltd, dated 22 December 2004; c) additional information relating to air quality, traffic, waste water, visual amenity impacts and responding to issues raised in submissions prepared by Kellogg Brown and Root Pty Ltd, including the Visual Assessment: Additional Information report prepared by Garry Stanley and dated March 2004, all submitted to the Department on 12 April 2005; d) additional information relating to construction noise prepared by Heggies Australia and dated 28 April 2005; e) Aboriginal Heritage Assessment, Final Report for the Proposed Allied mills Flour Mill, Picton NSW, prepared by Austral Archaeology Pty Ltd, dated May 2005, and submitted to the Department 2 June 2005; f) additional information relating to operational noise prepared by Heggies Australia and dated 10 June 2005; g) MOD 1; h) MOD 2; i) MOD 3; and j) the conditions of this consent.	Non-compliant	Ongoing	Allied Pinnacle demonstrated a high level of compliance with the documentation outlined in this condition, although six non-compliances were recorded against the conditions of this consent as detailed in the table below.	See below.
1.2	If there is any inconsistency between the plans and documentation listed under Condition 1.1 above, the most recent document prevails to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency.	Compliant	Ongoing	The Traffic Management Plan, Rev4 dated 15/4/20 states that there will be 30 traffic movements of total heavy good vehicles traffic generation from the site, which is inconsistent with the EIS (which predicted 16 movements). However as the TMP (15/4/20) is the most recent document. The plan prevails according to Condition 1.2 (as modified by MOD3).	Environmental Impact Statement, EIS For Grain Milling Facility, Picton Road, Maldon, prepared by KBR, dated 22 December 2004. The Traffic Management Plan, Rev4 dated 15/4/20. MOD 3
		General - Statuto	ry Requirements	5	
1.3	The Applicant shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.	Compliant	Ongoing	Operations are subject to the conditions of EPL12498, as the site conducts a Scheduled Activity as defined in the Protection of the Environment Operations Act 1997 (agricultural produce industries). A valid licence was maintained during the reporting period. The site also holds a current Water Licence which expires on 9 February 2025.	EPL12498 Water Licence approval number 10CA117028
		Dispute R	esolution		·
1.4	In the event that a dispute arises between the Applicant and Council or the Applicant and a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter shall be referred by either party to the Secretary, or if not resolved, to the Minister, whose determination of the dispute shall be final and binding on all parties. For the purpose of this condition, "public authority" has the same meaning as provided under section 4 of the Act.	Not triggered	Ongoing	No disputes have arisen between Allied Pinnacle and regulatory bodies.	N/A
		General - C	ompliance		
1.6	Notwithstanding condition 1.5 of this consent, the Secretary may require an update report on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the requirements of the Secretary and be submitted within such period as the Secretary may agree.	Not triggered	Ongoing	Allied Pinnacle confirms that the Secretary did not require an update report on compliance with all, or any part, of the conditions of this consent, during the reporting period.	N/A
1.7	The Applicant shall meet the requirements of the Secretary in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed under condition 1.1 of this consent. The Secretary may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Secretary may agree.	Not triggered	Ongoing	Allied Pinnacle confirms that no request have been made by the Secretary during the reporting period.	N/A
	Prov	vision and Protection	of Public Infras	structure	

Condition Number	Condition						Compliance Leve	el Status	2022/23 Comments
						Er	nvironmental Perf	ormance - Noise	Impacts
2.3	The Applicant shall contributions from the specified in Table 1 noise contributions a) wind speed up to b) temperature invertible above ground level.	design, construct he development , at those location apply under meter 3 m/s at 10 meter rsion conditions	t, operate and r do not exceed t ns and during th eorological cond res above groun of up to 3C/100	maintain the develo the maximum allows hose periods indica ditions of: nd level; or m and wind speed	pment to ensu able noise con ted. The maxir up to 2 m/s at	re that the noise tribution limits num allowable 10 metres	Non-compliant	Ongoing	<ul> <li>I he Noise and Vibration Management Sub-Plan, Rev 3 dated 08/08/19 (NVMF applicable during the reporting period, specified that noise monitoring will be undertaken every three (3) years. Noise monitoring was undertaken by SLR in November 2019 and was due again in November 2022, during this reporting p No noise monitoring was undertaken during this reporting period.</li> <li>As noise monitoring was not undertaken in accordance with the NVMP, Allied Pinnacle did not have data to demonstrate compliance against Conditions 2.3 a non-compliance has been awarded.</li> </ul>
	Table 1 - M	iaximum Ai	Iowable No	bise Contribu	tion	1			
	Location	D: 7:00am to 6:00 Satur 8:00am to 6:00p public h	ay pm Mondays to rdays om Sundays and polidays	Even 5:00pm to 10:00;	ing om on any day	10:00pm 10:00pm to 1	Night to 7:00am Mondays to 8:00am Sundays and p	Saturdays ublic holidays	
		L <sub>Aeq(day)</sub>	LAeg(15 minute)	L <sub>Aeq(evening)</sub>	L <sub>Aeq(15</sub>	LAeq(night)	LAeq(15 minute)	LA1(1 minute)	
	1		44	41	44	36	43	53	
	2	12	40		40	31	37	47	
	3	43	43	39	43	32	43	61	
	4	42	42	38	42	26	42	64	
	5	45	45	37	45	28	42	52	
	6		35	-	35	27	35	49	
2.4	Notwithstanding cor	ndition 2.3 the A	nnlicant shall in	nnlement all reason	able and feasi	hle measures to	Compliant	Ongoing	The NVMP details the poise mitigation measures in place which are consistent
2.5	shall implement the a) during the night-t b) during the night-t warehouse building c) during the night-t unloaded at the site d) additional attenua If the Applicant und Policy, that demons receiver locations w Applicant may, with	following measu ime all truck mov- ime all forklift mo- ; ime the Applican ; and ation to the exhat ertakes a noise in trates that the ap- rithout the noise in the approval of t	ires: vement shall be ovements will be t shall not caus ust fans detaile mpact assessm opropriate noise mitigation meas the EPA and the iance with the L	in the forward direct e limited to being with e or permit a train the d in the document litent, in accordance e criteria can be con- sures prescribed in e Secretary, cease Aeg(period) (being	ction only; ithin the confin- o be broken up isted under con with the EPA's nplied with at a this condition, to implement the day, evening of	es of the o, shunted, or ndition 1.1f). Industrial Noise Il relevant then the hose measures.	Not triggered	Ongoing	Refer to Clause 5.4(a) for implementation of the NVMP.
2.3	LAeq(15 minute) no be measured at the within 30 metres of Notwithstanding, sh Applicant may empl (refer to Section 11 assessment method implementation of the the measures noise	assessing compli- nise contribution I most affected po- the dwelling (whe ould direct meas oy an alternative of the EPA's Ind d accepted by the ne assessment m e levels, where ap-	limits specified i bint within the re ere the dwelling surement of noise noise assessm ustrial Noise Pc e EPA shall be nethod. Section oplicable.	Acquise for the second state of the second sta	se from the dev se from the dev or or at the mose etres from the oment be impra ed acceptable to ch an alternative cretary prior to Noise Policy s	velopment shall t affected point boundary). lictical, the by the EPA ve noise the hall also apply to	Not triggered	Chigoing	
2.6	For the purpose of a under condition 2.3 the building façade. impractical, the App by the EPA (refer to noise assessment r implementation of th	assessing compli of this consent, r Notwithstanding licant may emplo Section 11 of th nethod accepted ne assessment m	iance with the L noise from the c g, should direct by an alternative e EPA's Industr by the EPA sha nethod.	A1(1 minute) noise development shall b measurement of noise noise assessmen rial Noise Policy). D all be submitted to t	e contribution le be measured a bise from the d t method deem letails of such a the Secretary p	evels specified t 1 metre from evelopment be ned acceptable an alternative prior to the	Not triggered	Ongoing	No noise monitoring was undertaken during this reporting period.
	L								
						Environme	Ivironmental Perfe	ormance - Visual	Impacts Quality Impacts
						Environine	mai Periormance	- Son and Water	

	Reference Documentation
ed 08/08/19 (NVMP), nonitoring will be dertaken by SLR in ring this reporting period. eriod.	Appendix A - Noise and Vibration Management Sub-Plan, Rev 3, 08/08/19
the NVMP, Allied inst Conditions 2.3 hence	
hich are consistent with	Appendix A - Noise and Vibration Management Sub-Plan, Rev 3, 08/08/19
eriod.	
eriod.	

r				1
Condition Number	Condition	Compliance Level	Status	2022/23 Comments
2.13	Section 120 of the Protection of the Environment Operations Act 1997 must be complied with in the carrying out of the development, except as expressly provided by a licence under that Act for the development.	Compliant	Ongoing	<ul> <li>EPL12498 does not include any licensed water discharges. The site discharge water under normal operating conditions attributable to the Allied Pinnacle confirmed:</li> <li>There has been no recorded instances of unauthorised discharge pollution of waters.</li> <li>There has been no recorded complaints of water discharges from the result of the thermal pollution area into waterways.</li> </ul>
	En	vironmental Perform	ance - Heritage	Impacts
2.29	Prior to the commencement of any construction works at the site, the Applicant shall a) fully establish and secure Heritage Conservation Zone 1 in the north-western end of the site (as shown in Fig.6.1 of the document listed under condition 1.1e); b) fully establish and secure Heritage Conservation Zone 2 incorporating the area surrounding a scarred tree (AMP ST 1) with at least a diameter of 30 metres. The Zone shall be enclosed by a permanent fence that restricts access into the Zone for the duration of the development (including construction activities); and c) implement suitable drainage measures in the vicinity of Heritage Conservation Zone 2 to ensure ponding or other impacts do not occur in a manner which would affect the root zone of the tree. The Applicant shall manage the Heritage Conservation Zones in accordance with the management measures specified in the approved Cultural Heritage Management Plan.	Compliant	Ongoing	During this reporting period, Allied Pinnacle continued to monitor marequirements for the heritage conservation zones. Allied Pinnacle of Secured Heritage Conservation Zone 1 is fenced. • The area surrounding surrounding the scarred tree (Zone 2) is fen • Fallen tree branch located in the Zone 2, has not been removed, a stakeholder requirements.
	Enviro	nmental Performance	e - Flora and Fa	una Impacts
		nvironmental Perforn	nance - Traffic Ir	npacts
	No advertising signs or structures would be allowed within Pieton Road read reserve	Compliant	Ongoing	No adverticing signs or structures are present within Picton Road P
2.40		Compliant	ongoing	
	Enviror	mental Performance	- Hazards and I	Risk Impacts
	Env	ironmental Performa	nce - Air Quality	/ Impacts
2.43	The Applicant shall design, construct, operate and maintain the development in a manner that minimises dust emissions from the site.	Compliant	Ongoing	Allied Pinnacle confirmed: - There has been no recorded complaints of dust emissions from th - There has been no regulatory actions for dust emissions from the
2.44	The raw material storage bunkers shall be maintained in a condition that effectively eliminates wind generated dust emissions.	Compliant	Ongoing	Allied Pinnacle confirmed: - There has been no recorded complaints of dust discharges from the - There has been no regulatory actions for dust emissions from the
2.45	Dust collection systems with bag type dust collectors shall be provided to all potential sources of dust production during operation of the development.	Compliant	Ongoing	Allied Pinnacle confirmed: - There has been no recorded complaints of dust discharges from the - There has been no regulatory actions for dust emissions from the
	Enviror	nmental Performance	- Mine Subside	nce Impacts
	Environmen	tal Performance - Wa	ste Generation	and Management
2.47	The Applicant shall not cause, permit or allow any waste generated by the development or from outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposa on the site, except as expressly permitted by a licence under Protection of the Environment Operations Act 1997. This condition only applies to wastes for which a licence under the Protection of the Environment Operations Act 1997 is required.	Compliant	Ongoing	EPL12498 does not allow the storage, treatment, processing, repro disposal of waste on the site. Waste is not stored, treated, processed, reprocessed, or disposed of
	Environn	nental Monitoring an	d Auditing - Noi	se Monitoring
	Environmer	ntal Monitoring and A	Auditing - Air Qu	ality Verification
	Envi	ronmental Monitorin	g and Auditing ·	Auditing

	Reference Documentation
site does not o the operations. ages to water or om the site n the site. /s. maintenance e confirmed that: fenced. d, as per Aboriginal	Reference Documentation EPL12498 EPA Annual Return – 06/07/2021 to 07/04/2022. EPA Annual Return – 06/07/2022 to 07/04/2023. Incidents and complaints register
Road reserve.	
n the site he site.	
n the site he site.	
n the site he site.	
rocessing, or d of on site.	

Condition Number	Condition	Compliance Level	Status	2022/23 Comments
3.3	Twelve months after the commencement of operation of the development, and every three years thereafter or as otherwise agreed or required by the Secretary, the Applicant shall commission an independent, qualified person or team to undertake an Environmental Audit of the development. The independent person or team shall be approved by the Secretary prior to the commencement of the Audit. An Environmental Audit Report shall be submitted for the approval of the Secretary within one month of the completion of the Audit. The Audit shall: a) be carried out in accordance with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing; b) assess compliance with the requirements of this consent, and other licences and approvals that apply to the development; c) assess the environmental performance of the development against the predictions made and conclusions drawn in the documents referred to under condition 1.1 of this consent; and d) review the effectiveness of the environmental management of the development, including any environmental impact mitigation works. The Secretary may require the Applicant to undertake works to address the findings or recommendations presented in the Report. Any such works shall be completed within such time as the Secretary may require.	Non-compliant	Ongoing	<ul> <li>SLR conducted a three-yearly independent audit which covers the p October 2016 to 23 October 2019. The next IEA was due on Octob this reporting period however, an IEA was not conducted during this period.</li> <li>The 2022 IEA was not undertaken by Allied Pinnacle in a timely ma this reporting period it is noted that:</li> <li>SLR undertook an IEA site visit on 16 June 2023.</li> <li>the auditor commenced the audit prior to approval by DPE (receiv 2023).</li> <li>The FINAL IEA report is dated 31 August 2023.</li> </ul> Whilst a non-compliance has been awarded for this conditon, active is proposed as the audit has now been completed.
4.1	Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection on request. This shall include provision of all documents at the site for inspection by visitors, and in an appropriate electronic format on the Applicants internet site, should one exist.	Compliant	Ongoing	Allied Pinnacle has not received any requests for documents to be available. Not withstanding, the following documents were publicall web-site: - Picton Emergency Response Plan V02 - Picton Pollution Incident Response Management Plan - Consolidated Consent - DA - OEMP V1 dated 20/07/23 - NVMP V1 dated 20/07/23 - TMP V1 dated 20/07/23 - TMP V1 dated 20/07/23 - CHMP V1 dated 20/07/23 - Combined Checklist V1 dated 20/07/23 - Total care Vegetation Management Plan June 06 - EPA Licence update 2018 The following documents were not the most up to date available as - IEA Final Report - Allied Pinnacle Picton, March 2020 - 2020/21 AEMR Final Action 2022/23-05: Update the documents on the Allied Pinnacc particular, the most recent versions of the IEA and the AEMR.
	Community Informa	tion, Consultation a	and Involvement	- Complaints Procedure
4.3	The Applicant shall record details of all complaints received through the means listed under condition 4.2 of this consent in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to: a) the date and time, where relevant, of the complaint; b) the means by which the complaint was made (telephone, mail or email); c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect; d) the nature of the complaint; e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken. The Complaints Register shall be made available for inspection by the EPA and the Secretary upon request.	Compliant	Ongoing	An incident and complaints database (RAPID) is maintained across Pinnacle operations, which includes recording complaints. The required condition are recordable in the database. No complaints were recorded during the reporting period.
		Environmental Ma	anagement - CEN	
		Environmental Ma	anagement - OEM	/P

ne period 24 tober 2022, duing this reporting	Allied Pinnacle IEA Picton SLR reference No: 61019097-R02-v1.0.docx, August 2023
manner. Outside of	
ceived on 8 July	
on, no corrective	
be made publically cally available via its	https://alliedpinnacle.com/whs/picton/
as at 9/9/23:	
nacle web page. In IR.	
oss all of Allied equirements of this	RAPID Incidents register

Condition Number	Condition	Compliance Level	Status	2022/23 Comments	Reference Documentation
5.3	The Applicant shall prepare and <u>implement</u> an Operation Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during operation of the development. The Plan shall include, but not necessarily be limited to: a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations; b) a description of the roles and responsibilities for all relevant employees involved in the operation of the development; c) overall environmental policies and principles to be applied to the operation of the development; d) standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate; e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent; and f) the Management Plans listed under condition 5.4 of this consent. The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of operation of the development, or within such period otherwise agreed by the Secretary. Operation shall not commence until written approval has been received from the Secretary.	Compliant f	Ongoing	Quarterly inspection and maintenance records confirm that the site is monitoring and implementing maintenance programs as per the plans. Please refer to Conditon 5.4 for specific observations in relation to each sub-plan.	Water and soil monitoring records refer to Conditions 5.6, 5.7 and 5.8. Cultural Heritage Management Plan refer to Condition 2.29 Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).
5.4	As part of the Operation Environmental Management Plan for the development, required under condition 5.3 of this consent, the Applicant shall prepare and <u>implement</u> the following Management Plans:	See below	Ongoing	See below for specific observations in relation to each sub-plan.	
5.4 (a)	A Noise Management Plan to detail measures to mitigate and manage noise during operation of the development. The Plan shall include, but not necessarily be limited to: i. procedures to ensure that all reasonable and feasible noise mitigation measures are applied during operation of the development, including those measures listed in condition 2.7; ii. a system to undertake periodic assessment of Best Available Technically Economically Achievable and Best Management Practices to minimise noise emissions at all times and to seek to achieve noise reduction in accordance with the goal prescribed in condition 2.7; iii. procedures to generate suitable documentation for annual environmental reporting, that demonstrates that the noise limits and noise goals specified under this consent, or best practice noise control operations, are being met; v. identification of all relevant receivers and the applicable criteria at those receivers commensurate with the noise limits that will be carried out in relation to the development and the associated noise sources; v. identification of activities that will be carried out in relation to the development and the associated noise sources; vi. proposed on-going community consultation measures; vii. development of reactive and pro-active strategies for dealing promptly with any noise complaints; viii. noise monitoring and reporting procedures.	Non-compliant	Ongoing	<ul> <li>Allied Pinnacle quarterly observations confirmed the implemenation of the following mitigation measures:</li> <li>Operational mitigation measures including night works, bag packing works and site building facades</li> <li>Maintenance of mechanical equipment</li> <li>Bag packing works</li> <li>The Noise and Vibration Management Sub-Plan, Rev 3 dated 08/08/19 (NVMP), applicable during the reporting period, specified that noise monitoring will be undertaken every three (3) years. Noise monitoring was undertaken by SLR in November 2019 and was due again in November 2022, during this reporting period. No noise monitoring was undertaken during this reporting period.</li> <li>Therefore a non-compliance has been awarded for the implemenation of the NVMP.</li> <li>Whilst a noncompliance has been awarded for this conditon, no corrective action is proposed as SLR has been commissioned to undertake the triannaul monitoring program on 26 September 2023.</li> </ul>	Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).

Condition Number	Condition	Compliance Level	Status	2022/23 Comments	Reference Documentation
Condition Number 5.4 (b)	<b>Condition</b> A Water Monitoring and Management Plan to outline measures that will be employed to manage water on the site, to minimise soil erosion and the discharge of sediments and other pollutants to lands and/ or waters throughout the life of the development. The Plan shall be based on best environmental practice and shall address the requirements of the Department, the Australian Rail Track Corporation, Council and the EPA. The Plan shall include, but not necessarily be limited to: i. consideration of all reasonable and feasible options to avoid discharge to ground and/or ambient waters including methods to minimise the volume of contaminated water and effluent generated; ii. description of the criteria for nomination of areas as clean or dirty and identification of clean and dirty surface water areas on site maps; iii. details of water management and monitoring measures to be implemented, including measures to ensure the continued integrity of the culverts under the Great Southern Railway line; iv. characterisation of wastewater qualities and quantities for reuse on-site and specification of wastewater qualities and quantities for reuse on-site impact through the use of treated effluent for irrigation; wi. a program for monitoring effluent and receiving soil and waters to ensure the suitable operation of the sewage treatment plant, and the ongoing viability of the land and waters receiving the effluent under the irrigation scheme; vii. details of the remedial actions to be taken in response to an exceedance of concentration limits or other performance criteria for the treated water, or if there are predicted or actual adverse weather conditions, or complaints received regarding irrigation activities; viii. specific details shall be provided in relation to the times, locations, volumes and qualities of the water to be irrigation will be assessed.	Compliance Level Compliant	Status Ongoing	2022/23 Comments         Allied Pinnacle quarterly observations confirmed the implemenation of the following mitigation measures:         - Maintenance of hardstand area and stormwater drains         - Fuel and chemical storage         - AWTS         - Irrigation area maintenance         - Laboratory – storage and management of chemicals         Refer to Conditons 5.6 to 5.9 for compliance assessmnet realated to MOD 3.	Reference Documentation Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).
5.4 (c)	A Traffic Management Strategy to outline minimum requirements for the movement of heavy vehicles to and from the site. The Strategy shall meet the requirements of Council, the RTA, and the EPA, should there be any. The Code shall include, but not necessarily be limited to: i. driver training to ensure that noisy practices such as the use of compression engine brakes are avoided or minimised; ii. best exhaust emission and noise practice in the selection and maintenance of vehicle fleets; iii. speed limits to be observed along routes to and from, and within the site; iv. movement scheduling where practicable to minimise noise impacts during sensitive time of the day; v. behavioural requirements and load coverage specifications for drivers; vi. a system of audited management practices that identifies non-conformances, initiates and monitors corrective and preventive actions (including disciplinary action for breaches of procedures), and assesses the implementation and improvement of the Strategy; and vii. clauses in conditions of employment or contracts for drivers that require adherence to the noise minimisation procedures and facilitate implementation of disciplinary actions for breaches of the procedures.	Compliant	Ongoing	Allied Pinnacle quarterly observations confirmed the implemenation of the following mitigation measures: - Routine traffic monitoring including speed, noise and load coverage	Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).
5.4 (d)	A Cultural Heritage Management Plan to outline measures to ensure that the two Heritage Conservation Zones are suitably managed during the life of the development. The Plan shall be prepared in consultation with the EPA, and Aboriginal community, and shall clearly demonstrate how the issues and requirements of these entities have been addressed. Where the Plan is not consistent with the requirements of these entities, then a full justification for that inconsistency must be provided.	Compliant	Ongoing	Allied Pinnacle quarterly observations confirmed the implemenation of the following mitigation measures: - Maintenance of cultural heritage zones and control of access	Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).
5.4 (e)	A Landscape Management Plan to outline measures to ensure appropriate development and maintenance of landscaping on the site. The Plan shall include, but not necessarily be limited to: i. details of all landscaping to be undertaken on the site with specific reference to screening landscaping and the timing of landscaping works; ii. maximisation of flora species endemic to the locality in landscaping the site; iii. results of consultation with Council and the EPA to determine appropriate species for landscaping on the site; and iv. a program to ensure that all landscaped areas on the site are maintained in a tidy, healthy and weed free state.	Compliant	Ongoing	Allied Pinnacle quarterly observations confirmed the implemenation of the following mitigation measures: - Routine inspection of landscaped areas for noxious weeds, litter and pooled water, bushfire risk, and buffer zones.	Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).

Condition Number	Condition	Compliance Level	Status	2022/23 Comments	Reference Documentation
5.5	Every three years after the commencement of operation of the development the Applicant shall undertake a formal review of the OEMP required under condition 5.3 of this consent. The review shall ensure that the OEMP is up-to-date and all changes to procedures and practices prior to the review are fully incorporated into the OEMP. The Applicant shall notify the Secretary of the completion of the review, and shall supply a copy of the updated OEMP to the Secretary and any other party upon request.	Non-compliant	Ongoing	<ul> <li>The OEMP including the associated sub plans were current (reviewed within the three year period) and approved by DPE as follows:</li> <li>OEMP Revision 4, 15/04/20</li> <li>OEMP Appendix B WMMP, Revision 4 15/04/20</li> <li>OEMP Appendix C TMP, Revision 4 15/04/20</li> <li>OEMP Appendix E LMP, Revision 4 15/04/20</li> <li>OEMP Appendix F Combined Checklist, Revision 4 15/04/20</li> <li>The following documents were due to be updated during the reporting period but were not updated within the three year timeframe, therefore a non-compliance has been awarded:</li> <li>OEMP Appendix A NVMP, Revision 3 8/08/19</li> <li>OEMP Appendix D CHMP, Revision 3 8/08/19</li> <li>It is noted that the CEMP and all associated subplans were updated on 20 July 2023, therefore no further corrective action is required. However the Secretary had not been notified of the completion of the review.</li> <li>Action 2022/23-02: Notify the Secretary of update to the OEMP and supporting subplans.</li> <li>A copy of the updated OEMP and associated sub-plans were available on the Allied Pinnacle web-page.</li> </ul>	OEMP V1 dated 20/07/23 NVMP V1 dated 20/07/23 TMP V1 dated 20/07/23 CHMP V1 dated 20/07/23 LMP V1 dated 20/07/23 Combined Checklist V1 dated 20/07/23
		Effluent Irri	gation Area		
5.6	<ul> <li>When applying effluent to land, the Applicant must ensure:</li> <li>a) there is no surface water runoff beyond the irrigation area as identified in Figure 1 at Appendix A of this consent;</li> <li>b) spray does not drift beyond the boundary of the site; and</li> <li>c) the quantities of nutrients, salt, hydraulic load and organic material are effectively absorbed through plant or crop production or within the soil as outlined in MOD 3, and confirmed through annual soil monitoring (refer to condition 5.9).</li> </ul>	Compliant	Ongoing	<ul> <li>Quarterly monioring confirmed:</li> <li>no evidence of surface water runoff beyond the irrigation area</li> <li>spray does not drift beyond the boundary of the site</li> <li>the stormwater diversion bank is maintained between the road and the irrigation area</li> <li>There are no depressions capable of ponding water</li> <li>grass is kept to below 100mm in length (except for on 18/5/23 due to excessive rain and inability to access to irrigation area without causing damage).</li> <li>Historical annual testing by Landfax laboratoies has confirmed that consistently, the quantities of nutrients, salt, hydraulic load and organic material are effectively absorbed through plant or crop production or within the soil as outlined in MOD 3.</li> <li><i>Refer to Conditon 5.9 for a non-compliance in relation to annual soil monitoring.</i></li> </ul>	Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).
5.7	Within two months of the approval of MOD 3, the Applicant must ensure the irrigation area identified in Appendix A of this consent is managed and maintained as follows: a) a diversion bank of no higher than 200 mm must be constructed between the road and the irrigation area to divert runoff away from the irrigation area and into the tree row; b) any depressions capable of ponding water (such as natural depressions or wheel tracks) in the irrigation area must be regularly removed by levelling with top soil; c) the irrigation area must be regularly mowed to a length of 100 mm; and d) pasture or fodder crops must only be harvested when dry.	Compliant	Ongoing	The criteria in this condition has been incorporated in the WMMP and implemented on site as confirmed via the quarterly inspections.	OEMP Appendix B WMMP, Revision 4 15/04/20 Quarterly inspection records (16/2/23, 17/11/23, 18/5/22 and 23/8/22).
	AWT	S Maintenance and I	Monitoring Requ	uirements	
5.8	The Applicant must ensure the AWTS is serviced prior to any irrigation recommencing. The service report, together with records of those measurements are to be submitted to the Department prior to any irrigation recommencing and then on a quarterly basis. Before commencing each service, measurements are to be taken to demonstrate that the following target requirements have been met: a) faecal coliforms, or E.coli (thermotolerant coliforms) must be less than 100 colony forming units per 100 ml in the irrigation chamber; b) dissolved oxygen in the irrigation chamber is more than 5 mg O2/L at 20 degrees Celsius; and c) free available chlorine in the irrigation chamber is between 0.01 and 2.0 mg/L.	Non-compliant	Ongoing	Allied Pinnacle water results were submitted to DPE via the major projects potral dated May 22, Aug 22, Nov 22, Feb 23. Whilst the AWTS was serviced quarterly, only the service record for May 22 was provided to the Secretary. Action 2022/23-03: Submit any outstanding AWTS service records to the Secretary as required by Condtion 5.8.	Project portal receipts

Condition Number	Condition	Compliance Level	Status	2022/23 Comments	Reference Documentation
5.9	Within two months of the determination of MOD 3, the Applicant must update and <u>implement</u> the Water Monitoring and Management Plan, as required by Condition 5.4 b), to the satisfaction of the Secretary, to include: a) an annual soil monitoring program for the irrigation area in accordance with the DEC Guideline; and b) the management and monitoring requirements detailed in conditions 5.6 to 5.8 inclusive.	Non-compliant	Ongoing	The previous AEMRs confirmed that the WMMP (Jan 18) was amended to include MOD 3 requirments including annual soil monitoring program and management and monitoring requirements. These requirements were based on the Landfax report "Review of wastewater treatment and effluent application to land, Allied Mills Pty Ltd – Picton Mill" (2016 Review). Regarding implemenation of Conditon 5.9 (a), Allied Pinnacle did not undertake an annual soil monitoring program for the irrigation area in accordance with the DEC Guideline, therefore a non compliance has been awarded. Allied Pinnacle advised that their previous service provider (Landfax Pty Ltd) no longer offers this services hence they in search of another suitable technical specialist. Action 2022/23-04: Engage a suitably qualified technical specialist to undertake the annual soil monitoring program for the irrigation area in accordance with the DEC Guideline as required by Condition 5.9 Regarding implemenation of Conditon 5.9 (b), please refer to Conditons 5.6 to 5.8 above.	OEMP Appendix B WMMP, Revision 4 15/04/20
	Environr	nental Reporting - A	nnual Performan	ice Reporting	
6.3	The Applicant shall, throughout the life of the development, prepare and submit for the approval of the Secretary, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 5.3 of this consent), the conditions of this consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to: a) details of compliance with the conditions of this consent; b) a copy of the Complaints Register (refer to condition 4.3 of this consent) for the preceding twelvemonth period (exclusive of personal details), and details of how these complaints were address and resolved; c) identification of any circumstances in which the environmental impacts and performance of the development during the year have not been generally consistent with the environmental impacts and performance predicted in the documents listed under condition 1.1 of this consent, with details of additional mitigation measures applied to the development to address recurrence of these circumstances; (d) results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) a list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Secretary every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation of the development. The Applicant shall submit a copy of the address certary may require the Applicant to address of period as the Secretary may require. The Applicant shall be completed within such period as the Secretary may require. The Applicant shall make copies of each AEMR available for p	Compliant	Ongoing	During this reporting period, the 2021-22 AEMR covering the period 1 April 2021 to 30 March 2022 was prepared in accordance with this condition. No requests were made to address matters in relation to the environmental performance of the development in response to review of the Annual Environmental Report.	2021/22 Annual Environmental Monitoring Report (OptimE, August 2022).

# Appendix B – Irrigation chamber of AWTS water monitoring data

(Extract from: Annual review of wastewater treatment and effluent Irrigation – Picton Mill, Landfax Laboratories, 7 July 2021, Appendix B Table B2)

### Phone Office/Lab

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### Table B2. Analysis of Water Sample

Client: Allied Pinnacle Pty Ltd – Picton Mill Water Sample collected: 21<sup>st</sup> June 2021, 0825 hrs Analysis completed: 27<sup>th</sup> June 2021

Date: 27<sup>th</sup> June 2021

	Source of	water: Irri	gation cha	mber of A	WTS		
Parameter	JUN2021	JUN2020	MAY2019	MAY2018	ADWG 2004	Units	Method
	Effluent	Effluent	Effluent	Effluent			
рН	7.36	7.26	6.87	6.42	6.5-8.5 Aesthetic	units	
Elect. cond. (EC)	0.778	0.687	0.564	0.626		dS m <sup>-1</sup>	APHA 2510
Total dissolved solids TDS	530	460	384	419		mg L <sup>-1</sup>	calculation
Total suspended solids TSS	5	8	<2	<2	500 Aesthetic	mg L <sup>-1</sup>	APHA 2540
Salinity hazard	Non-saline	Non-saline	Non-saline	Non-saline			
Sodium (Na <sup>+</sup> )	53.5	51.0	48.2	52.3		mg L <sup>-1</sup>	
Potassium (K <sup>+</sup> )	36.6	49.5	30.5	36.0		mg L <sup>-1</sup>	ADUA 2120
Magnesium (Mg <sup>2+)</sup>	11.6	9.4	7.34	6.96	180 Aesthetic	mg L <sup>-1</sup>	APRA 5120
Calcium (Ca <sup>2+)</sup>	37.2	33.9	34.8	39.3		mg L <sup>-1</sup>	
Sodium adsorption ratio SAR	2.0	2.0	1.9	2.0			calculation
Hardness as CaCO <sub>3</sub>	141	123	117	127	200 Aesthetic	mg L <sup>-1</sup>	APHA 2340
Saturation Index @ 25°C	-0.36	-0.89	-1.34	-2.37			APHA 2330B
Alkalinity (pH 4.5) as CaCO <sub>3</sub>	176	72	59	28		mg L <sup>-1</sup>	APHA 2320
Aluminium (Al <sup>3+)</sup>	< 0.005	< 0.005	< 0.005	< 0.005	0.2 Aesthetic	mg L <sup>-1</sup>	
Boron (B)	0.10	0.132	0.280	0.296	4.0 Health	mg L <sup>-1</sup>	
Copper (Cu <sup>2+</sup> )	0.006	0.030	0.023	0.020	1.0 A, 2.0 H	mg L <sup>-1</sup>	
Iron (Fe <sup>2+</sup> )	0.06	0.030	0.066	0.045	0.3 Aesthetic	mg L <sup>-1</sup>	APHA 3120
Manganese (Mn <sup>4+</sup> )	0.02	0.022	0.02	0.008	0.1 A, 0.5	mg L <sup>-1</sup>	
					Health		
Zinc $(Zn^{2+})$	< 0.005	0.145	0.13	0.044	3.0 Aesthetic	mg L <sup>-1</sup>	
Total nitrogen (TN)	33.4	22.3	12.8	23.0		mg L <sup>-1</sup>	APHA
Total phosphorus (TP)	8.98	8.58	10.3	10.5			
Fluoride (F)	0.76	0.640	0.491	0.718		mg L <sup>-1</sup>	
Chloride (Cl <sup>-</sup> )	94.2	93.2	106	112		mg L <sup>-1</sup>	
Bromide (Br)	< 0.02	< 0.02	< 0.02	< 0.02		mg L <sup>-1</sup>	
Nitrite (NO <sub>2</sub> N)	< 0.02	< 0.02	< 0.02	< 0.02	3.0 Health	mg L <sup>-1</sup>	ADUA 4110D
Nitrate (NO <sub>3</sub> N)	5.12	21.7	9.15	22.3	11.0 Health	mg L <sup>-1</sup>	AFIA 4110B
Reactive phosphorus (PO <sub>4</sub> <sup>3+)</sup>	9.78	8.28	10.2	10.1		mg L <sup>-1</sup>	
Sulphur (SO <sub>4</sub> <sup>=</sup> -S)	10.7	14.8	12.5	11.3		mg L <sup>-1</sup>	
Sulphate (SO <sub>4</sub> <sup>=</sup> )	32.1	44.4	35.6	33.9	250 A,500 H	mg L <sup>-1</sup>	
Ammonia (NH4-N)	18.7	1.54	0.09	<1		mg L <sup>-1</sup>	
Biochemical Oxygen Demand	12.6	2.6				mg L <sup>-1</sup>	APHA 5210 B
Faecal coliforms	<1	<1	2	<1	Ī	cfu/	
E.coli	<1	<1	<1	<1	Ī	100	APHA 9222
Total coliforms	170	<1	250	<1		mL	

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<0.x = measured but reading below detection level

 $mg L^{-1} = part per million$ 

References: APHA, 2005 Standard Methods for the Examination of Water and Wastewater. 21st Edition NH&MRC and NRMMC (2004) National Water Quality Management Strategy: Australian Drinking Water Guidelines



Commercial and research laboratory for soil, water and plant analysis.

Soil survey and analytical assessments, landscape analysis and plant nutrient relationships, Wastewater and effluent reuse specialists - on-site and decentralised

### Appendix C – Irrigation area soil monitoring data

(Extract from: Annual review of wastewater treatment and effluent Irrigation – Picton Mill, Landfax Laboratories, 7 July 2021, Appendix C, Table C1)

				Tak	ole C1 R	esults fc	or soil an	alysis for	JUNE 20	021			
	Jun-21												
Location	Exc.Al+H	C	а		К	N	1g	N	a	Base Sat.	ESP	ECEC	Ca/Mg
Location	cmol+/kg	mg/kg	cmol+/kg	mg/kg	cmol+/kg	mg/kg	cmol+/kg	mg/kg	cmol+/kg	%	%	cmol+/kg	ratio
AP - Picton Mill - 1 surface	0.00	2732	13.6	192	0.49	329	2.71	86	0.37	100.0	2.2	17.2	5.0
AP - Picton Mill - 1 subsoil	0.00	1749	8.7	56	0.14	285	2.35	125	0.54	100.0	4.6	11.8	3.7
AP - Picton Mill - 2 surface	0.00	2793	13.9	360	0.92	385	3.17	104	0.45	100.0	2.4	18.5	4.4
AP - Picton Mill - 2 subsoil	0.00	2273	11.3	96	0.24	691	5.68	232	1.01	100.0	5.5	18.3	2.0
AP - Picton Mill - 3 surface	0.00	2853	14.2	254	0.65	284	2.34	116	0.50	100.0	2.8	17.7	6.0
AP - Picton Mill - 3 subsoil	0.00	2218	11.1	113	0.29	462	3.80	237	1.03	100.0	6.4	16.2	2.9
AP - Picton Mill - 4 surface	0.00	2534	12.6	278	0.71	308	2.53	104	0.45	100.0	2.8	16.3	4.9
AP - Picton Mill - 4 subsoil	0.00	2139	10.7	146	0.37	556	4.57	145	0.63	100.0	3.9	16.3	2.3
AP - Picton Mill - 5 surface	0.00	2923	14.6	297	0.76	385	3.17	114	0.49	100.0	2.6	19.0	4.6
AP - Picton Mill - 5 subsoil	0.00	2269	11.3	96	0.25	495	4.08	150	0.65	100.0	4.0	16.3	2.7
AP - Picton Mill - 6 surface	0.00	3226	16.1	406	1.04	422	3.47	123	0.54	100.0	2.5	21.1	4.6
AP - Picton Mill - 6 subsoil	0.00	1829	9.1	109	0.28	494	4.07	174	0.76	100.0	5.3	14.2	2.2
Average surface soil	0.00	2843	14.2	298	0.76	352	2.90	108	0.47	100.0	2.6	18.3	4.9
Average B Horizon	0.00	2080	10.4	102	0.26	497	4.09	177	0.77	100.0	5.0	15.5	2.6
Method						15D3					Calc.	Calc.	calc.
LOQ					0.2 m	ıg/kg							
Recovery %		66	.6	8	9.2	36	3.4	66	.2				
Location	Exc.Al+H	С	a		К	2	١g	Z	a	Base Sat.	ESP	ECEC	Ca/Mg
All samples dried at 50degC, c	rushed and	l sieved to	minus 2 m	m prior to	sampling.								
All analyses performed in acc	ordance wi	th method	s set out in	Rayment	and Lyons	(2011)							
ASPAC Reference Standards L	ısed: 7122	and 7469											

ilts for soil analysis for JUNE 2021		P KCI 40 - S NO3-N CI- Emerson class Psorption	g   mg/kg   mg/kg   mg/kg   in SAR5, EC 1 dS/m   kg/ha	11.0 9.4 37 water stable, swell Class 7 960	5.5 0.7 32 *3/6, slake 1 11200	2 16.1 14.9 61 water stable, swell Class 7 1470	25.4 0.5 99 *3/6, slake 1 15100	1         75         water stable, swell Class 7         1530	28.7 0.4 75 *3/6, slake 1 10100	5 16.1 8.2 45 water stable, swell Class 7 2280	9.9 0.5 41 *3/6, slake 1 9800	3 21.0 9.7 55 water stable, swell Class 7 1530	11.4 0.6 49 *3/6, slake 1 10200	3 20.7 15.7 62 water stable, swell Class 7 1410	18.5 0.6 59 *3/6, slake 2 8100	t 20.0 11.5 56 1530	16.6 0.5 59 10750		KCl40 7C1 lon Chrom		98 96 96 96	P SO4-S NO3-N CI-	
for soil analysis for JUNE 2021		KCl 40 - S NO3-N Cl- Emerson cla	mg/kg mg/kg mg/kg in SAR5, EC 1 d	11.0 9.4 37 water stable, swe	5.5 0.7 32 *3/6, slake	16.1   14.9   61   water stable, swe	25.4 0.5 99 *3/6, slake	34.8 11.1 75 water stable, swe	28.7 0.4 75 *3/6, slake	16.1 8.2 45 water stable, swe	9.9 0.5 41 *3/6, slake	21.0 9.7 55 water stable, swe	11.4 0.6 49 *3/6, slake	20.7   15.7   62   water stable, swe	18.5 0.6 59 *3/6, slake	20.0 11.5 56	16.6 0.5 59		KCI40 7C1 lon Chrom	1 0.2 1	98 96 96	SO4-S NO3-N CI-	
Results f		Bray-P K	mg/kg	4.3	9.0	71.2	2.1	61.1	3.6	21.6	2.0	42.8	6.5	65.3	2.4	44.4	2.9		9E1	0.1	06	Bray-P	
<b>Fable C1</b>		OC	%	2.24	0.66	3.06	0.66	3.31	0.47	2.00	0.52	2.93	0.41	3.79	0.49	2.89	0.53		6A1	0.01	95	OC	
-		EC	uS/cm	0.101	0.067	0.129	0.124	0.144	0.127	0.114	0.071	0.128	0.078	0.144	0.089	0.127	0.093		3A1	5		EC	
		pHCa		6.38	6.81	6.58	6.52	6.14	6.70	6.22	6.62	6.61	6.82	6.49	6.73	6.40	6.70		4B1	0.01		pHCa	
	Jun-21	мНq		7.12	7.84	7.24	7.36	6.84	7.62	6.94	7.62	7.24	7.97	7.18	7.70	60.7	69.7		4A1	0.01		рНw	
		Lab Run	No.	1	2	3	4	5	9	7	8	6	10	11	12							Lab Run	
		Site Location	Sample ID	AP - Picton Mill - 1 surface	AP - Picton Mill - 1 subsoil	AP - Picton Mill - 2 surface	AP - Picton Mill - 2 subsoil	AP - Picton Mill - 3 surface	AP - Picton Mill - 3 subsoil	AP - Picton Mill - 4 surface	AP - Picton Mill - 4 subsoil	AP - Picton Mill - 5 surface	AP - Picton Mill - 5 subsoil	AP - Picton Mill - 6 surface	AP - Picton Mill - 6 subsoil	Average surface soil	Average B Horizon					Site Location	

	Psorption	kg/ha	2160	1599	1200	1300	1650	960	lower		20500	16400	16400	15100	11800	11200	lower		2970	1560	1200	1400	780	1470	stable	11000	11200	11300	15600	11600	15100	higher	
	Emerson class	in SAR5, EC 1 dS/m	water stable, swell class 7	water stable, no swell Class 8	water stable, swell Class 7			*3/6, slake 1	*3/6, slake 1	*3/6, slake 1	*3/6, slake 2	*3/6, slake 2	*3/6, slake 1			water stable, swell class 7	*3 <i>/</i> 6, slake 1	water stable, no swell Class 8	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7		t estate of c*	2/0/ SIGKE 1	*3 /6 slake 1 *3 /6 slake 2	*3./6, slake 2	*3/6, slake 1	*3/6, slake 1					
	c;	mg/kg	28	20	55	43	43	37	stable		51	25	35	57	36	32	stable		27	27	114	108	41	61	stable	L	C/ FF	41	65	77	66	higher	the other states
	NO3-N	mg/kg	4.6	11.0	5.3	4.1	7.6	9.40	higher		0.4	0.7	0.4	0.0	0.3	0.7	higher		3.8	14.8	18.4	23.5	8.4	14.9	stable	, ,	1.0	1.7	0.0	0.5	0.5	stable	
	KCI 40 - S	mg/kg	12.0	7.1	3.3	7.8	15.2	11.0	stable		21.9	5.7	5.8	4.5	7.7	5.5	stable		23.0	9.0	10.5	30.4	27.6	16.1	stable	0 1 0	0.02	0.0	6.9	36.1	25.4	stable	
	Bray-P	mg/kg	4.8	4.1	4.0	5.8	5.2	4.3	stable		0.1	0.1	0.1	0.7	0.5	0.6	higher		5.3	7.1	3.5	23.1	33.7	71.2	higher	5	1.0	1.0	5.0	2.6	2.1	higher	
	 oc	%	7.4	3.1	2.3	2.3	3.0	2.2	stable		1.7	0.8	1.1	0.7	0.7	0.66	stable		7.9	3.8	2.5	4.3	4.2	3.06	stable	6	r. 0	0.0	1.0	1.4	0.7	lower	
/e data	EC	dS/m	0.123	0.083	0.091	0.091	0.121	0.101	stable		0.121	0.093	0.073	0.072	0.077	0.067	stable		0.121	0.106	0.147	0.190	0.134	0.129	stable	C 7 7 0	24T-0	9110	0.083	0.130	0.124	<u>stable</u>	
omparativ	pHCa		6.20	6.31	6.25	6.02	5.79	6.38	higher		6.81	6.70	6.71	6.34	5.92	6.81	stable		6.09	6.41	6.51	6.30	6.02	6.58	higher	01 7	0.10	0.40 5.00	6.41	6.07	6.52	stable	
n Mill - co	pHw		6.90	6.98	7.05	6.97	6.87	7.12	higher		7.66	7.80	7.75	7.70	7.60	7.84	higher		6.90	6.95	6.93	6.90	7.08	7.24	higher	UU F	200.7	7.40	7.55	7.10	7.36	stable	
td - Picto	Lab Run	.oN	1	1	H	1					2	2	2	2					3	m	3	m				•	- t	7 4	4				
Allied Pinnacle Pty L	Site Location	Sample ID	Picton-2016 - 1 surface	Picton-2017 - 1 surface	Picton-2018-1 surface	Picton - 2019-1 surface	Picton - 2020-1 surface	Picton-2021-1 surface	Surface 1 -Change		Picton-2016 - 1 subsoil	Picton-2017 - 1 subsoil	Picton-2018-1 subsoil	Picton - 2019-1 subsoil	Picton-2020-1 subsoil	Picton-2021-1 subsoil	Subsoil 1 -Change		Picton-2016 - 2 surface	Picton-2017 - 2 surface	Picton-2018-2 surface	Picton - 2019-2 surface	Picton-2020-2 surface	Picton-2021-2 surface	Surface 2 - Change		105005 7 - 0107-100014	Picton-2019 - 2 Subsol	Picton - 2019-2 subsoil	Picton-2020-2 subsoi,	Picton-2021-2 subsoil	Subsoil 2 -Change	
	Ca/Mg	atio	3.0	4.5	4.6	4.5	4.2	5.0	higher		1.1	2.5	1.9	2.7	2.7	3.7	higher		5.1	4.4	4.2	4.6	3.5	4.4	stable	,		 	1.7	2.0	2.0	<u>stable</u>	I
	CEC	cmol+/kg	10.9	17.1	14.6	15.4	15.6	17.2	higher		9.5	15.8	14.9	12.3	10.3	11.8	stable		16.1	18.6	16.7	18.6	13.8	18.5	stable	, , ,	1 T C	1150	17.4	15.3	18.3	higher	İ
	ESP	%	0.7	2.0	2.9	1.8	2.6	2.2	stable		0.4	4.1	5.8	4.8	5.5	4.6	stable		2.2	2.9	3.4	3.1	3.1	2.4	lower	с т	r.'	4.0	5.3	5.4	5.5	stable	
	Base Sat.	%	100	98.1	5.66	100	100	100	stable		99.2	0'66	100	100	100	100	stable		99.5	99.1	0.66	100	100	100	higher		4.00	0.95 0.1 F	100	100	100	stable	
	e	cmol+/kg	0.08	0.34	0.42	0.28	0.40	0.37	stable		0.04	0.65	0.86	0.59	0.57	0.54	stable		0.36	0.53	0.57	0.57	0.42	0.45	stable	7	71.1	1 0 1	0.93	0.83	1.01	stable	
	z	mg/kg	18	79	96	65	92	86	stable		∞	149	197	135	131	125	stable		83	123	131	130	97	104	stable	010	0170	0/T	213	190	232	stable	
	ß	cmol+/kg	2.5	2.9	2.4	2.6	2.7	2.7	stable		4.3	4.3	4.8	3.1	2.6	2.3	lower		2.4	3.2	2.9	3.1	2.7	3.2	higher	ſ	0.0	0.0 4	6.5	4.7	5.7	stable	
	2	mg/kg	305	350	293	315	332	329	stable		523	516	585	381	315	285	lower		294	386	352	373	328	385	higher	c, j	740	810	716	571	691	stable	
		cmol+/kg	0.78	0.58	0.45	0.68	0.95	0.49	lower		0.21	0.16	0.15	0.15	0.11	0.14	stable		0.82	0.59	0.73	0.70	1.05	0.92	stable	11	CT-0	0.10	0.21	0.27	0.24	stable	
	¥	ng/kg	304	227	174	267	370	192	lower		82	63	58	58	42	56	stable		321	229	285	272	410	360	stable	Ľ	02	16	83	104	96	stable	
data		cmol+/kg	7.5	13.0	11.2	11.8	11.5	13.6	higher		4.8	10.6	0.6	8.5	7.0	8.7	stable		12.4	14.1	12.3	14.3	9.7	13.9	stable		0. 1	יי סיס	10.4	9.5	11.3	higher	
omparative	Ca	ng/kg	1501	2602	2247	2372	2312	2732	higher		972	2121	1810	1697	1409	1749	stable		2486	2826	2466	2858	1937	2793	stable	11.00	67CT	1177	2078	1904	2273	higher	
ton Mill - c	kc.Al+H	nol+/kg n	0.00	0.30	0.10	0.00	0.00	0.00	stable		0.1	0.2	0.00	0.00	0.00	0.00	stable		0.1	0.2	0.20	0.00	0.00	0.00	stable	5		0.80	00.0	00.0	0.00	stable	İ
Allied Pinnacle Pty Ltd - Pic	Location	Location	Picton-2016 - 1 surface	Picton-2017 - 1 surface	Picton-2018-1 surface	Picton - 2019-1 surface	Picton - 2020-1 surface	Picton-2021-1 surface	Surface 1 -Change		Picton-2016 - 1 subsoil	Picton-2017 - 1 subsoil	Picton-2018-1 subsoil	Picton - 2019-1 subsoil	Picton-2020-1 subsoil	Picton-2021-1 subsoil	Subsoil 1 - Change		Picton-2016 - 2 surface	Picton-2017 - 2 surface	Picton-2018-2 surface	Picton - 2019-2 surface	Picton-2020-2 surface	Picton-2021-2 surface	Surface 2 - Change		105005 7 - 0107-1101014	Picton-2019-2 subsoil	Picton - 2019-2 subsoil	Picton-2020-2 subsoi,	Picton-2021-2 subsoil	Subsoil 2 - Change	

				840	1590	1200	1300	1500	1530	stable		10000	10200	10200	11300	11100	10100	stable		2700	4500	1100	1000	780	2280	stable		11200	7800	7800	10300	10300	9800	stable		
5		Emerson class	in SAR5, EC 1 dS/m	water stable, swell class 7	water stable, swell Class 7	water stable, no swell Class 8	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7			*3/6, slake 2	*3/6, slake 1	*3/6, slake 1	*3/6, slake 2	*3/6, slake 1	*3/6, slake 1			*3/6, slake 1	*3/6, slake 1	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7			*3/6, slake 2	*3/6, slake 1	*3/6, slake 1	*3/6, slake 1	*3/6, slake 1	*3/6, slake 1		5	
Ion Chror	5	cl-	mg/kg	15	27	109	472	65	75	stable		39	50	6	100	87	75	stable		6	20	76	40	41	45	stable		22	17	77	80	57	41	stable	Ion Chror	Ċ
701	N-EON	s NO3-N	mg/kg	6.8	8.8	17.8	105.1	1.0	11.1	stable		0.6	0.7	0.8	0.0	0.3	0.4	stable		22.0	7.3	15.0	1.9	2.4	8.2	stable		0.1	0.4	0.9	0.0	0.0	0.5	stable	7C1	NO3-N
KC140	S04-5	KCI 40 - 3	mg/kg	11.3	13.3	12.1	52.1	35.6	34.8	stable		17.4	16.5	21.2	20.4	35.5	28.7	stable		6.4	7.5	10.7	22.0	16.5	16.1	stable		4.8	5.2	7.3	4.2	17.8	9.9	stable	KCI40	S04-S
9F1	Bray-P	Bray-P	mg/kg	12.3	5.5	4.3	17.5	37.6	61.1	higher		0.1	0.1	0.1	1.0	4.8	3.6	higher		2.2	5.4	3.7	22.0	34.0	21.6	stable		0.1	0.1	0.1	1.1	2.9	2.0	stable	9E1	Brav-P
641	00	oc	%	5.7	3.7	2.5	4.0	4.8	3.3	stable		1.1	0.5	9.0	9.0	0.8	0.5	lower		5.5	2.6	2.7	4.0	4.7	2.0	lower		0.8	0.4	0.7	0.6	1.0	0.5	stable	6A1	00
3A1	ι Έ	EC	dS/m	0.085	0.096	0.144	0.490	0.175	0.144	stable		0.091	0.087	0.115	0.128	0.150	0.127	stable		0.086	0.070	0.117	0.157	0.116	0.114	stable		0.052	0.046	0.083	0.075	0.098	0.071	stable	3A1	Ë
4R1	pHCa	pHCa		60.9	5.96	5.91	6.36	6.22	6.14	e stable		5.80	6.65	6.47	6.69	6.28	6.70	e stable		5.94	6.31	6.10	5.97	6.25	6.22	r stable		6.40	6.57	6.43	6.50	6.34	6.62	e higher	481	pHCa
441	MHd ui	in pHw		7.07	6.52	6.65	6.81	7.11	6.84	stable		7.02	7.72	7.72	7.75	7.42	7.62	stable		6.72	6.80	6.60	6.50	7.03	6.94	highe		7.62	7.70	7.62	7.69	7.47	7.62	stable	4A1	wHa
	Lab Ru	Lab Ru	No.	ce 5	ce 5	e 5	ce 5	e	e			oil 6	oil 6	ii 6	oil 6		=			ce 7	ce 7	e 7	ce 7	e	e			oil 8	oil 8	il 8	oil 8	li	=			Lab Ru
	Site Location	Site Location	Sample ID	Picton-2016 - 3 surfac	Picton-2017 - 3 surfac	Picton-2018-3 surfac	Picton - 2019-3 surfac	Picton-2020-3 surfac	Picton-2021-3 surfac	Surface 3 -Change		Picton-2016 - 3 subsc	Picton-2017 - 3 subsc	Picton-2018-3 subsoi	Picton - 2019-3 subsc	Picton-2020-3 subsoi	Picton-2021-3 subsoi	Subsoil 3 - Change		Picton-2016 - 4 surfac	Picton-2017 - 4 surfac	Picton-2018-4 surfac	Picton - 2019-4 surfac	Picton 2020-4 surfac	Picton-2021-4 surfac	Surface 4-Change		Picton-2016 - 4 subsc	Picton-2017 - 4 subsc	Picton-2018-4 subsoi	Picton - 2019-4 subsc	Picton-2020- 4 subso	Picton-2021-4 subsoi	Subsoil 4 - Change		Site Location
calc	Ca/Mg	Ca/Mg	ratio	4.6	5.5	5.0	3.8	4.6	6.0	higher		0.9	2.9	1.4	2.4	2.7	2.9	stable		4.2	4.8	4.1	4.2	3.4	4.9	higher		1.4	2.2	1.4	1.6	2.0	2.3	higher	calc.	Ca/Mg
Calc	CEC	CEC	cmol+/kg	14.0	16.3	14.9	21.9	15.9	17.7	stable		14.7	15.7	15.1	15.4	14.4	16.2	higher		13.7	15.1	13.9	17.0	14.9	16.3	higher		13.5	14.4	14.6	14.3	15.2	16.3	higher	Calc.	CEC
Calc	ESP	ESP	%	0.6	2.5	3.4	3.8	2.7	2.8	stable		8.6	5.1	8.1	5.6	6.0	6.4	stable		0.9	1.8	3.1	1.3	2.6	2.8	stable		4.3	4.0	7.4	6.0	4.5	3.9	stable	Calc.	ESP
	Base Sat.	Base Sat.	%	99.4	98.5	100	100	100	100	stable		99.5	99.5	101	100	100	100	stable		99.4	98.9	98.8	100	100	100	higher		99.4	98.9	98.9	100	100	100	higher		Base Sat.
	Na	Na	cmol+/k§	0.08	0.40	0.51	0.83	0.43	0.50	stable		1.26	0.81	1.23	0.86	0.85	1.03	stable		0.12	0.28	0.43	0.21	0.39	0.45	higher		0.58	0.58	1.08	0.86	0.69	0.63	stable		Na
			g mg/kg	18	93	117	191	66	116	stable		291	185	282	197	196	237	stable		27	64	100	49	90	104	higher		132	133	248	198	159	145	stable		
	Mg	Mg	cmol+/k§	2.3	2.3	2.2	3.9	2.6	2.3	stable		7.1	3.7	5.6	4.2	3.5	3.8 8.6	stable		2.4	2.4	2.4	3.0	3.0	2.5	stable		5.2	4.1	5.5	5.1	4.7	4.6	stable		Mg
15D3	-		g mg/kg	276	275	270	476	318	284	stable		862	445	685	509	429	462	- stable		294	291	295	362	363	308	stable		627	503	669	615	570	556	- stable	15D3	
	×	К	cmol+/k	1.07	0.68	0.85	2.15	0.76	0.65	e stable		0.16	0.23	0.12	0.21	0.24	0.29	r higher		0.74	0.66	0.70	1.20	1.19	0.71	e stable		0.13	0.14	0.12	0.16	0.21	0.37	r higher		×
			g mg/kg	418	265	334	841	299	254	r stable		63	91	46	83	94	113	r higher		289	260	272	469	467	278	r stable		53	55	47	61	83	146	r higher		
	ß	 ca	cmol +/k	10.5	12.7	11.3	15.0	12.1	14.2	highe		6.1	10.9	8.2	10.2	9.7	11.1	highe		10.4	11.7	10.2	12.6	10.3	12.6	highe		7.5	9.4	7.8	8.2	9.6	10.7	highe		S
			mg/kg	2103	2542	2268	3011	2424	2853	higher		1231	2181	1642	2034	1949	2218	higher		2079	2334	2042	2516	2067	2534	higher		1512	1884	1554	1641	1929	2139	higher		
	Exc. AI+H	Exc.AI+H	cmol+/kg	0.1	0.2	0.00	00.0	00.0	0.00	stable		0.1	0.1	0.00	00.0	0.00	0.00	stable		0.1	0.2	0.2	00.0	0.00	0.00	stable		0.1	0.2	0.2	0.00	0.00	00.0	stable		Exc. AI+H
Method	Location	Location	Location	Picton-2016 - 3 surface	Picton-2017 - 3 surface	Picton-2018-3 surface	Picton - 2019-3 surface	Picton-2020-3 surface	Picton-2021-3 surface	Surface 3 -Change		Picton-2016 - 3 subsoil	Picton-2017 - 3 subsoil	Picton-2018-3 subsoil	Picton - 2019-3 subsoil	Picton-2020-3 subsoil	Picton-2021-3 subsoil	Subsoil 3 -Change		Picton-2016 - 4 surface	Picton-2017 - 4 surface	Picton-2018-4 surface	Picton - 2019-4 surface	Picton 2020-4 surface	Picton-2021-4 surface	Surface 4-Change		Picton-2016 - 4 subsoil	Picton-2017 - 4 subsoil	Picton-2018-4 subsoil	Picton - 2019-4 subsoil	Picton-2020- 4 subsoil	Picton-2021-4 subsoil	Subsoil 4 - Change	Method	Location

		2700	2600	600	1100	1470	1530	stable	00.00	0200	9500	10900	10800	10200	stable		5300	4700	1100	1400	1650	1410	stable		11100	0066	0066	10200	11000	8100	lower		
Emerson class	in SAR5, EC 1 dS/m	*3 <i>/</i> 6, slake 1	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7		10 / C#	3/0, slake 1 *3 /6, slake 1	*3/6. slake 1	*3/6, slake 2	*3/6, slake 1	*3/6, slake 1			water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7	water stable, swell Class 7			*3/6, slake 1	*3/6, slake 1	*3/6, slake 1	*3/6, slake 1	*3/6, slake 1	*3/6, slake 2			
c'	mg/kg	13	43	42	58	55	55	stable	6	5	178	127	46	49	stable		44	37	53	54	69	62	stable		60	35	75	69	71	59	stable	Ion Chrom	÷
NO3-N	mg/kg	3.9	17.7	16.3	6.3	6.5	9.7	stable	ç		0.0	0.0	0.0	0.6	higher		5.2	15.2	2.5	9.9	9.5	15.7	higher		0.0	1.1	0.0	0.0	0.0	0.6	stable	7C1	N-EON
KCI 40 - 5	mg/kg	9.9	12.0	4.1	14.5	42.9	21.0	stable	ç		4.2	8.1	25.3	11.4	stable		24.7	10.8	15.4	7.9	26.3	20.7	stable		40.0	5.8	7.8	8.0	14.6	18.5	stable	KCI40	SO4-S
Bray-P	mg/kg	7.4	12.0	3.9	11.2	29.1	42.8	higher	ç	10	0.1	0.7	2.0	6.5	higher		10.4	4.8	9.5	5.2	23.8	65.3	higher		0.1	0.1	0.1	1.2	1.7	2.4	higher	9£1	Bray-P
oc	%	0.4	4.9	2.7	3.2	5.1	2.9	stable	0	0.0	0.6	0.6	0.7	0.4	stable		1.1	3.5	2.8	1.7	4.7	3.8	stable		0.0	0.6	0.5	0.7	1.1	0.5	stable	6A1	З
EC	dS/m	0.101	0.135	0.101	0.110	0.167	0.128	stable	2010	0.061	0.126	0.100	0.104	0.078	stable		0.155	0.114	0.095	0.104	0.165	0.144	stable		0.149	0.055	0.079	0.076	0.102	0.089	stable	3A1	E
pHCa		6.24	6.45	6.17	6.30	6.33	6.61	higher	5,5	6 70	6.54	6.56	6.39	6.82	higher		6.35	6.47	6.35	6.60	6.38	6.49	stable		5.56	6.62	6.43	6.64	6.44	6.73	stable	4B1	pHCa
n pHw		7.12	6.95	6.75	6.88	7.17	7.24	higher	57 5	87.7	7.47	7.57	7.51	7.97	higher		7.05	7.00	6.91	7.37	7.14	7.18	stable		6.47	7.66	7.52	7.71	7.52	7.70	stable	4A1	wHq n
Lab Rur	No.	е 9	e 9	6	e 9				5	2 2	10	10	_				e 11	e 11	11	e 11					12	12	12	1 12					Lab Rur
Site Location	Sample ID	Picton-2016 - 5 surfac	Picton-2017 - 5 surfac	Picton-2018-5 surface	Picton - 2019-5 surfac	Picton-2020-5 surface	Picton-2021-5 surface	Surface 5 -Change		Picton-2017 - 5 subsol	Picton-2018-5 subsoil	Picton - 2019-5 subsoi	Picton 2020- 5 subsoi	Picton-2021-5 subsoil	Subsoil 5 -Change		Picton-2016 - 6 surfac	Picton-2017 - 6 surfac	Picton-2018-6 surface	Picton - 2019-6 surfac	Picton 2020-6 surface	Picton-2021-6 surface	Surface 6 -Change		Picton-2016 - 6 subsoi	Picton-2017 - 6 subsoi	Picton-2018-6subsoil	Picton - 2019-6subsoi	Picton-2020-6 subsoil	Picton-2021-6 subsoil	Subsoil 6 -Change		Site Location
Ca/Mg	ratio	4.0	4.0	3.9	3.7	3.3	4.6	higher	1	3.7	1.3	1.7	2.7	2.7	stable		4.5	4.4	4.5	4.2	3.3	4.6	stable		0.8	2.7	1.1	1.6	2.4	2.2	stable	calc.	Ca/Mg
CEC	cmol+/kg	14.1	20.2	15.3	16.8	16.4	19.0	higher	1	16.7	15.4	15.3	14.0	16.3	higher		17.4	18.8	16.4	14.3	17.0	21.1	higher		13.5	14.2	16.1	15.0	14.8	14.2	stable	Calc.	CEC
ESP	%	1.3	2.2	2.3	1.5	3.6	2.6	stable	0	4.7	7.0	6.0	4.3	4.0	lower		2.0	2.4	3.1	3.5	4.0	2.5	stable		9.7	3.8	6.7	5.4	4.8	5.3	stable	Calc.	ESP
Base Sat.	%	99.4	98.8	0.06	100	100	100	stable	5	0 00	5.66	100	100	100	stable		99.5	99.1	99.5	100	100	100	stable		99.4	99.4	100	100	100	100	stable		Base Sat.
Na	amol+/kg	0.18	0.44	0.35	0.25	0.60	0.49	stable	5	10.5	1.08	0.92	0.59	0.65	stable		0.36	0.46	0.52	0.50	0.69	0.54	stable		1.32	0.54	1.08	0.82	0.71	0.76	stable		Na
	mg/kg	41	101	81	57	137	114	stable	¢, c	15.5	249	212	137	150	stable		82	105	118	114	158	123	stable		303	125	249	187	162	174	stable		
Mg	cmol +/kg	2.5	3.7	2.8	3.3	3.3	3.2	stable	Ľ	1.0	9.0	5.3	3.5	4.1	stable		2.9	3.2	2.7	2.5	3.4	3.5	higher		6.7	3.6	7.0	5.3	4.0	4.1	stable		Mg
	mg/kg	306	446	346	398	403	385	stable	1.5	307	727	639	424	495	stable		355	390	332	307	415	422	higher		813	433	847	646	481	494	stable	15D3	
×	cmol+/kg	1.20	0.85	0.79	0.99	1.48	0.76	lower	0,0	0.00	0.11	0.19	0.20	0.25	higher		0.84	0.79	0.72	0.52	1.59	1.04	stable		0.16	0.26	0.13	0.21	0.51	0.28	stable		×
	mg/kg	469	332	310	389	577	297	lower	5	5 5	41	73	79	96	higher		328	310	281	204	622	406	stable		62	103	52	82	200	109	stable		
e	cmol+/kg	10.1	15.0	11.1	12.3	11.0	14.6	higher	0	10.0	8.1	9.0	9.7	11.3	higher		13.2	14.2	12.4	10.7	11.3	16.1	higher		5.3	9.7	7.9	8.7	9.6	9.1	stable		e
	mg/kg	2030	3006	2233	2454	2212	2923	higher	0027	2400	1631	1793	1937	2269	higher		2638	2846	2482	2150	2265	3226	higher		1056	1951	1590	1745	1928	1829	stable		
Exc. Al+H	cmol+/kg	0.1	0.2	0.2	0.00	0.00	0.00	stable	ç	1.0	0.1	0.00	0.00	0.00	stable		0.1	0.2	0.1	0.00	0.00	0.00	stable		0.1	0.1	0.0	0.00	0.00	0.00	stable		Exc.Al+H
Location	Location	Picton-2016 - 5 surface	Picton-2017 - 5 surface	Picton-2018-5 surface	Picton - 2019-5 surface	Picton-2020-5 surface	Picton-2021-5 surface	Surface 5 -Change		Picton-2017 - 5 subsoil	Picton-2018-5 subsoil	Picton - 2019-5 subsoil	Picton 2020- 5 subsoil	Picton-2021-5 subsoil	Subsoil 5 -Change		Picton-2016 - 6 surface	Picton-2017 - 6 surface	Picton-2018-6 surface	Picton - 2019-6 surface	Picton 2020-6 surface	Picton-2021-6 surface	Surface 6 -Change		Picton-2016 - 6 subsoil	Picton-2017 - 6 subsoil	Picton-2018-6subsoil	Picton - 2019-6subsoil	Picton-2020-6 subsoil	Picton-2021-6 subsoil	Subsoil 6 -Change	Method	Location

### **OptimE Pty Ltd**

Allied Pinnacle, Picton Mill

### 2022/23 Annual Environmental Management Report

### **Document Control**

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