

#### 3 November 2023

Your ref: MP06\_0220-PA-4 Our ref: AO/2023/07575

Phillip Rose
A/Senior Compliance Officer
Planning & Assessment
Department of Planning and Environment
Phillip.Rose@planning.nsw.gov.au

Dear Phillip Rose,

#### Re: Armidale Regional Landfill, Waterfall Way - 2023 Independent Audit Response

I am writing to respond to your recent request for information following Armidale Regional Council's submission of the 2023 Independent Environmental Audit report and Response to Audit Recommendations submitted to the NSW Planning on 27 July 2023.

I appreciate your diligence and partnership in ensuring that we fulfill our obligations, and I want to provide a comprehensive explanation of our circumstances and the steps we are taking to address the identified challenges.

The challenges faced by Armidale Regional Council have been formidable, and I understand that our previous shortcomings have raised concerns. The 2016 amalgamation of Guyra Shire, and Armidale Dumaresq councils to form Armidale Regional Council marked a significant shift in the organisational landscape. We encountered a series of trials, including eight general manager turnovers within five years, placing the council under administration twice, and the imposition of a performance improvement order with the appointment of a financial controller until 2021. The history of these challenges is not one we take lightly.

Since January 2021, Armidale Regional Council has embarked on a "Restore and Thrive" agenda, with a focus on rebuilding the organisation's foundation and capacity to perform our local government duties effectively. As part of this extensive transformation, we have undertaken a thorough organisational restructuring including the creation of a separate business division for Regional Waste. Since the appointment of a Manager Regional Waste in early 2023, Council has focused its attention understanding its obligations, including legal and planning amongst others and methodically addressing those items, including those raised in the post operation audit.

In this context, please be assured that we have been proactive in addressing the challenges and nonconformances identified in our regional landfill. We have reported these issues to our Audit, Risk, and Improvement Committee, the external body responsible for tracking and advising on risk and improvements following audits. Additionally,



we are currently engaging additional staff to ensure the compliance and rectification of nonconformances are addressed in a timely manner.

Armidale Regional Council is committed to compliance and continuous improvement and we are conscious of the example and impact we have as a provider and regional leader in waste management and processing services in the New England region.

We understand that our efforts directly affect the well-being of our community and the environment, and with your support, we are dedicated to making the necessary improvements to meet our obligations and provide the best services to our constituents.

Please feel free to reach out to Guada Lado, Manager Regional Waste on 0427 791 869 or by email at glado@armidale.nsw.gov.au if you require any further information or clarification on our progress and actions taken.

Yours sincerely

Alx Mar

Alex Manners

**Chief Officer - Assets and Services** 

Encl: Table 1: Armidale Regional Council Response to NSW Planning Request for Information

<u>Table 1: Armidale Regional Council Response to NSW Planning Request for Information</u>

Po	tential non-compliances	ARC Response		
1.	Schedule 3, Condition 2 Statement of Commitments 5, 18, 30 & 33.	SOC 5: An Erosion and Sediment Control Plan was produced and implemented only as part of the landfill construction phase.  SOC18: The Biodiversity Offset Management Plan (BODM) is being implemented over time, however, drought conditions in recent years have affected planting efforts and growth. Additional plantings will be undertaken as required.  SOC 30: Vegetation screening of the landfill facility is not completed. Council is seeking consultants to assist with this project.		
		SOC 33: Further to the ongoing implementation of the BODM, Council will be appointing an environmental consultant to undertake the biodiversity offset monitoring required under the plan.		
2.	Schedule 3, Condition 7 Buildings on site without BCA approval.	The existing building on site was initially a temporary site office during the construction of the landfill and so BCA approval was not sought. As the site office has remained in use in this location and a construction and occupation certificate cannot be issued retrospectively, a building information certificate was lodged with Council's Planning team in June 2023.		
3.	Schedule 3, Condition 12 Assessment of management of project related risks	Council has been managing project-related risks and ensuring a high degree of compliance with our EPL. Unfortunately, Council has had a series of issues with the operational noise monitoring equipment and has been actively addressing these to ensure this risk is actively managed.		
		Council will be implementing a remote monitoring system which will include current information on operational noise, and have taken the following actions:  Noise monitors serviced and recalibrated (completed May 2023); Provide new batteries, checked SIM cards and solar panels (completed July 2023); Connect to the website to provide access for Council personnel to all the monitoring data (completed July 2023); Check noise suppressors on all equipment and replace as necessary (ongoing); Engaged a noise consultant to visit the Regional Landfill site to finalise noise monitoring set up and ensure everything is		
4.	Schedule 4, Condition 5* Construction Design of Leachate Barrier	working (October 2023).  The Water Leachate Management Plan was sent by NSW DPE to the Commonwealth Department of Environment Energy (DEE) for approval. Council received written evidence from DEE providing approval from the Minister for the Environment and Energy on 27 August 2017 and requiring the plans to be implemented.		
		The Water Leachate Management Plan was revised in 2019 and approved by EPA as a requirement of Council's EPL. In the unfilled section of the landfill, Subcell B, components of the leachate barrier such as the lining and some pipework are still accessible and can be inspected to confirm the construction is in accordance with the requirements.		
		As there was no further correspondence from DPE to Council at the time, Council seeks support from NSW Planning to follow up the resolution and obtain written evidence identifying their satisfaction with this condition.		
5.	Schedule 4, Condition 6* The leachate collection, conveyance and storage system Demonstrate the leachate	The Water Leachate Management Plan and Water Quality Management Plans were sent by NSW DPE to DEE for approval. Council received written evidence from DEE providing approval from the Minister for the Environment and Energy on 27 August 2017 and requiring the plans to		

		he implemented
	collection, conveyance and storage system meets Schedule 4,	be implemented.
	Condition 6.	There was no record of further correspondence from DPE on this
	Condition 6.	matter, and Council had at the time, assumed that the DEE approval (as
		sought by DPE) satisfied this condition. Council therefore seeks support
		from NSW Planning to follow up the resolution and obtain written
		evidence identifying their satisfaction with this condition.
6.	Schedule 4 Condition 7*	At the time the WLMP and WQMP were sent by DPE to DEE for
0.	Design of the leachate storage dam	approval. Council received written evidence from DEE providing
	Demonstrate the leachate storage	approval from the Minister for the Environment and Energy on 27
	dam is designed and maintained in	August 2017 and requiring the plans to be implemented.
	accordance with Schedule 4,	3 1 1 3
	Condition 7.	There was no record of further correspondence from DPE on this
		matter, and Council had at the time, assumed that the DEE approval (as
		sought by DPE) satisfied this condition. Council therefore seeks support
		from NSW Planning to follow up the resolution and obtain written
		evidence identifying their satisfaction with this condition.
7.	Schedule 4, Condition 9*	The Water Leachate Management Plan was sent by DPE to DEE for
	No approval of the Leachate	approval. Council received written evidence from DEE providing
	Management Plan by DPE	approval from the Minister for the Environment and Energy on 27
		August 2017 and requiring the plans to be implemented.
	No approval of the Water Leachate	There was a great of final account to the Company of the Company o
	Management Plan by DPE. The	There was no record of further correspondence from DPE on this
	Leachate Management Plan	matter, and Council had at the time, assumed that the DEE approval (as
	requires amendment (consideration	sought by DPE) satisfied this condition. Council therefore seeks support
	of Modifications 1 and 2) and	from NSW Planning to follow up the resolution and obtain written evidence identifying their satisfaction with this condition.
8.	approved by NSW Planning. Schedule 4, Condition 10*	The Water Leachate Management Plan was sent by DPE to DEE for
0.	Stormwater infrastructure Concerns	approval. Council received written evidence from DEE providing
	Water Leachate Management Plan	approval from the Minister for the Environment and Energy on 27
	does not appear consistent with	August 2017 and requiring the plans to be implemented.
	current stormwater drainage	The grade and the quality and promote to the impromotions
	infrastructure onsite.	There was no record of further correspondence from DPE on this
		matter, and Council had at the time, assumed that the DEE approval (as
		sought by DPE) satisfied this condition. Council therefore seeks support
		from NSW Planning to follow up the resolution and obtain written
		evidence identifying their satisfaction with this condition.
		Council has obtained EPA approval to temporarily divert clean water
		from Cell 1B, away from the leachate pond. This diversion has recently
		been reinstated, as required by the EPA, in preparation for active
		landfilling in Cell 1B. Council has also received a licence variation from
		the EPA to operate a mobile water treatment plant and is currently undertaking a trial to remove PFAS from leachate.
9.	Schedule 4, Condition 11	Council can confirm that the 5 day 95 <sup>th</sup> percentile storage capacity has
J 9.	Sediment basin storage from 5-day	been maintained in the sediment basin.
	95 <sup>th</sup> percentile storm level.	Following the IEA, Council drained the sedimentation basin and found
	porosimio diominiovoli	that the accumulated silt levels were compliant with the 5-day 95 <sup>th</sup>
		percentile storm capacity. Furthermore, the accumulated silt was
		completely removed on 6 September 2023.
10.	Schedule 4, Condition 12	The Water Quality Management Plan was sent by DPE to DEE for
	No approval of Soil and Water	approval. Council received written evidence from DEE providing
	Management Plan by DPE.	approval from the Minister for the Environment and Energy on 27
		August 2017 and requiring the plans to be implemented.
		There was no record of further correspondence from DPE on this matter
		and Council had at the time, assumed that the DEE approval (as sought
		by DPE) satisfied this condition. Council therefore seeks support from
		NSW Planning to follow up the resolution and obtain written evidence
11	Schodulo 4 Condition 16	identifying their satisfaction with this condition.
11.	Schedule 4, Condition 16	Council has reinstated the required noise monitors on site following refurbishment and recalibration of the monitors.
	Operational noise management concerns with no monitoring	Terurbishinent and recambiation of the monitors.
	equipment onsite.	All the data from those monitors is uploaded automatically to the
	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Svannet website and will also be incorporated into Council's proposed
		SCADA system for the Regional Landfill when it becomes operational
		,

	towards the end of 2023.
	towards tric crid or 2023.
	However, we are still encountering problems retrieving this data and
	<ul><li>have taken the following actions:</li><li>Noise monitors serviced and recalibrated (completed May</li></ul>
	2023);
	<ul> <li>Provide new batteries, checked SIM cards and solar panels (completed July 2023);</li> </ul>
	<ul> <li>Connect to the website to provide access for Council personnel</li> </ul>
	to all the monitoring data (completed July 2023);
	<ul> <li>Check noise suppressors on all equipment and replace as necessary (ongoing);</li> </ul>
	Engaged a noise consultant to visit the Regional Landfill site to
	finalise noise monitoring set up and ensure everything is working (October 2023).
12. Schedule 4, Condition 17	A recent Certificate of Title has been obtained which still does not
No noise easement for farm known as 'Sherraloy'.	contain the noise easement (to the benefit of Council).
,	The easement sets a calculated noise limit of 38dB(A) at Sherraloy,
	whereas under laws governing received noise levels they would be entitled to a noise limit of 35dB(A). The ambient noise recorded at the
	Sherraloy property prior to the start of construction was 45db(A).
	Council's Senior Property Specialist is working with external solicitors to
13. Schedule 4, Condition 18	have the noise easement registered on the title.  Council prepared a Noise Management Plan, which was approved by
No approval of the Noise	DPE in their letter dated 5 July 2016, which was provided as part of the
Management Plan by DPE.  14. Schedule 4, Condition 26	IEA.  Council prepared a Biodiversity Offset Management Plan (BODM) in
The preparation and implementation	consultation with the CMA and OEH, which was approved by DPE in
of the biodiversity offset package is unknown.	their letter dated 5 July 2016, which was provided as part of the IEA.
and our	The Biodiversity Offset Management Plan is being implemented over
	time, however, drought conditions in recent years have affected planting efforts and growth. Additional plantings will be undertaken as required.
	Vegetation screening of the landfill facility is not completed. Council is seeking consultants to assist with this project.
	Council will be appointing an environmental consultant to undertake the biodiversity offset monitoring required under the Biodiversity Offset Management Package.
15. Schedule 4, Condition 31  No installation of the weight bridge	The Armidale Waste Management Facility, Long Swamp Rd, is used as Council's primary transfer station and is open 7 days per week. All
and wheel wash.	waste vehicles are weighed via the Gatehouse at this location and
	materials are recovered when possible. And waste that cannot be recovered is weighed and directed or bulk transported to Armidale
	Regional Landfill.
	This has alleviated the need for a weighbridge, gatehouse and gate attendant at the Armidale Regional Landfill.
	The access road at Armidale Regional Landfill has been surfaced and gravel roads constructed within the landfill cell for the use of trucks
	entering the cell. The road is regularly inspected for the deposition of deleterious material. This approach has been working well for Council
	and negates the need of a wheel wash.
	On this basis, Council would like to discuss with the Post Approval section of NSW Planning, an application to remove the requirement for a wheel wash and weighbridge.
16. Schedule 5, Condition 2 No approval of Landfill	The LEMP was developed by Council's consultant and it was noted that DPE approval was to be obtained as part of the process.
Environmental Management Plan by DPE.	The LEMP was updated in 2019 and approved by NSW EPA.

	Council seeks the assistance of NSW Planning to investigate the approval status of the plan. If there remains no evidence of the approval, we will submit the updated plan for approval.
17. Schedule 5, Condition 3  No approval of Landfill Closure and Site Rehabilitation Plan by DPE.	Council prepared a Landfill Closure and Rehabilitation Management Plan which was submitted to DPE and DEE in 2015.
Che richabilitation i lair by Di E.	Council seeks the assistance of NSW Planning to investigate the approval status of the plan. If there remains no evidence of the approval, we will update and submit the plan for approval.
18. Schedule 5, Condition 4 The Annual Review required on 22 October 2021 remains overdue.	Following Council's administration challenges, Armidale Regional Council was undertaking a major organisational restructure in 2021 and was unable to complete the Annual Review as required on 22 October 2021.
	Council will be preparing the required annual environmental review and developing a process to ensure timely completion going forward.
19. Schedule 5, Condition 8 IEA was required on 22 October 2021, IEA provided on 27 July 2023.	Following Council's administration challenges, Armidale Regional Council was undertaking a major organisational restructure in 2021 and therefore, the IEA on 22 October 2021. Council appointed a Manager Regional Waste in late February 2023, and commenced the IEA in March 2023.
20. Schedule 5, Condition 9 The audit was undertaken on 28 March 2023. Provided 27 July 2023, greater than 6 weeks from the date the audit was undertaken.	The audit report was not submitted within 6 weeks of completing the audit. The report was submitted as soon as was practical, considering the amount of data requested, the extensive dialogue between the consultants and Council, and time required to clarify or investigate some of the issues raised in the audit.
21. Schedule 5, Condition 10  The project website does not contain required information and is not up to date.	Council maintains a publicly available website with all available project information and planning approvals: <a href="https://www.armidaleregional.nsw.gov.au/environment/waste-and-recycling/new-landfill">https://www.armidaleregional.nsw.gov.au/environment/waste-and-recycling/new-landfill</a> .
	The environmental monitoring results are also held and regularly updated on Council's website at: <a href="https://www.armidaleregional.nsw.gov.au/environment/sustainable-living/epa-monitoring">https://www.armidaleregional.nsw.gov.au/environment/sustainable-living/epa-monitoring</a> .
	As the audit has identified, Annual Reviews and the IEA have not been previously undertaken and therefore none have been uploaded to Council's website. Council will continue to review its website regularly to ensure the information is current, complete and easy to locate.
Additional potential non-compliances identified by NSW Planning	ARC Response
Schedule 4, Condition 23     The preparation of the Greenhouse     Gas Management Plan is unknown.	The Greenhouse Gas Management Plan was prepared and approved by DPE in their letter dated 5 July 2016, which was provided as part of the IEA.
2. Schedule 4, Condition 24 The preparation of the Air Quality Monitoring Plan is unknown.	The Air Quality Management Monitoring Plan was approved by DPE in their letter dated 5 July 2016, which was provided as part of the IEA.
Schedule 4, Condition 27     No approval of the Conservation     Management Plan by DPE has been identified.	The Conservation Management Plan was approved by DPE in their letter dated 5 July 2016, which was provided as part of the IEA.
Schedule 5, Condition 7     Regular reporting of environmental performance was not available on the project website.	Regular reporting of environmental performance is available on Council's website, <a href="https://www.armidaleregional.nsw.gov.au/environment/sustainable-living/epa-monitoring">https://www.armidaleregional.nsw.gov.au/environment/sustainable-living/epa-monitoring</a> .
	This was provided as part of the IEA and we understood this to be compliant.  We have also taken on board an opportunity for improvement to make this information easier to find. Currently, it is grouped with all of Council's monitoring data for our licenced facilities and separate to the project website.

## Independent Environmental Audit

## Armidale Regional Landfill





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#### Certification

	Name	Signature	Date
Prepared by	Simon Williams	Sell	05/06/2023
Reviewed by	Duncan Thomson	F. Thoman	05/06/2023

UPR	Description	Issued By	Date Issued
4530-1007	First Issue	Simon Williams	23/05/2023
4530-1011	Final Issue	Simon Williams	07/06/2023



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## 1. Audit Outline

#### 1.1 Introduction

GeoLINK was engaged by Armidale Regional Council (ARC) to carry out an Independent Environmental Audit (Audit) of the Armidale Regional Landfill, located on Waterfall Way, approximately 12 km east of Armidale.

The Audit was undertaken pursuant to the Minister's Conditions of Approval (MCoA) (Application No. 06\_0220) to undertake an independent environmental audit at the landfill operation against inter alia, the project approval conditions issued by Department of Planning and Environment (DPE).

### 1.2 Armidale Regional Landfill Project

A regional landfill was proposed on Waterfall Way, approximately 12 km east of Armidale, to service Armidale, Uralla, Walcha and Guyra Local Government Areas (LGA). On 4 July 2012, approval was granted (Project Approval 06\_0220) following an environmental assessment prepared in accordance with the requirements of the then Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This approval includes:

- Five landfill cells, each proposed to contain approximately 211,000 m3 of waste.
- An approximate cell life of ten years for each cell, based on an estimated filling rate of up to 15,000 tonnes per annum.

We understand the construction of the Armidale Regional Landfill was completed in 2019. The following general works activities have been carried out at the site:

- Site establishment including vegetation clearing, construction of an access road, installation of perimeter fencing, installation of erosion and sedimentation control measures and construction of site infrastructure.
- Construction of the leachate pond, sedimentation basin and dry basin.
- Construction of a leachate barrier and collection system in Cell 1.
- Excavation of Cell 1, with ongoing filling of Cell 1A.
- Biodiversity offset plantings.
- Ongoing environmental monitoring.

## 1.3 Audit Type

This audit is an Independent Environmental Audit of the Armidale Regional Landfill conducted by GeoLINK. The audit was limited to the operations being undertaken pursuant to the DPE approval for development of waste and landfill facilities as per approval 06\_0220 (4 July 2012) pursuant to the MCoA.

#### 1.4 Previous Environmental Audit

There have been no other audits to date.



#### 1.5 Reasons for Audit

Pursuant to MCoA, Schedule 5, Condition 8, Independent Environmental Audit states:

Within a year of the commencement of operations of the project, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
- b) include consultation with the relevant agencies;
- c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any plan or program required under these approvals);
- d) review the adequacy of any plans or programs required under these approvals; and, if appropriate;
- e) recommend measures or actions to improve the environmental performance of the project, and/or any plan or program required under these approvals.

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

The audit has been prepared to satisfy this requirement.

### 1.6 Auditee and Representatives

Armidale Regional Council representatives for the audit were:

Name	Position	Role
Guada Lado	Manager Waste Services	Overarching responsibility for the landfill operation
Mike Brooks	Senior Engineering Officer	Primary responsibility for technical issues relating to the landfill operation
Shane Anderson	Acting Manager Waste Services	N/A
Josh Keene	Landfill Coordinator	Onsite management

#### 1.7 The Audit Team

The GeoLINK Audit Team for this audit comprised of:

Mr Simon Williams Lead Environmental Auditor

Mrs Sarah Viney Assistant Environmental Auditor

Mr Duncan Thomson Environmental Audit Reviewer

Simon Williams was the Lead Auditor for the project, and coordinated the Environmental Audit, reviewed the available records and documents, attended project meetings and the site visit and reviewed the final audit findings. He was approved by the DPE to undertake this audit; pursuant to MCoA Schedule 5, Condition 8 clause (a). DPE approval correspondence is provided in **Appendix D**.



Sarah Viney provided support during the audit and assisted with the preparation of this report. Duncan Thomson reviewed the environmental audit, provided advice and ensured Quality Assurance requirements were satisfied.

The audit team were selected on their specialist skills in environmental management, environmental compliance, environmental law and auditing.

## 1.8 Audit and Site Inspection

The audit was conducted at Armidale Regional Council offices at Armidale on 28 March 2023 and the site inspection was undertaken at Armidale Regional Landfill on the same day.

# 2. Audit Plan

### 2.1 Objectives

The primary objective of the audit was to assess compliance of the Armidale Regional Landfill with the MCoA issued by the DPE, and other environmental management requirements. The secondary objectives of the Audit were to:

- Verify legislative and regulatory compliance.
- Assess conformance with internal policy and procedures.
- Establish the status of current practices.
- Identify opportunities for improvement.

The audit focussed on all landfill operations as this is the first audit undertaken for the facility. General works undertaken to date are outlined in **Section 1.2**.

### 2.2 Confidentiality

As an Environmental Auditing organisation, GeoLINK are given access to documents and information that are considered to be highly confidential. We also work closely with clients that are in direct commercial competition. For these reasons, it is important to our business that we maintain a strict high level of confidentiality for all of our clients.

Whilst our client's information remains confidential, information is made available to the NSW DPE through our work. This information includes this Audit Report, and we accept no responsibility for third-party handling.

The nature of an audit also presents a risk for maintaining confidentiality, as our auditors have client files on their laptops and there is also a potential for client information to be released during conversation. In order to control these risks, all auditors as employees of GeoLINK are required to complete a Confidentiality Statement as part of their employment contract. Furthermore, all auditors' laptops are password protected and when left unattended are locked.

#### 2.3 Distribution

The audit would be approved and distributed as per below.

Delegated Client Audit Contact Mike Brooks Armidale Regional Council

External Audit Approval (DPE) Phillip Rose Compliance, DPE

Internal Audit Distribution Guada Lado Armidale Regional Council

## 2.4 Audit Scope

The scope of the Independent Environmental Audit was developed with consideration of the nature of the operation, its environmental aspects and potential impacts, the various site activities, and following a review of the MCoA.



The scope of the Audit included:

- General requirements of the MCoA Reference: 06 0220.
- Statement of Commitments (SoC).
- NSW Environment Protection Licence 21362 and associated annual returns.
- Preparation of pre-construction Environmental documentation:
  - Construction Environmental Management Plan Rev D (29 September 2015).
  - Landfill Environmental Management Plan Rev G (20 November 2019).
  - Aboriginal Heritage Management Plan Rev 3 (3 May 2016).
  - Air Quality Management and Monitoring Plan Rev C (23 June 2015).
  - Biodiversity Offset Management Plan Rev 0 (8 August 2014).
  - Construction Quality Assurance Plan Rev E (16 November 2016).
  - Greenhouse Gas Management Plan Rev C (17 July 2015).
  - Noise Management Plan Rev D (3 June 2015).
  - Water and Leachate Management Plan Rev C (26 February 2016).
  - Water Quality Monitoring Plan Rev D (26 February 2016).
  - Transport Code of Conduct Rev C (15 September 2015).
  - Landfill Closure and Rehabilitation Management Plan Rev C (17 July 2015).
- Operations, limits, monitoring and reporting.
- Public enquiry and complaints responses.
- Site inspection.

The physical scope of the Audit included operations and facilities within the Armidale Regional Landfill.

#### 2.5 Consultation

Contact was made with stakeholders prior to the site inspection to obtain feedback and draw the auditor's attention to any key issues within the agreed scope of the audit. The stakeholders contacted are in the table below:

Agency	Contact	Email/s / Comms	Correspondence	Comments
DPE Compliance	Philip Rose	phillip.rose@planning.nsw.gov.au Portal	Portal 01/03/2023	Y – See below
NSW Environmental Protection Authority	Scott Hunter	epa.westopsregional@epa.nsw.gov.au scott.hunter@epa.nsw.gov.au	Email 11/04/2023	No Comments
Office of Environment and Heritage	-	No involvement / N/A	-	-
NSW Office of Water	-	No involvement / N/A		-

Department of Planning and Environment (DPE) comments can be categorised as follows:

- A review of the Water and Leachate Management Plan and implementation of leachate processes to identify any potential improvements.
- An assessment of operational processes, in particular measures to prevent litter from being blown outside of the project boundary and the effective use of daily cover material.
- A review of the project administrative housekeeping to determine that all plans, programs and strategies required by the Approval have been provided and are being addressed.

DPE requirements are integrated into the audit report.



#### 2.6 Audit Criteria

The content of the audit is provided by the MCoA Schedule 5, Condition 8 whereby the proponent must undertake an independent audit within a year of commencement of operations of the project, and every three years thereafter and must:

- Be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General.
- Include consultation with the relevant agencies.
- Assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL (including any plan or program required under these approvals).
- Review the adequacy of any plans or programs required under these approvals, and if appropriate.
- Recommend measures or actions to improve the environmental performance of the project, and/or any plan or program required under these approvals.

### 2.7 Audit Approach and Methodology

The DPE released an *Independent Audit, Post Approval Requirements May 2020.* The guideline was developed to ensure audits are undertaken in a consistent manner and meet minimum quality standards.

The Audit approach followed the standardised procedures for environmental management systems auditing established under *ISO* 19011:2018 Guidelines for auditing management systems and the *Independent Audit, Post Approval Requirements May 2020.* Details of the methodology are provided in **Appendix A**. In summary, the methodology consisted of an Initiation Stage followed by the Pre-Audit, Audit and Post-Audit stages as follows:

#### **Initiation Stage**

- Organisational review.
- Review of available background information.

#### **Pre-Audit Stage**

- Opening meeting.
- Review of documentation.
- Detailed site inspection.
- Interviews with relevant personnel.
- Review of audit evidence.
- Closing meeting.

#### **Post-Audit Stage**

- Review of audit data.
- Request for additional evidence.
- Preparation of audit report.

The checklist provided in **Section 3** documents the specifics of the audit and the responses of the ARC's team in relation to these requirements.



## 2.8 Interview and Site Inspection

Staff interviews and document review was undertaken on 28 March 2023 at the offices of Armidale Regional Council in Armidale with:

- Mike Brooks.
- Guada Lado.

A site inspection also occurred with Josh Keene of Armidale Regional Council on the same day. The site inspection included:

- Site establishment.
- Landfill operations.
- Revegetation and offset areas.

The Audit and attendance register is provided in **Appendix G**.

## 3. Audit Findings

Findings within the report are listed as Compliant, Non-compliant or Not triggered and are included in the following sections. These are consistent with the *Independent Audit, Post Approval Requirements May 2020.* They are described (where applicable) as follows:

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

### 3.1 Summary of Environmental Audit Findings

#### 3.1.1 Non-Compliance 1: Terms of Approval

#### Requirement

Schedule 3 Condition 2

The Proponent shall carry out the Project generally in accordance with the:

- a) EA;
- b) statement of commitments (see Appendix A);
- c) site layout plans and drawings in the EA (as shown in Appendix B);
- d) MOD 1; and
- e) MOD 2.

#### **Findings**

This IEA identifies a number of non-compliances during the audit period with the SoC and MCoA Modifications 1 and 2.

#### **Discussion**

The non-compliances are detailed in **Sections 3.1.5**, **3.1.7**, **3.1.8**, **3.1.10**, **3.1.16**, **3.1.17**, **3.1.25** to 3.1.30. Discussion and recommendations are provided, where relevant.

#### 3.1.2 Non-Compliance 2: BCA Compliance

#### Requirement

Schedule 3 Condition 7

The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.

Note: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.

#### **Findings**

Evidence of BCA compliance for on-site buildings has not been provided.

#### Discussion

There are portable site offices onsite with an associated concrete slab. Discussions with ARC representatives indicate there is no compliance documentation on file. It is recommended that a



retrospective compliance assessment be undertaken to ensure the site infrastructure is compliant with this condition.

#### 3.1.3 Non-Compliance 3: Environmental Performance

#### Requirement

Schedule 3 Condition 12

The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:

- a) take all reasonable and feasible steps to bring the operation back into compliance;
- b) ensure that the exceedance does not recur;
- c) consider all reasonable and feasible options for remediation (where relevant) and how to prevent a recurrence and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- d) implement remediation and prevention measures as directed by the Director-General, to the satisfaction of the Director-General.

#### **Findings**

There are a number of non-compliances in Schedule 4 which relate to environmental performance criteria and/or measures.

#### **Discussion**

Although, it was advised that noise monitors had been installed, no evidence of operational noise monitoring was provided to illustrate compliance with Condition 16 and 18 of Schedule 4 (refer to **Sections 3.1.12** and **3.1.14**, respectively). As such, it is not clear if there was an operational noise exceedance. The location of noise monitors was also discussed during the audit interviews, however they are not currently in place as they were being calibrated and serviced at the time of the audit. ARC representatives identified that no operational noise records are maintained for the site.

It is recommended that noise monitors are installed/ re-installed at the site and operational noise monitoring is undertaken in accordance with the Noise Management Plan (AECOM 3 June 2015).

#### 3.1.4 Non-Compliance 4: Landfill Cover Material

#### Requirement

Schedule 4 Condition 2

The Proponent shall ensure that all waste cover material used on site is virgin excavated natural material and/or alternative daily cover, as approved in writing by the EPA.

#### **Findings**

An alternative daily cover was requested of EPA on 8 November 2022 in the form of 'landfill lids'. A variation to the EPL was provided on 15 November 2022. EPL condition E1.1 refers to a trial of the 'landfill lids' over a 6-month period commencing from the first day of use.

ARC advised that wood waste is used as an alternative daily cover to VENM. Wood waste was not cited during the site inspection and evidence of EPA approval of wood waste has not been provided.



#### Discussion

To date, the 'landfill lids' have not been used due to appropriate plant and equipment not being available to install the lids at the end of each day. Daily cover was also not observed during the site inspection due to daily activities being undertaken onsite.

It is recommended that until the appropriate plant and equipment is purchased to use the 'landfill lids', EPA approval is to be sought to use the wood waste as an alternative daily cover to VENM.

#### 3.1.5 Non-Compliance 5: Leachate Containment System

#### Requirement

Schedule 4 Condition 5

Each landfill cell must be construction with a leachate barrier that:

- a) is designed in consultation with the EPA and to the satisfaction of the Secretary;
- b) addresses dispersive soil in the A2 and B soil horizons;
- c) meets independent conformance testing in accordance with the NSW EPA Environmental Guidelines Solid waste landfills (2006); and
- d) includes:
- a re-compacted clay liner at least 900 mm thick or a geosynthetic clay liner with an in-situ co-efficient of permeability of less than 10-9 metres per second covering the entire floor and walls of each waste disposal cell;
- a flexible membrane liner stabilised against or protected from ultra violet light with a minimum coefficient of permeability of less than 10-14 metres per second covering the entire floor and walls of each waste disposal cell; and
- a leachate drainage layer for each landfill cell floor comprising a minimum 300 mm layer of drainage medium:
- with a permeability of not less than 1 x 10-3 metres per second;
- which is chemically resistant to leachate; and
- which is capable of withstanding the weight of overlying waste;
- a leachate layer for the landfill cell sidewalls comprising of a Drainage geocomposite layer:
- with a permeability of not less than 1 x 10-3 metres per second;
- which is chemically resistant to leachate; and
- which is capable of withstanding the weight of the overlying waste.

#### **Findings**

The Water and Leachate Management Plan was generally prepared in accordance with this condition and provided to EPA in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and DPE approval has been provided by ARC.

The then Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.

The Water and Leachate Management Plan has also not been revised to ensure compliance with Modification 1 and 2 of the MCoA, received 11 August 2015 and 30 April 2018, respectively.

#### **Discussion**

Evidence has not been provided of the issue resolution and DPE approval. Following modifications of the MCoA, the plan also hasn't been updated accordingly. The leachate containment system was cited during the site inspection and it is understood the system has been constructed and is maintained in accordance with this plan.

It is recommended that ARC consult with DPE and other relevant agencies to ensure the leachate containment system has been constructed with consideration of Modifications 1 and 2 of the MCoA.



Concurrence should also be sought to ensure the system is designed to the satisfaction of the Secretary and this is reflected in the Water and Leachate Management Plan.

#### 3.1.6 Non-Compliance 6: Leachate Collection, Conveyance and Storage System

#### Requirement

Schedule 4 Condition 6

The leachate collection, conveyance and storage system must:

- a) be designed in consultation with the EPA and to the satisfaction of the Director General;
- b) be designed to address dispersive soil in the A2 and B soil horizons;
- c) not include leachate discharge or disposal except by way of:
- evaporation;
- irrigation on to an active landfill cell;
- re-injection into an active or capped landfill cell;
- transport to a facility licensed to accept such waste;
- d) include a leachate storage dam that has a minimum leachate storage capacity of 12 megalitres.

#### **Findings**

Refer to the findings in Section 3.1.5.

#### Discussion

Refer to the discussion in Section 3.1.5.

#### 3.1.7 Non-Compliance 7: Leachate Storage Dam

#### Requirement

Schedule 4 Condition 7

The leachate storage dam must:

- a) be designed in consultation with the EPA and to the satisfaction of the Secretary;
- b) be designed to address dispersive soil in the A2 and B soil horizons;
- c) allow for the level of leachate in the storage dam to be maintained such that there is no overflow
- d) be designed to contain a 100-year ARI 3 day rainfall event and provide 150mm freeboard for wave action, providing a total storage capacity of 14.6ML;
- e) include high-level alarm and/or interlock system configured such that the alarm is activated and any pump or gravity flow of leachate to the dam is automatically shut down prior to dam overflow;
- f) Include a leachate barrier comprising:
- a re-compacted clay or similar material at least 600 mm thick with an in situ co-efficient of permeability of less than 2 x 10-10 metres per second covering the entire floor and walls of the dam/s; and
- a flexible membrane liner stabilised against or protected from ultra violet light with a minimum coefficient of permeability of less than 10-14 metres per second covering the entire floor and walls of the dam/s.

#### **Findings**

Refer to the findings in Section 3.1.5.

#### **Discussion**

Refer to the discussion in Section 3.1.5.



#### 3.1.8 Non-Compliance 8: Water and Leachate Management Plan

#### Requirement

Schedule 4 Condition 9

The Proponent shall prepare and implement a Leachate Management Plan. The plan must:

- a) be prepared in consultation with EPA and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
- b) be approved by Director General prior to the commencement of construction;
- c) include a water balance for the Project;
- d) include design specifications for the leachate containment system (see conditions 5, 6 and 7 of this schedule);
- e) include design specifications that address dispersive soil in the A2 and B soil horizons;
- f) include a ground and surface water monitoring plan for the site in consultation with NOW. The plan shall include details on:
- the number, design and location for the monitoring bores, including upstream groundwater bore/s for baseline data collection;
- timelines for establishment and sampling regime(s) for the monitoring bores;
- monitoring frequency, including monitoring during rainfall;
- a schedule of contaminants to be monitored; and
- reporting requirements for the sampling results.
- The plan must be submitted to the Director-General [Secretary] prior to commencement of construction and be endorsed by NOW before submission.
- The Proponent shall install the baseline monitoring bore and implement the baseline monitoring sampling program obtaining a minimum of two- bi-monthly baseline sampling events before commencing construction of the landfill.
- The Proponent shall implement the approved ground and surface water monitoring plan to the satisfaction of the Director-General.
- g) ensure all surface waters are directed away from the leachate containment system;
- h) ensure all lateral flows in the A2 soil horizon are directed away from the leachate containment system.
- i) ensure any water that contacts waste or leachate is handled as leachate;
- j) include remedial action plan should leachate escape the leachate containment system.

#### **Findings**

Refer to the findings in Section 3.1.5.

There are five groundwater bores at the facility. Groundwater and surface quality monitoring is undertaken quarterly. EPL annual return monitoring results were cited for the 2021 to 2022 reporting period.

Baseline sampling events were undertaken and reported in February 2020.

Evidence of Water and Leachate Management Plan revision following the issue of the EPL were not provided (as required in section 9.3 of the Water and Leachate Management Plan). ARC advised the plans will be revised once the PFAS treatment plant has been operational.

#### Discussion

Refer to the discussion in Section 3.1.5.

It is recommended that the Water and Leachate Management Plan is reviewed to ensure consistency with the EPL.



#### 3.1.9 Non-Compliance 9: Stormwater Management

#### Requirement

Schedule 4 Condition 10

Stormwater infrastructure must installed to the satisfaction of the Director General: The design must:

- a) be prepared in consultation with NOW and EPA and to the satisfaction of the Director General;
- b) be approved by Director General prior to the commencement of construction;
- c) direct clean water in overland flow around operational parts of the site:
- d) prevent cross-contamination of clean or sediment laden water with leachate;
- e) direct all sediment laden water in overland flow
- away from the leachate containment system;
- to a sediment basin with capacity for a 5 day 95th percentile storm with a minimum storage capacity of 5250m3.
- f) include a dry detention basin below the operational parts of the site with capacity for a 100 year ARI 3 day rainfall event with a minimum storage capacity of 30ML;
- g) address stormwater run-off from ancillary parts of the site such as the access road.

#### **Findings**

Refer to the findings in **Section 3.1.5**.

#### **Discussion**

Refer to the discussion in **Section 3.1.5**.

During the site inspection, clean water diversions were observed. A sediment basin has been constructed as well as a dry detention basin.

#### 3.1.10 Non-Compliance 11: Sediment Basin Capacity

#### Requirement

Schedule 4 Condition 11

The proponent shall manage the sediment basin so that it maintains capacity to store run-off from the 5 day 95th percentile storm.

#### **Findings**

During the site inspection, sediment build up was observed at the sediment basin inlet. ARC advised the basin hasn't been de-silted to date. No evidence was provided to confirm the sediment basin still retains capacity to store run-off from the 5 day 95th percentile storm.

#### **Discussion**

It is recommended the sediment basin is de-silted and a procedure developed for ARC to determine ongoing capacity of the sediment basin.

#### 3.1.11 Non-Compliance 11: Approval of Water and Leachate Management Plan

#### Requirement

Schedule 4 Condition 12

The Proponent shall prepare and implement a soil and water management plan. The plan must:

- a) be prepared in consultation with the EPA and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
- b) be approved by Director General prior to the commencement of construction;
- c) include design specifications for stormwater infrastructure (see conditions 10 and 11 of this schedule);
- d) include design specifications for erosion and sediment control to;



- minimise erosion and soil-loss:
- set aside any topsoil in manner appropriate for re-use in site rehabilitation;
- minimise the tracking of mud and waste by vehicles onto public roads.
- e) address the environmental and structural risks of dispersive soils in the A2 and B soil horizons;
- f) ensure that watercourse and natural drainage lines maintain natural hydrological flows and geomorphic integrity;
- g) address any Harvestable Right Order that might apply;
- h) specify work methods within riparian areas and drainage lines in accordance with the Guidelines for Controlled Activities 2008.

#### **Findings**

Refer to the findings in Section 3.1.5.

#### **Discussion**

Refer to the discussion in Section 3.1.5.

#### 3.1.12 Non-Compliance 12: Noise Limits

#### Requirement

Schedule 4 Condition 16

The Proponent shall ensure that the noise generated by the project does not exceed the emission limits in Table 3.

Table 3 - Noise emission limits dB(A)

Receiver	Limit -
Residences on privately-owned land during construction	LA <sub>eq(15 minute)</sub> 40dB(A)
Residences on privately-owned land during operations	LA <sub>eq(15 minute)</sub> 35dB(A)
Residence on privately owned land known as 'Sherraloy' during operation of cell 1 only	LA <sub>eq(15 minute)</sub> 38dB(A)

#### Notes:

- LAeq (15 minute) is the level of noise equivalent to the average of noise levels occurring over the measured period (i.e. 15 minutes).
- For the purpose of noise measures required for this condition, the LAeq noise level must be measured or computed at any point within 30 metres of any residence not on the premises over a period of 15 minutes 9 using "FAST" response on the sound level meter. Where it can be demonstrated that direct measurement at such a location is impractical, an alternative means of determining compliance under Chapter 11 of the NSW Industrial Noise Policy may be acceptable.
- Modification factors in Section 4 of the NSW Industrial Noise Policy apply to the measured noise levels.
- The noise emission limits apply under all meteorological conditions except during rain and wind speeds greater than 3m/s at 10m height; and under "non-significant weather conditions". Field meteorological indicators for non-significant weather conditions are described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.

#### **Findings**

We understand, noise loggers have been installed onsite to the north, east, south and west of the landfill operations. The monitoring equipment is currently being recalibrated (April 2023).

Noise complaints were received during construction and operation with evidence provided of two occasions. Compliance with the noise emission limits is unclear in these circumstances.



Section 6 of the Noise Management Plan outlines the monitoring approach for the project. Attended measurements are to be undertaken on a biannual basis with unattended monitoring undertaken on real time with a trigger alarm system to notify ARC when noise limits are exceeded. No evidence of operational noise monitoring has been provided.

#### **Discussion**

Compliance with this condition cannot be determined without evidence of operational noise monitoring.

ARC confirmed the 'Sherraloy' property has complained about noise and ARC manage on an as needs basis. ARC is considering the installation of a noise logger at the 'Sherraloy' property. It is recommended operational noise monitoring is undertaken in accordance with the Noise Management Plan to ensure compliance with Schedule 4 Condition 16.

#### 3.1.13 Non-Compliance 13: Noise Easement

#### Requirement

Schedule 4 Condition 17

Before operation commences a noise-easement must be registered on the title of the residual lot containing the dwelling on the farm 'Sherraloy' allowing the noise criteria as specified in condition 16 of this Schedule.

#### **Findings**

No evidence of a noise easement has been provided.

#### **Discussion**

ARC provided history of correspondence regarding the proposed noise easement. However, this does not appear to have been registered on the title.

It is recommended ARC review historical correspondence and discuss future options with DPE to ensure compliance with Schedule 4 Condition 17.

#### 3.1.14 Non-Compliance 14: Operational Noise Monitoring

#### Requirement

Schedule 4 Condition 18

The Proponent must prepare and implement a Noise Management Plan (NMP) prior to commencement of operation that covers all premises based activities and transport operations. The plan must:

- a) be prepared in consultation with the EPA by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
- b) be approved by the Director-General prior to the commencement of construction;
- c) include a system that allows for periodic assessment of Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA) that has the potential to minimise noise levels from the facility;
- d) specify effective implementation of identified BMP and BATEA measures, where considered feasible and reasonable;
- e) include a program for monitoring the noise impacts of the project including real time noise monitors to measure noise emissions during operation;
- f) include measures to record and respond to complaints;
- g) include measures for community consultation including site contact details;
- h) include specifications and protocols for the installation and relocation of mobile noise barriers; and



i) describe mitigation measures that would be implemented in the event that a non-compliance is identified with the noise impact assessment criteria in this approval.

#### **Findings**

Approval of the Noise Management Plan was provided by DPE on 5 July 2016. No evidence of operational noise monitoring has been provided in accordance with Condition 18(e). Complaints register cited, in accordance with Condition 18(f).

Refer to the findings in **Section 3.1.12**.

#### Discussion

Refer to the discussion in Section 3.1.5.

#### 3.1.15 Non-Compliance 15: Biodiversity Offset Monitoring

#### Requirement

Schedule 4 Condition 26

A biodiversity offset package must be implemented to the satisfaction of the Director General. The package must generally conform to Biodiversity Offset Management Plan in the EA prepared by EA Systems (17 February 2010) and include:

- a) the offset areas mapped in the diagram at APPENDIX E;
- b) ongoing monitoring and review for effectiveness;
- c) security in perpetuity to the satisfaction of OEH.

#### **Findings**

Approval of the Biodiversity Offset Management Plan was provided by DPE on 5 July 2016.

Two plantings of offset areas have been undertaken. Section 6 of the Biodiversity Offset Management Plan refers to, inter alia ongoing annual monitoring of the revegetation. Site officer referred to ongoing monitoring by a local company. Council staff referred to no monitoring of planted areas.

During the site inspection, a number of dead plants were observed.

#### Discussion

It is unclear if the biodiversity offset planting has been undertaken in accordance with the Biodiversity Offset Management Plan, and whether ongoing monitoring has been undertaken to review the effectiveness of the offsets.

It is recommended ARC review the Biodiversity Offset Management Plan and implement recommendations, including ongoing monitoring and onsite maintenance of planted vegetation.

#### 3.1.16 Non-Compliance 16: Construction of Weighbridge and Wheel Wash Facility

#### Requirement

Schedule 4 Condition 31

Prior to the commencement of operation the Proponent shall carry out the following work to the satisfaction of the Director General:

- a) construct an AUSTROADS modified BAR treatment to 100km/h standard at the site entrance on Waterfall Way generally in accordance with the diagram in APPENDIX D so through traffic can safely negotiate right-turning vehicles;
- b) construct an AUSTROADS BAL treatment at the site entrance on Waterfall Way;
- c) install warning signs and road markings in accordance with RTA requirements;



- d) provide an entry gate on the access road that is sufficiently distant from the site entry to allow the largest vehicle to stand clear of the public roadway while waiting to enter the site;
- e) construct and seal an access road from Waterfall Way to the wheel wash facility;
- f) construct a culvert over the affected drainage line/s to allow vehicular access to the landfill during a 1 in 20 year flood event.
- g) construct parking for staff in accordance with AS 2890 Parking Facilities.
- h) construct a weighbridge within the footprint of the access road in accordance with MOD 1 and ensure the coloration of the weighbridge structure blends with the environment.

Note: Any work on Waterfall Way will require a Works Authorisation Deed from the RTA.

#### **Findings**

ARC confirmed works associated with Condition 31 (a) to (d) and (f) and (g) are compliant with this condition. However, a wheel wash facility has not been constructed as part of the works (Condition 31 (e)) and a weighbridge has not been constructed in accordance with Condition 31 (h).

#### **Discussion**

No reasons were provided as to why a wheel wash facility was not constructed as part of the works. It is recommended ARC review their documentation to determine the requirement for a wheel wash facility and consult with DPE accordingly.

ARC advised that all waste is weighed via the Long Swamp Road landfill. It is recommended ARC consult with DPE regarding the need for a weighbridge and the options for modification of the MCoA.

#### 3.1.17 Non-Compliance 17: Approval of Landfill Environmental Management Plan

#### Requirement

Schedule 5 Condition 2

The Proponent shall prepare and implement a Landfill Environmental Management Plan for the Project to the satisfaction of the Director-General. This plan must:

- a) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
- b) be prepared in consultation with the EPA and approved by the Secretary prior to the commencement of operation;
- c) include detailed baseline data;
- d) incorporate management plans and programs required by this approval;
- e) address the Benchmark Techniques in Appendix 1 of Environmental Guidelines for Solid Waste Landfills (1996, Environment Protection Authority) and the conditions of this approval; f) describe:
- statutory requirements (including any approval, licence or lease conditions);
- · any limits or performance criteria; and
- specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Project or any management measures;
- a) include a protocol for managing and reporting any:
- incidents;
- non-compliances with statutory requirements; and
- exceedances of the relevant limits and/or performance measures / criteria; and g) include a protocol to:
- inform the local community and relevant agencies about the operation and environmental performance of the project;
- receive, handle, respond to, and record complaints;
- · resolve any disputes that may arise during the course of the project; and
- respond to emergencies; and



- h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.
- i) include a contingency plan to manage any unpredicted impacts and their consequences;
- j) include a protocol for periodic review of the plan.
- k) include a program to monitor and report on the impacts and environmental performance of the Project and the effectiveness of any management measures; and
- *I) include a program to investigate and implement ways to improve the environmental performance of the Project over time.*

#### **Findings**

No evidence of DPE approval of Landfill Environmental Management Plan provided.

#### **Discussion**

A Landfill Environmental Management Plan has been prepared and implemented at the facility. However, it is noted that evidence of approval of this plan could not be obtained. It is recommended ARC consult with DPE to determine if approval of the Landfill Environmental Management Plan exists and/or seek a retrospective approval.

#### 3.1.18 Non-Compliance 18: Approval of Landfill Closure and Site Rehabilitation Plan

#### Requirement

Schedule 5 Condition 3

The Proponent shall prepare and implement a landfill closure and site rehabilitation plan. The plan must:

- a) be prepared in consultation with EPA by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
- b) be approved by the Director General prior to the commencement of operation;
- c) describe the final landform generally in accordance with the final landform diagram in APPENDIX C;
- d) ensure the site including capped landfill cells are equivalent to Class 4 agricultural land under the Agricultural Land Suitability Classification guideline;
- e) include post-closure monitoring of ground and surface waters; and
- f) include post-closure monitoring of leachate.

#### **Findings**

The Landfill Closure and Site Rehabilitation Plan was provided to DPE and the then Commonwealth Department of the Environment and Energy on 17 July 2015. DPE letter dated 5 July 2016 identified the need for groundwater and leachate monitoring with the plan to be approved once outstanding issues were resolved. No evidence of issue resolution and/or DPE approval provided.

The then Commonwealth Department of the Environment and Energy approved the Landfill Closure and Site Rehabilitation Plan on 22 August 2017.

#### **Discussion**

The Landfill Closure and Site Rehabilitation Plan requires approval by the Director-General in accordance with Schedule 5 Condition 3(b). However, it is noted that evidence of approval of this plan could not be obtained. It is recommended ARC consult with DPE to determine if approval of the Landfill Closure and Site Rehabilitation Plan exists and/or seek a retrospective approval.

#### 3.1.19 Non-Compliance 19: Annual Reviews

#### Requirement

Schedule 5 Condition 4





One year after the commencement of operations, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must

- a) describe the operations that were carried out in the past year;
- b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the:
- relevant statutory requirements, limits or performance measures/criteria;
- monitoring results of previous years; and
- relevant predictions in the EA;
- c) Corroboration of leachate and stormwater monitoring results with modelled conditions;
- d) identify any trends in the monitoring data over the life of the Project; and
- e) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; and
- f) describe what measure will be implemented over the next year to improve the environmental performance of the Project.

#### **Findings**

The facility has been operational since 2019. No annual reviews have been undertaken to date.

#### **Discussion**

An annual review of the environmental performance of the facility should have been undertaken in 2020, 2021 and 2022. It is recommended ARC undertake an annual review of environmental performance in accordance with Schedule 5, Condition 4 following submission of this audit report, and annually thereafter.

#### 3.1.20 Non-Compliance 20: Plan Revisions

#### Requirement

Schedule 5 Condition 5

Within 3 months of the submission of an:

- a) annual review under condition 4 of SCHEDULE 5:
- b) incident report under condition 6 of SCHEDULE 5;
- c) independent environmental audit under condition 8 of SCHEDULE 5,

the Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General.

Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.

#### **Findings**

No evidence of plan revisions provided.

#### **Discussion**

There have been no plan revisions undertaken in accordance with this condition. It is noted that this is required to ensure plans and programs are updated on a regular basis.

As discussed in **Section 3.1.19**, no annual reviews have been completed to date. No incidents have been reported. Independent Environmental Audit non-compliances are discussed in **Sections 3.1.22** and **3.1.23**.

It is recommended that plan revisions are undertaken following submission of this Independent Environmental Audit.





#### 3.1.21 Non-Compliance 21: Environmental Performance Reporting

#### Requirement

Schedule 5 Condition 7

The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.

#### **Findings**

There appears to be no evidence of environmental performance reporting provided on the website.

#### Discussion

ARC manage an organisational website with a webpage dedicated to this facility. The webpage provides details of the facility including access to the MCoA and all the plans required by the MCoA. However, there is no detail provided regarding the environmental performance of the project. Some of the detail is also outdated.

It is recommended that relevant environmental performance reporting is provided on the Council webpage and the webpage is also updated to reflect the current site activities.

#### 3.1.22 Non-Compliance 22: Timing of Independent Environmental Audit

#### Requirement

Schedule 5 Condition 8

Within a year of the commencement of operations of the project, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
- b) include consultation with the relevant agencies;
- c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any plan or program required under these approvals);
- d) review the adequacy of any plans or programs required under these approvals; and, if appropriate;
- e) recommend measures or actions to improve the environmental performance of the project, and/or any plan or program required under these approvals.

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

#### **Findings**

Operation of the facility commenced in 2019. This is the first Independent Environmental Audit completed.

#### Discussion

An Independent Environmental Audit was required within 12 months of operations, which would have been in 2020. This is the first Independent Environmental Audit for the project. As such, the project is non-compliant with the timing required of this condition.

#### 3.1.23 Non-Compliance 23: Independent Audit Submission

#### Requirement

Schedule 5 Condition 9





Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

#### **Findings**

This is the first Independent Environmental Audit completed for this project and it has taken longer than six weeks.

#### **Discussion**

This Independent Environmental Audit was undertaken on 28 March 2023. As such, the audit report associated with this audit, together with ARC response, was not submitted to DPE within six weeks of completing the audit. Given this is the first audit for the project, it has taken longer than anticipated.

#### 3.1.24 Non-Compliance 24: Website Information

#### Requirement

Schedule 5 Condition 10

From the commencement of the construction of the project, the Proponent shall make the following information publicly available on its website as it is progressively required by the approval:

- a) a copy of all current statutory approvals;
- b) a copy of the current plans and programs required under this approval;
- c) a summary of the monitoring results of the Project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
- d) a complaints register, which is to be updated on a monthly basis;
- e) a copy of the Annual Reviews (over the last 5 years);
- f) a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and
- g) any other matter required by the Director-General.

#### **Findings**

The ARC website for this facility is located at:

https://www.armidaleregional.nsw.gov.au/environment/waste-and-recycling/new-landfill Evidence of c), d), e), f) and g) has not been provided.

#### Discussion

Similar to the discussion provided in **Section 3.1.21**, relevant information has not been made publicly available. It is recommended ARC update the facility website to ensure compliance with Schedule 5 Condition 10 c) to g) of the MCoA.

#### 3.1.25 Non-Compliance 25: Approval of Landfill Environmental Management Plan

#### Requirement

Statement of Commitment 3

The Proponent will prepare and implement the following management plans for the project:

- A Landfill Environmental Management Plan and associated sub-plans; and
- a Biodiversity Offset Management Plan

#### **Findings**

Approval of the Biodiversity Offset Management Plan was provided by DPE on 5 July 2016. No evidence has been provided for the Landfill Environmental Management Plan approval. Both plans are currently being implemented.

#### **Discussion**





Both the Biodiversity Offset Management Plan and Landfill Environmental Management Plan have been prepared and are being implemented. However, evidence of DPE approval of the Landfill Environmental Management Plan has not been provided.

Refer to discussion provided in **Section 3.1.17**.

#### 3.1.26 Non-Compliance 26: Erosion and Sediment Control Plan

#### Requirement

Statement of Commitment 5

The Proponent will implement an Erosion and Sediment Control Plan as part of the Landfill Environmental Management Plan

#### **Findings**

Construction drainage plans are provided as part of Appendix A of the Water and Leachate Management Plan. No evidence of operational erosion and sediment control plan has been provided.

#### Discussion

Site discussions indicate that some erosion and sediment controls were amended during operation to better manage the site. However, this has not been reflected in an operation erosion and sediment control plan. It is also noted the Water and Leachate Management Plan has not been approved by DPE (refer to **Section 3.1.5**).

It is recommended ARC prepare an operational erosion and sediment control plan that is reviewed regularly and reflects the current site activities.

#### 3.1.27 Non-Compliance 27: Surface Water Quality Monitoring

#### Requirement

Statement of Commitment 10

The Proponent will ensure that monitoring is undertaken as detailed in the Water Quality Monitoring Program and Management Plan.

#### **Findings**

EPL 21362 applies to the site. EPL annual return monitoring results were cited for the 2021 to 2022 reporting period.

Section 6 of the monitoring plan outlines the monitoring program for surface water, groundwater and leachate. Evidence of Water Quality Monitoring Plan revision following the issue of the EPL was not provided (as required in section 9.3 of the Water and Leachate Management Plan). ARC advised the plans will be revised once the PFAS treatment plant has been operational. It is unclear if the monitoring program outlined in the Water Quality Monitoring Plan is consistent with the monitoring required by the EPL.

In the DPE letter dated 5 July 2016, DPE identified the Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.

Refer to the findings in **Section 3.1.5** and **3.1.8**.

#### **Discussion**

It is recommended ARC consult with DPE to determine if approval of the Water Quality Monitoring Plan exists and/or seek a retrospective approval. It is also recommended that the Water Quality Monitoring Plan is reviewed to ensure consistency with the EPL.





Refer to the discussion in Section 3.1.5 and 3.1.8.

#### 3.1.28 Non-Compliance 28: Groundwater Quality Monitoring

#### Requirement

Statement of Commitment 13

The Proponent will ensure that monitoring is undertaken as detailed in the Water Quality Monitoring Program and Management Plan and in accordance with an EPL

#### **Findings**

Refer to the findings in **Section 3.1.27**.

#### **Discussion**

Refer to the discussion in Section 3.1.27.

## 3.1.29 Non-Compliance 29: Compliance with Biodiversity Offset Management Planbiodiversity issues

#### Requirement

Statement of Commitment 18

The Proponent will adhere to the mitigation measures identified in the Biodiversity Offset Management Plan

#### **Findings**

Management measures are outlined in Section 5 and 6 of the Biodiversity Offset Management Plan. No evidence has been provided to demonstrate compliance with the plan.

Refer to the findings in **Section 3.1.15**.

#### Discussion

Section 5 of the Biodiversity Offset Management Plan outlines the implementation requirements of the plan with Section 6 detailing the offset monitoring and review requirements. Appendix N of the Biodiversity Offset Management Plan also outlines the monitoring protocol required by the then OEH. A monitoring checklist is also provided in Appendix O. Evidence of compliance with this plan has not been provided.

Refer to the discussion in Section 3.1.15.

## 3.1.30 Non-Compliance 30: Compliance with Biodiversity Offset Management Plan – climate change

#### Requirement

Statement of Commitment 33

The Proponent will implement and adhere to the mitigation measures identified in the Biodiversity Offset Management Plan

#### **Findings**

Refer to the findings in **Section 3.1.29**.

#### **Discussion**

Refer to the discussion in Section 3.1.29.





#### 3.1.31 Non-Compliance 31: Site Inspection

#### Requirement

A Site Inspection was undertaken on the site which includes a general inspection of matters such as design of cells, offsetting areas, fencing, monitoring equipment and other onsite matters.

#### **Findings**

During the site inspection it was noted that there was rilling occurring due to stormwater entering the dry basin. A number of sediment checks required attention due to the build-up of silt and/or split sediment bags.

#### **Discussion**

It is recommended that ARC repair the damage from stormwater rilling and a bund be put in place to prevent clean stormwater from entering the dry basin. It also recommended that all sediment checks are inspected to ensure they are operating correctly and replace/maintain any sediment bags/checks as required.

### 3.2 Site Inspection Outcomes

The site appeared in reasonable condition with only a single non-administrative matter raised due to the most recent seasons of high rainfall. See **Section 3.1.31** above.

#### 3.3 Level of Awareness

The level of awareness of environmental management practices within management and operations staff was assessed through discussions with management and observation of environmental practices during the site inspection. It was apparent that although this audit finds several non-compliances there was a general acceptance of the need for environmental measures, however the reporting of those requires additional resources.

## 3.4 Status of Environmental Compliance

At the time of the Audit, Armidale Regional Landfill was generally compliant with the requirements of the Armidale Regional Landfill Project Approval, Statement of Commitments, relevant regulations and good management practice as many of the non-compliances related to administrative errors. In summary, there were 31 non-compliance matters raised.

## 3.5 Environmental Management Documentation

The adequacy of the environmental management documents listed in **Section 2.4** has been reviewed as part of this audit. No issues were identified, except for those noted and discussed in the preceding sections.

It is noted that there are delays in approval of some of the documents, mainly due to technical reasons. Given the site is under management and relatively environmentally low risk, this is not considered a key issue. Notwithstanding, a key outcome of this audit is to finalise the documentation and requirement within the documentation to satisfy the relevant MCoA.

## 4. Recommendation and Conclusions

#### 4.1 Recommendations

A number of recommendations are provided in **Section 3** above. The following section summarises these recommendations.

- A retrospective BCA compliance assessment is to be undertaken to ensure the site infrastructure is compliant with Schedule 3 Condition 7.
- It is recommended noise monitors are installed/ re-installed at the site and operational noise monitoring is undertaken in accordance with the Noise Management Plan (AECOM 3 June 2015) and Schedule 4 Condition 16.
- It is recommended that until the appropriate plant and equipment is purchased to use the 'landfill lids', EPA approval is to be sought to use the wood waste as an alternative daily cover to VENM.
- It is recommended that ARC consult with DPE and other relevant agencies to ensure the leachate containment system has been constructed with consideration of Modifications 1 and 2 of the MCoA. Concurrence should also be sought to ensure the system is designed to the satisfaction of the Secretary and this is reflected in the Water and Leachate Management Plan.
- It is recommended that the Water and Leachate Management Plan is reviewed to ensure consistency with the EPL.
- It is recommended the sediment basin is de-silted and a procedure developed for ARC to determine ongoing capacity of the sediment basin.
- It is recommended ARC review historical correspondence and discuss future Noise Easement options with DPE to ensure compliance with Schedule 4 Condition 17.
- It is recommended ARC review the Biodiversity Offset Management Plan and implement recommendations, including ongoing monitoring and onsite maintenance of planted vegetation.
- It is recommended ARC consult with DPE regarding the need for a weighbridge and the options for modification of the MCoA (Schedule 4, Condition 31).
- It is recommended ARC consult with DPE to determine if approval of the Landfill Environmental Management Plan exists and/or seek a retrospective approval.
- It is recommended ARC consult with DPE to determine if approval of the Landfill Closure and Site Rehabilitation Plan exists and/or seek a retrospective approval.
- It is recommended ARC undertake an annual review of environmental performance in accordance with Schedule 5, Condition 4 following submission of this audit report, and annually thereafter.
- It is recommended that plan revisions are undertaken in accordance with Schedule 5 Condition 5 following submission of this Independent Environmental Audit.
- It is recommended that relevant environmental performance reporting is provided on the Council webpage and the webpage is also updated to reflect the current site activities.
- It is recommended ARC update the facility website to ensure compliance with Schedule 5 Condition 10 c) to g) of the MCoA.
- It is recommended ARC prepare an operational erosion and sediment control plan that is reviewed regularly and reflects the current site activities.
- It is recommended ARC consult with DPE to determine if approval of the Water Quality Monitoring Plan exists and/or seek a retrospective approval.
- It is recommended that the Water Quality Monitoring Plan is reviewed to ensure consistency with the EPL.
- It is recommended that ARC repair the damage from stormwater rilling and a bund be put in place to prevent clean stormwater from entering the dry basin.
- It is recommended that all sediment checks are inspected to ensure they are operating correctly and replace/ maintain any sediment bags/ checks as required.



#### 4.2 Conclusions

The commitment of Armidale Regional Landfill and its staff to the landfill's environmental management was noted, and site operations and work practices were found to be generally in compliance with the Conditions of Approval, Statement of Commitments and relevant legislation, and consistent with good Environmental practices.

There were 31 non-compliances made mainly with approval documentation.

The non-compliances related to:

- Documentation compliance including BCA documentation, environmental performance,
   Independent Audit requirements and website information.
- Landfill cover material and associated approvals.
- Approval of the Water and Leachate Management Plan.
- Approval of the Water and Leachate Management Plan.
- Sediment basin capacity.
- Operational noise monitoring.
- Noise easement documentation.
- Construction of weighbridge and wheel wash facility.
- Approval of Landfill Environmental Management Plan.
- Approval of Landfill Environmental Management Plan.
- Approval of Landfill Closure and Site Rehabilitation Plan.
- Biodiversity Offset Management Plan monitoring requirements.
- Annual reviews and plan revisions.
- Operation erosion and sediment control plan and implementation.
- Approval of Water Quality Monitoring Plan.
- ERSED controls improvement.

Each of the non-compliances should be addressed prior to the next scheduled audit. However, the ERSED control matter requires more immediate action, and a timeframe for this recommendation should be developed and implemented by the Armidale Regional Council management team. The findings of this audit will be auditable within forthcoming audits.

The level of awareness among staff of good environmental practice was generally satisfactory. Several examples of good environmental practices were observed during the site inspection. The findings obtained during this Audit shows that, except where noted above, Armidale Regional Landfill is generally compliant with the Conditions of Approval, Statement of Commitments, and with relevant environmental legislation.

## References

Independent Audit Guideline, Post approval requirements for State Significant Developments October 2015; [Online]. Available: <a href="http://www.planning.nsw.gov.au/~/media/Files/DPE/Guidelines/independent-audit-guideline-2015-10-23.ashx">http://www.planning.nsw.gov.au/~/media/Files/DPE/Guidelines/independent-audit-guideline-2015-10-23.ashx</a>

ISO 19011:2018 Guidelines for auditing management systems

Thomson Reuters: Environmental Audit Guidebook 2011

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# Appendix A Audit Methodology





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Project Armidale Regional Date 21 March 2023

Landfill Audit

To Mike Brooks **Email** <u>mbrooks@armidale.nsw.gov.au</u>

Of Armidale Regional Page 1 of

Council

From Simon Williams Ref No 4530-1009

**Subject** Environmental Compliance Audit Methodology

Meeting	File Notes	Facsimile	Transmittal	Х	Telephone	
Notes					Notes	

#### **Initiation Stage**

#### Project Start-up

A project start-up teleconference or communications (dialogue) will be held prior to conducting the site audit. The dialogue is to involve representatives of Armidale Regional Council and the GeoLINK audit team to discuss the project, introduce members of each team, and to establish communications protocols. The start-up dialogue provides a forum for Council to identify and provide handover of relevant documentation that may be required during the forthcoming audit stages. Details to be addressed include:

- The landfill site and facility boundaries
- The scope and objectives of the audit
- The proposed audit activities, such as document reviews, personnel interviews and site inspections, communication protocols, logistics and administrative arrangements
- Identification of the audit team and site facilitation arrangements
- The audit schedule and milestones.

#### **Organisational Review**

GeoLINK will review Council's current management plans and approvals in order to gain an understanding of the organisational structure of Armidale Regional Landfill and the environmental management required of the operation.

#### **Review of Background Information**

Council is to provide all background information prepared for the project. The background information will then be reviewed, and any questions will be raised with Armidale Regional Council.

### **Pre-Audit Stage**

A number of pre-audit activities are to be undertaken in consultation with Council staff. These activities include development of an audit table for the on-site activities, undertaking consultation and making the necessary preparation and arrangements for the site visit by the GeoLINK audit team.

#### **Audit Plan**

A site-specific audit plan (checklist) is being developed for the project and the site. The audit plan details a step by step series of questions and evaluation criteria designed to assess:

- Compliance with the approval requirements of the Armidale Regional Landfill
- Compliance with management and monitoring plans
- Compliance with and performance against EPL 21362 (if required)
- Current environmental management practices and their status
- Staff awareness.

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#### **Audit Stage**

The audit is a systems performance assessment that every staff member can take part in contributing towards an overall performance improvement.

#### **Opening Meeting**

GeoLINK will conduct an audit Opening Meeting prior to the commencement of the site audit. The Opening Meeting is to be attended by GeoLINK audit team and the Armidale Regional Landfill management team and nominated Council staff. The purpose of the Opening Meeting is to:

- Introduce the audit team members to quarry staff
- Present the audit scope and explain the objectives
- Outline the audit approach and methodology
- Address any questions or concerns that site personnel may have at this early stage
- Gain the support and assistance of management and operations staff in conducting the audit.

#### **Document Review**

During the audit we will review the following compliance documents as provided by Armidale Regional Council:

- 06 0220 Armidale Regional Landfill Project Approval (4 July 2012)
- 06 0220 Armidale Regional Landfill Modification 1 (11 August 2015)
- 06 0220 Armidale Regional Landfill Modification 2 (30 April 2018)
- NSW Environment Protection Licence 21362
- Landfill Environmental Management Plan Rev G (20 November 2019)
- Aboriginal Heritage Management Plan Rev 3 (3 May 2016)
- Air Quality Management and Monitoring Plan Rev C (23 June 2015)
- Biodiversity Offset Management Plan Rev 0 (8 August 2014)
- Construction Quality Assurance Plan Rev E (16 November 2016)
- Greenhouse Gas Management Plan Rev C (17 July 2015)
- Noise Management Plan Rev D (3 June 2015)
- Water and Leachate Management Plan Rev C (26 February 2016)
- Water Quality Monitoring Plan Rev D (26 February 2016)
- Transport Code of Conduct Rev C (15 September 2015)
- Landfill Closure and Rehabilitation Management Plan Rev C (17 July 2015)
- Any notices or amendments issued against the MCoA and EPL.

#### **Detailed Site Inspection**

As part of the site audit the GeoLINK audit team will undertake a detailed, but efficient and practical, site inspection. During the site inspection we will observe the existing conditions at the site and adjoining land, including management measures for mitigation of potential environmental impacts, including: air, biodiversity, water, wastewater, noise and waste materials, and look for evidence of:

- Compliance with legislative and regulatory requirements
- Conformance with the approval and with management plans and programs
- Actual operational practices
- Staff participation in environmental management at the landfill.

#### Interview/s with Key Staff

During the site audit the GeoLINK audit team will hold one or more interviews with appropriate staff in order to obtain information on:

- Actual past and present work practices
- The level of compliance with approval and statutory requirements
- The level of awareness of those requirements.

#### **Review Audit Evidence**

GeoLINK will review the adequacy and completeness of the audit evidence at the conclusion of the site audit. GeoLINK will:

- Review the information gathered and seek additional information where needed
- Attempt to substantiate the findings of the audit
- Summarise and document the audit findings and observations
- Identify issues that require immediate attention
- Note any outstanding issues that require a follow-up
- Prepare for the closing meeting.

#### **Closing Teleconference**

At the conclusion of the audit, a closing teleconference to debrief will be undertaken with the Armidale Regional Landfill management team. If possible the attendees at this teleconference should be the same people who were in attendance at the Opening Meeting. Areas covered in this teleconference would include:

- Summarise the audit activities and findings
- Highlight compliance strengths and weaknesses at the landfill
- Discuss the preliminary findings and recommended corrective actions, and in particular, any findings that will require immediate attention
- Clarify outstanding issues and address staff questions or concerns.

#### **Post-Audit Stage**

The outcome of the post-audit stage, and the purpose of the project, is to produce an Environmental Audit Report that addresses all of the audit findings and recommendations.

#### **Review of Audit Data**

At the completion of the audit, Council will review the draft Environmental Audit Report and provide any comments to the GeoLINK audit team for review and where supported for inclusion in the final audit report.

Do not hesitate to contact me on 02 6772 0454 or 0488 677 666 should you have any queries.

**Simon Williams** 

Director

Principal Environmental Auditor

# Appendix B Audit Table



CoA	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
06 0220 - Schedul	e 3 - Administrative Conditions					
	Obligation to Minimise Harm to the Environment					
Condition 1	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the Project.	Yes	Compliant	This IEA	Although this IEA identifies a number of non-compliances, taking into consideration the scale of the development, this IEA concludes that in general measures have been undertaken consistent with the EA, SoC and MCoA. Details of non-compliances are detailed in Section 3 of the Audit Report.	
	Terms of Approval					
Condition 2	The Proponent shall carry out the Project generally in accordance with the: a) EA; b) statement of commitments (see Appendix A); c) site layout plans and drawings in the EA (as shown in Appendix B); d) MOD 1; and e) MOD 2.	Yes	Non-Compliant	This IEA EA Statement of Commitments MCoA	This IEA identifies a number of non-compliances during the audit period with the SoC and MCoA Modifications 1 and 2. Details of non-compliances are detailed in Section 3 of the Audit Report.	1
Condition 3	If there is any inconsistency between the above documents specified in condition 2, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Yes	Compliant	EA Statement of Commitments MCoA	Following a review of the evidence collected and the site inspection, there appears to be no inconsistencies.	
Condition 4	The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of: a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this approval; and b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.		Compliant	DPE correspondence	Documentation reviewed as part of the EIA indicates ARC has complied with DPE requirements during the audit period.	
-	Limits of Approval					
Condition 5	The Proponent shall not exceed the maximum volume for each land-fill cell specified in Table 1. Calculation of the cell-volume shall include the intermediate non-waste layers but shall not include the leachate barrier, leachate drainage layer, the re-compacted clay liner at the base of the cell or the cell cap.  Table 1 - Maximum volume for each landfill cell  Cell 1		Compliant	Site inspection and interviews  Armidale Regional Landfill - Waste Disposal Operational and Filling Plan for Cell 1A - 12 July 2019	The Waste Disposal Operational and Filling Plan for Cell 1A outlines the filling design in accordance with this condition. Fill capacity surveys are being undertaken by the ARC engineering department to ensure fill capacity is foes not exceed the maximum volume.	
Condition 6	The Proponent shall prepare and submit a waste management performance review for the project. The review must:  a) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General; b) be submitted to the Director- General at least 12 months before the proposed commencement of each additional landfill cell; c) report on Council's progress in meeting current waste avoidance and resource recovery targets; and d) recommend necessary measures or actions to improve Council's waste avoidance and resource recovery performance to meet current targets.  Note: The Proponent may submit the report in conjunction with the Annual Review under Condition 4 of Schedule 5 or the Independent Environmental Audit under Condition 8 of Schedule 5.  Structural Adequacy	No	Non Triggered	Site inspection and interviews	ARC commenced work in Cell 1A in 2019 with Cell 1B due to for commission soon. A waste management performance review is required prior to commencing Cell 2.	
Condition 7	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.  Note: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.	Yes	Non-Compliant	Site inspection and interviews	Evidence of BCA compliance for on-site buildings has not been provided.	2
a 11.1 -	Subdivsion					
Condition 8	Before commencing any work on the site, the Proponent shall register a new lot with the Land and Property Information Centre as generally described by the red out-line shown on the site layout in APPENDIX B.	Yes	Compliant	Site inspection and interviews  Document review	Lot 1 in DP 1206469 has been created with evidence provided during the interview via ARC internal property information.	
	Protection of Public Infrastructure					

СоА	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 9	The Proponent shall:  a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Project; and b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the Project.	No	Non Triggered	Site inspection and interviews	There has been no damage to public infrastructure to date.	
Condition 10	Operation of Plant and Equipment  The Proponent shall ensure that all plant and equipment used for the Project is: a) maintained in a proper and efficient condition; and b) operated in a proper and efficient manner.	Yes	Compliant	Site inspection and interviews	ARC currently hires the plant and equipment in use at the facility. The hire company is responsible for the maintenance of the plant and equipment.  During the site inspection, it was observed the plant and equipment was operated in a proper and efficient manner.	
	Staged Submission of Plans or Programs					
Condition 11	With the approval of the Director-General, the Proponent may submit any plan or program required by this approval on a progressive basis.	Yes	Compliant	Document review and interviews DPE letter to ARC (dated 5 July 2016)	DPE approved staged submission of management plans on 5 July 2016.	
	Compliance					
Condition 12	The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:  a) take all reasonable and feasible steps to bring the operation back into compliance; b) ensure that the exceedance does not recur; c) consider all reasonable and feasible options for remediation (where relevant) and how to prevent a recurrence and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and d) implement remediation and prevention measures as directed by the Director-General, to the satisfaction of the Director-General.	Yes	Non-Compliant	Site inspection and interviews Document review	There are a number of non-compliances in Schedule 4 which related to environmental performance criteria and/or measures.  No evidence of operational noise monitoring has been provided in accordance with Condition 16 and 18 of Schedule 4. As such, it is not clear if there was an exceedance.	3

CoA	Requirement e 4 - Specific Environmental Conditions	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
06_0220 - Scriedur	Waste Management - Restrictions on Receipt of Waste					
Condition 1	The Proponent shall only receive waste on site that is authorised for receipt by an EPL.	Yes	Compliant	EPL 21362 Site inspection and interviews	The facility is authorised to accept waste under EPL 21362. Waste is received at the site directly from kerbside pickup with some commercial waste sent via the Long Swamp Road landfill. There is no public access to the facility.  The landfill at Long Swamp Road is supervised by staff with cameras and signage present at the site. Each staff mamber is verbally inducted using a check sheet.  Future changes to kerbside collection may include camera installation in vehicles to better monitor waste collection.	
	Landfill Operation - Cover Material					
Condition 2	The Proponent shall ensure that all waste cover material used on site is virgin excavated natural material and/or alternative daily cover, as approved in writing by the EPA.	Yes	Non-Compliant	Site inspection and interviews  EPL Notice of Variation 1622272 (15 November 2022)	An alternative daily cover was requested on 8 November 2022 in the form of 'landfill lids'. A variation to the EPL was provided on 15 November 2022. EPL condition E1.1 refers to a trial of the 'landfill lids' over a 6 month period commencing from the first day of use. To date, the 'landfill lids' have not been used as the appropriate plant and equipment isn't available.  ARC advised that wood waste is used as an alternative daily cover to VENM. Evidence of EPA approval of wood waste has not been provided.  Daily cover was not observed during the site inspection due to daily activities onsite.	4
	Landfill Operation - Security					
Condition 3	The Proponent shall: a) install and maintain a perimeter fence and security gates; b) ensure that the security gates are locked whenever the site is unattended.  Soil and Water - Discharge Limits	Yes	Compliant	Site inspection and interviews	Compliance with this condition was confirmed during the site inspection. ARC also provided verbal confirmation that the site is locked when unattended.	
Condition 4	The Proponent shall ensure that all surface water discharges from the site comply with the:  a) discharge limits (both volume and quality) set for the development in any EPL; or b) relevant provisions of the POEO Act.	No	Non Triggered	EPL 21362 Site inspection and interviews Email correspondence with ARC and EPA (June 2020)	There has been no discharges from the site since the commencement of the EPL.	
Condition 5	Each landfill cell must be construction with a leachate barrier that: a) is designed in consultation with the EPA and to the satisfaction of the Secretary; b) addresses dispersive soil in the A2 and B soil horizons; c) meets independent conformance testing in accordance with the NSW EPA Environmental Guidelines Solid waste landfills (2006); and d) includes: • a re-compacted clay liner at least 900 mm thick or a geosynthetic clay liner with an in-situ co-efficient of permeability of less than 10-9 metres per second covering the entire floor and walls of each waste disposal cell; • a flexible membrane liner stabilised against or protected from ultra violet light with a minimum co-efficient of permeability of less than 10-14 metres per second covering the entire floor and walls of each waste disposal cell; and • a leachate drainage layer for each landfill cell floor comprising a minimum 300 mm layer of drainage medium: - with a permeability of not less than 1 x 10-3 metres per second; - which is chemically reistant to leachate; and - which is capable of withstanding the weight of overlying waste; • a leachate layer for the landfill cell sidewalls comprising of a Drainage geocomposite layer: - with a permeability of not less than 1 x 10-3 metres per second; - which is chemically resistant to leachate; and - which is capable of withstanding the weight of the overlying waste.		Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  DPE letter to ARC (dated 5 July 2016)  DEE letter to ARC (dated 22 August 2017)	The Water and Leachate Management Plan was prepared in accordance with this condition and provided to EPA and DPI Water in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan and Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.  The Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.  The plan has not been revised to ensure compliance with Modification 1 and 2 of the Minister's Conditions of Approval, received 11 August 2015 and 30 April 2018, respectively.	
Condition 6	The leachate collection, conveyance and storage system must: a) be designed in consultation with the EPA and to the satisfaction of the Director General; b) be designed to address dispersive soil in the A2 and B soil horizons; c) not include leachate discharge or disposal except by way of: • evaporation; • irrigation on to an active landfill cell; • re-injection into an active or capped landfill cell; • transport to a facility licensed to accept such waste; d) include a leachate storage dam that has a minimum leachate storage capacity of 12 megalitres.	Yes	Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  DPE letter to ARC (dated 5 July 2016)  DEE letter to ARC (dated 22 August 2017)	The Water and Leachate Management Plan was prepared in accordance with this condition and provided to EPA and DPI Water in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan and Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.  The Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.	6

СоА	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 7	The leachate storage dam must:  a) be designed in consultation with the EPA and to the satisfaction of the Secretary; b) be designed to address dispersive soil in the A2 and B soil horizons; c) allow for the level of leachate in the storage dam to be maintained such that there is no overflow d) be designed to contain a 100-year ARI 3 day rainfall event and provide 150mm freeboard for wave action, providing a total storage capacity of 14.6ML; e) include high-level alarm and/or interlock system configured such that the alarm is activated and any pump or gravity flow of leachate to the dam is automatically shut down prior to dam overflow; f) Include a leachate barrier comprising:  • a re-compacted clay or similar material at least 600 mm thick with an in situ co-efficient of permeability of less than 2 x 10-10 metres per second covering the entire floor and walls of the dam/s; and • a flexible membrane liner stabilised against or protected from ultra violet light with a minimum co-efficient of permeability of less than 10-14 metres per second covering the entire floor and walls of the dam/s.  Soil and Water - Construction Quality Assurance Plan		Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  DPE letter to ARC (dated 5 July 2016)  DEE letter to ARC (dated 22 August 2017)	The Water and Leachate Management Plan was prepared in accordance with this condition and provided to EPA and DPI Water in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan and Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.  The Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.	7
Condition 8	The Proponent shall prepare and implement a Construction Quality Assurance Plan. The plan must:  a) be prepared in consultation with OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;  b) be approved by Director General prior the commencement of construction;  c) specify leachate-barrier material selection and construction techniques;  d) include a geotechnical assessment and map of suitable construction clay;  e) specify validation of thickness and permeability of leachate barrier/s;  f) include an environmental-awareness site-induction for construction personnel.  Note: The geotechnical assessment and map must be more detailed than the assessment and map in the EA.	Yes	Compliant	Site inspection and interviews  Construction Quality Assurance Plan Rev E (AECOM 16 November 2016)  DPE letter to ARC (dated 5 July 2016)	Approval of the Construction Quality Assurance Plan was provided by DPE on 5 July 2016.	
Condition 9	The Proponent shall prepare and implement a Leachate Management Plan. The plan must:  a) be prepared in consultation with EPA and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;  b) be approved by Director General prior to the commencement of construction;  c) include a water balance for the Project;  d) include design specifications for the leachate containment system (see conditions 5, 6 and 7 of this schedule);  e) include design specifications that address dispersive soil in the A2 and B soil horizons;  f) include a ground and surface water monitoring plan for the site in consultation with NOW. The plan shall include details on:  • the number, design and location for the monitoring bores, including upstream groundwater bore/s for baseline data collection;  • timelines for establishment and sampling regime(s) for the monitoring bores;  • monitoring frequency, including monitoring during rainfall;  • a schedule of contaminants to be monitored; and  • reporting requirements for the sampling results.  • The plan must be submitted to the Director-General [Secretary] prior to commencement of construction and be endorsed by NOW before submission.  • The Proponent shall install the baseline monitoring bore and implement the baseline monitoring sampling program obtaining a minimum of two- bi-monthly baseline sampling events before commencing construction of the landfill.  • The Proponent shall implement the approved ground and surface water monitoring plan to the satisfaction of the Director-General. g) ensure all surface waters are directed away from the leachate containment system;  h) ensure all lateral flows in the A2 soil horizon are directed away from the leachate containment system.  i) ensure all year that contacts waste or leachate is handled as leachate;  j) include remedial action plan should leachate escape the leachate containment system.	Yes	Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  Water Quality Monitoring Plan Rev D (AECOM 26 February 2016)  DPE letter to ARC (dated 5 July 2016)  DEE letter to ARC (dated 22 August 2017)  Baseline Monitoring ABH15A, ABH15B, ASB1, ADB1: Armidale Regional Landfill (CodyHart Consulting February 2020)  EPL Annual Return 21362 monitoring results 1 July 2021 to 30 June 2022	The Water and Leachate Management Plan was prepared in accordance with this condition and provided to EPA and DPI Water in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan and Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.  The Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.  There are 5 groundwater bores at the facility. Groundwater and surface quality monitoring is undertaken quarterly. EPL annual return monitoring results were cited for the 2021 to 2022 reporting period.  Baseline sampling events were undertaken and reported in February 2020.  Evidence of Water and Leachate Management Plan and Water Quality Monitoring Plan revision following the issue of the EPL were not provided (as required in section 9.3 of the Water and Leachate Management Plan). ARC advised the plans will be revised once the PFAS treatment plant has been operational.  The Water and Leachate Management Plan has not been revised to ensure compliance with Modification 1 and 2 of the Minister's Conditions of Approval, received 11 August 2015 and 30 April 2018, respectively.	8
Condition 10	Soil and Water - Stormwater Management  Stormwater infrastructure must installed to the satisfaction of the Director General: The design must:  a) be prepared in consultation with NOW and EPA and to the satisfaction of the Director General;  b) be approved by Director General prior to the commencement of construction;  c) direct clean water in overland flow around operational parts of the site;  d) prevent cross-contamination of clean or sediment laden water with leachate;  e) direct all sediment laden water in overland flow  • away from the leachate containment system;  • to a sediment basin with capacity for a 5 day 95th percentile storm with a minimum storage capacity of 5250m3.  f) include a dry detention basin below the operational parts of the site with capacity for a 100 year ARI 3 day rainfall event with a minimum storage capacity of 30ML;  g) address stormwater run-off from ancillary parts of the site such as the access road.	Yes	Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  DPE letter to ARC (dated 5 July 2016)  DEE letter to ARC (dated 22 August 2017)	The Water and Leachate Management Plan was prepared in accordance with this condition and provided to EPA and DPI Water in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan and Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.  The Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.	9

СоА			Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 11	The proponent sha	l manage the sediment basin s	so that it maintains capacity to store run-off from the 5 day 95th perce	ntile storm. Yes	Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)	During the site inspection, sediment build up was observed at the sediment basin inlet. ARC advised the basin hasn't been de-silted to date. No evidence was provided to confirm the sediment basin still retains capacity to store run-off from the 5 day 95th percentile storm.	10
	Soil and Water - Soil and Water Management Plan							
The Proponent shall prepare and implement a soil and water management plan. The plan must:  a) be prepared in consultation with the EPA and NOW by a suitably qualified and experienced expert whose appendorsed by the Director-General;  b) be approved by Director General prior to the commencement of construction;  c) include design specifications for stormwater infrastructure (see conditions 10 and 11 of this schedule);  d) include design specifications for erosion and sediment control to;  • minimise erosion and soil-loss;  • set aside any topsoil in manner appropriate for re-use in site rehabilitation;  • minimise the tracking of mud and waste by vehicles onto public roads.  e) address the environmental and structural risks of dispersive soils in the A2 and B soil horizons;  f) ensure that watercourse and natural drainage lines maintain natural hydrological flows and geomorphic integ g) address any Harvestable Right Order that might apply;  h) specify work methods within riparian areas and drainage lines in accordance with the Guidelines for Controlle  Soil and Water - Bunding		NOW by a suitably qualified and experienced expert whose appointment of construction; frastructure (see conditions 10 and 11 of this schedule); adiment control to; re-use in site rehabilitation; icles onto public roads. of dispersive soils in the A2 and B soil horizons; ines maintain natural hydrological flows and geomorphic integrity; t apply;		Non-Compliant	Site inspection and interviews  Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  Water Quality Monitoring Plan Rev D (AECOM 26 February 2016)  DPE letter to ARC (dated 5 July 2016)  DEE letter to ARC (dated 22 August 2017)	The Water and Leachate Management Plan was prepared in accordance with this condition and provided to EPA and DPI Water in 2015. In the DPE letter dated 5 July 2016, DPE identified the Water and Leachate Management Plan and Water Quality Monitoring Plan had not been approved as there were outstanding issues to be resolved. No evidence of issue resolution and/or DPE approval was provided.  The Commonwealth Department of the Environment and Energy approved the Water and Leachate Management Plan on 22 August 2017.	11	
	The Proponent shall store all chemicals, fuels and oils used on site in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant <i>Australian Standards</i> , and/or EPA's <i>Environmental Protection Manual: Technical Bulletin Bunding and Spill Management</i> .  Soil and Water - Wastewater Management							
Condition 13			d. Any bunds	Compliant	Site inspection and interviews	During the site inspection, fuels and oils were observed stored in appropriately bunded areas.		
Condition 14			Yes proval under	Compliant	Site inspection and interviews  Armidale Regional Council s68 approval letter Ref S68-125-2019 (dated 17 June 2019)	Cited letter providing s68 approval to install an onsite sewage management system at 1238 Grafton Road. It is noted a vehicle-wash has not been constructed onsite.		
	Noise - Operating I	lours						
Condition 15	The Proponent sha	I comply with the operating he	ours in Table 2.	Yes	Compliant	Site inspection and interviews	Construction hours are detailed in section 4.4 of the CEMP. Operating hours are detailed in	
Condition 15	Table 2 - Operating Activity Construction  Operation	Monday - Friday Saturday Any other time Monday - Friday Saturday Any other time	Hours 7 am – 5 pm 8 am – 1 pm Only with the prior written approval of OEH and subject to any conditions that may be imposed. 7 am – 5.30 pm 8 am – 6 pm Only during an emergency. The details of any such incident must be reported in accordance with schedule 5, condition 6.			Construction Environmental Management Plan Rev D (AECOM 29 September 2015)  Noise Management Plan Rev D (AECOM 3 June 2015)  Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)  ARC AINT 2021 10842 Waste Complaint Register		
	Noise - Noise Limit	s						

СоА	Requirement		Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 16	Table 3 - Noise emission limits dB(A)  Receiver  Residences on privately-owned land during construction  Residences on privately-owned land during operations  Residence on privately owned land known as 'Sherraloy' during operation of cell 1 only  LAeq (15 minute) is the level of noise equivalent to the average of noise level.  For the purpose of noise measures required for this condition, the LAeq noise 30 metres of any residence not on the premises over a period of 15 minutes of can be demonstrated that direct measurement at such a location is impractice.  Modification factors in Section 4 of the NSW Industrial Noise Policy apply to the noise emission limits apply under all meteorological conditions except to height; and under "non-significant weather conditions". Field meteorological described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relations.	Limit -  LA <sub>eq(15 minute)</sub> 40dB(A)  LA <sub>eq(15 minute)</sub> 35dB(A)  LA <sub>eq(15 minute)</sub> 38dB(A)  els occurring over the measured period (i.e. 15 minutes).  ele level must be measured or computed at any point within a using "FAST" response on the sound level meter. Where it al, an alternative means of determining compliance under the measured noise levels.  furing rain and wind speeds greater than 3m/s at 10m indicators for non-significant weather conditions are	Yes	Non-Compliant	Site inspection and interviews  Noise Management Plan Rev D (AECOM 3 June 2015)  Email correspondence between ARC and complainant (July 2017)  Email correspondence between ARC and Reverb Acoustics (August 2017)	Noise loggers are installed onsite to the north, east, south and west of the landfill operations. The monitoring equipment is currently being recalibrated (April 2023).  Noise complaints were received during construction with evidence provided of two occasions. Compliance with the noise emission limits is unclear in these circumstances.  Section 6 of the NMP outlines the monitoring approach for the project. Attended measurements are to be undertaken on a biannual basis with unattended monitoring undertaken on real time with a trigger alarm system to notify ARC when noise limits are exceeded. No evidence of operational noise monitoring has been provided.  ARC confirmed 'Sherraloy' property has complained about noise and ARC manage on as needs basis. ARC are considering the installation of a noise logger at the 'Sherraloy' property.	12
Condition 17	Before operation commences a noise-easement must be registered on the ti 'Sherraloy' allowing the noise criteria as specified in condition 16 of this Sche		Yes	Non-Compliant	Site inspection and interviews  Noise Management Plan Rev D (AECOM 3 June 2015)	No evidence of a noise easement has been provided.	13
Condition 18	The Proponent must prepare and implement a Noise Management Plan (NM of operation that covers all premises based activities and transport operation a) be prepared in consultation with the EPA by a suitably qualified and exper appointment has been endorsed by the Director-General; b) be approved by the Director-General prior to the commencement of cons c) include a system that allows for periodic assessment of Best Management Best Available Technology Economically Achievable (BATEA) that has the pot noise levels from the facility; d) specify effective implementation of identified BMP and BATEA measures, feasible and reasonable; e) include a program for monitoring the noise impacts of the project including monitors to measure noise emissions during operation; f) include measures to record and respond to complaints; g) include measures for community consultation including site contact detail h) include specifications and protocols for the installation and relocation of rand i) describe mitigation measures that would be implemented in the event tha identified with the noise impact assessment criteria in this approval.	ns. The plan must: ienced expert whose  truction; Practice (BMP) and ential to minimise  where considered g real time noise  s; nobile noise barriers;	Yes	Non-Compliant	Site inspection and interviews  Noise Management Plan Rev D (AECOM 3 June 2015)  Noise Management Plan Rev D (AECOM 3 June 2015) Appendix A - Consultation with EPA on NMP  ARC AINT 2021 10842 Waste Complaint Register	Approval of the Noise Management Plan was provided by DPE on 5 July 2016.  No evidence of operational noise monitoring has been provided in accordance with Condition 18(e).  Complaints register cited, in accordance with Condition 18(f).	14
Condition 19	Air Quality - Dust  All operations and activities occurring at the premises or on a haulage route emissions of dust.	must be carried out in a manner that will minimise	Yes	Compliant	Site inspection and interviews  Air Quality Management and Monitoring Plan Re C (AECOM 23 June 2015)	Operations observed during the site inspection to be generally undertaken in a manner minimising emissions of dust.	
Condition 20	Trucks entering and leaving the premises that are carrying loads must be cov	ered at all times, except during loading and unloading.	Yes	Compliant	Site inspection and interviews  Air Quality Management and Monitoring Plan Re C (AECOM 23 June 2015)	There were no trucks observed entering and leaving the premises while undertaking the site inspection. ARC verbal confirmation that all loads are covered except during loading and vunloading.	
Condition 21	Air Quality - Odour  The Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause or permit the emission of offensive odours from the Proponent shall not cause of	om the site, as defined under Section 129 of the POEO Act.	Yes	Compliant	Site inspection and interviews  Air Quality Management and Monitoring Plan Re C (AECOM 23 June 2015)  EPL Annual Return 21362 monitoring results 1 July 2021 to 30 June 2022	No offensive odour observed during the site inspection. ARC advised that no odour complaints have been raised to date.  V  Methane monitoring is not required by the EPL until Cell 1 is completed. Landfilling of Cell 1 commenced on 18 November 2020.	
Condition 22	Air Quality - Greenhouse Gas  The Proponent shall implement all reasonable and feasible measures to mini a) greenhouse gas emissions; b) energy use.	mise:	Yes	Compliant	Site inspection and interviews	ARC advised of the following measures to minimise gas emissions:  - Installation of solar panels in early 2023  - Trialling the use of landfill lids to reduce resource consumption and reduce transportation of soils for soil cover  - Removal of biological material and recycling out of general rubbish	

СоА	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 23	The Proponent shall prepare and implement a Greenhouse Gas Management Plan in consultation with the OEH and to the satisfaction of the Director-General prior to commencement of operations.	Yes	Compliant	Site inspection and interviews  Greenhouse Gas Management Plan Rev C (AECOM 17 July 2015)  Greenhouse Gas Management Plan Rev C (AECOM 17 July 2015) Appendix A -Consultation with EPA on GGMP  DPE letter to ARC (dated 5 July 2016)	Approval of the Greenhouse Gas Management Plan was provided by DPE on 5 July 2016.	
Condition 24	Air Quality - Air Quality Monitoring Plan  The Proponent shall prepare and implement an Air Quality Monitoring Plan in consultation with the EPA and to the satisfaction of the Director-General prior to the commencement of operations.  Air Quality - Meteorological Monitoring	Yes	Compliant	Site inspection and interviews  Air Quality Management and Monitoring Plan Rev C (AECOM 23 June 2015)  Air Quality Management Plan Rev C (AECOM 23 June 2015) Appendix A -Consultation with EPA on AQMMP	Approval of the Air Quality Monitoring Plan was provided by DPE on 5 July 2016.	
Condition 25	During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the latest version of Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	Yes	Compliant	Site inspection and interviews  Air Quality Management and Monitoring Plan Rev C (AECOM 23 June 2015)	A weather station was installed in 2019 and was visible during the site inspection.	
Condition 26	Biodiversity Conservation - Biodiversity Offset Package  A biodiversity offset package must be implemented to the satisfaction of the Director General. The package must generally conform to	Ves	Non-Compliant	Site inspection and interviews	Approval of the Biodiversity Offset Management Plan was provided by DPE on 5 July 2016.	
	Biodiversity Offset Management Plan in the EA prepared by EA Systems (17 February 2010) and include: a) the offset areas mapped in the diagram at APPENDIX E; b) ongoing monitoring and review for effectiveness; c) security in perpetuity to the satisfaction of OEH.		·	Biodiversity Offset Management Plan Rev 0 (E.A. Systems 8 August 2014)	Two plantings of offset areas has been undertaken. Section 6 of the Biodiversity Offset Management Plan refers to, inter alia ongoing annual monitoring of the revegetation. Site officer referred to ongoing monitoring by a local company. Council staff referred to no monitoring of planted areas.  During the site inspection a number of dead plants were observed.	15
Condition 27	Biodiversity Conservation - Conservation Management Plan  The Proponent shall prepare and implement a Conservation Management Plan. The plan must: a) be prepared in consultation with the CMA and OEH, by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General; b) be approved by Director General prior to the commencement of construction; c) generally conform with the recommendations in the Flora and Fauna Assessment in the EA prepared by EA Systems (17 February 2010) d) include detailed specifications for the biodiversity offset package; e) specify minimum qualifications for any person involved in biodiversity management; f) specify a protocol for tree removal. The protocol must include: • a construction schedule showing progressive tree removal to the minimum extent necessary; • a prohibition on the use of loud or heavy machinery within 100m of the 2009 Little Eagle nest tree during breeding season (August to January); • tree tagging for significant trees that can be retained. Significant trees include: • individual stands of Eucalyptus nicholii; • hollow bearing or known habitat trees or stags; • individual stands within a critically endangered ecological community. • supervision of any tree removal by a suitably qualified person; g) specify Koala management for the site access; h) specify a protocol for isolated finds of Aboriginal artefacts; i) specify any necessary ongoing management measures.	Yes	Compliant	Site inspection and interviews  Biodiversity Offset Management Plan Rev 0 (E.A. Systems 8 August 2014)	Approval of the Biodiversity Offset Management Plan was provided by DPE on 5 July 2016.	
Condition 28	Visual Amenity - Landscaping  The proponent shall ensure landscaping and revegetation screens the operational parts of the landfill from Waterfall Way as much as practical and to the satisfaction of the Director General. Any landscaping must be consistent with the Biodiversity Offset Package or Biodiversity Management Plan.  Visual Amenity - Lighting	Yes	Compliant	Site inspection and interviews  Biodiversity Offset Management Plan Rev 0 (E.A. Systems 8 August 2014)  Vegetation Management Plan and Vegetation Clearing Protocol Rev 0 (E.A. Systems 13 August 2014)	Approval of the Biodiversity Offset Management Plan was provided by DPE on 5 July 2016. Revegetation screens were evident during the site inspection.	

СоА	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 29	The Proponent shall ensure that the lighting associated with the project: a) complies with the latest version of AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting; and b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.	Yes	Compliant	Site inspection and interviews	ARC confirmed there is lighting onsite during the day when the generator is in use and the lighting is compliant with this condition. Solar power will now be the source of energy for lighting. Lighting is only in use when staff are present.	
	Visual Amenity - Signage					
Condition 30	The Proponent shall not install any advertising signs on site without the written approval of the Director-General.	Yes	Compliant	Site inspection and interviews	There are no advertising signs on site.	
	Traffic and Transport - Access Road Work and parking					
Condition 31	Prior to the commencement of operation the Proponent shall carry out the following work to the satisfaction of the Director General:  a) construct an AUSTROADS modified BAR treatment to 100km/h standard at the site entrance on Waterfall Way generally in accordance with the diagram in APPENDIX D so through traffic can safely negotiate right-turning vehicles; b) construct an AUSTROADS BAL treatment at the site entrance on Waterfall Way; c) install warning signs and road markings in accordance with RTA requirements; d) provide an entry gate on the access road that is sufficiently distant from the site entry to allow the largest vehicle to stand clear of the public roadway while waiting to enter the site; e) construct and seal an access road from Waterfall Way to the wheel wash facility; f) construct a culvert over the affected drainage line/s to allow vehicular access to the landfill during a 1 in 20 year flood event. g) construct parking for staff in accordance with AS 2890 Parking Facilities. h) construct a weighbridge within the footprint of the access road in accordance with MOD 1 and ensure the coloration of the weighbridge structure blends with the environment. Note: Any work on Waterfall Way will require a Works Authorisation Deed from the RTA.	Yes	Non-Compliant	Site inspection and interviews	ARC confirmed works associated with Condition 31 (a) to (d) and (f) and (g) are compliant with this condition.  A wheel wash facility has not been constructed as part of the works (Condition 31 (e)).  A weighbridge hasn't been constructed in accordance with Condition 31 (h). All waste is weighed via the Long Swamp Road landfill.	16
	Traffic and Transport - Transport Code of Conduct					
Condition 32	The Proponent shall prepare and implement a Transport Code of Conduct for the project to the satisfaction of the Director-General. This code must:  a) be prepared in consultation with the RTA by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;  b) be approved by the Director-General prior to the commencement of operation;  c) describe the measures to be implemented to minimise the impacts of the Project on the local and regional road network, including traffic noise.	Yes	Compliant	Site inspection and interviews  Transport Code of Conduct Rev C (AECOM 15 September 2015)  Transport Code of Conduct Rev C (AECOM 15 September 2015) Appendix A - RMS comments on TCC	Approval of the Transport Code of Conduct was provided by DPE on 5 July 2016.	

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Interconcental Management Contribution Management (Fig. Co. Val. Contribution Management (Fig. Co. Val. Co. Val	СоА	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Intersected Management Contribution Management Files  Conduction  Intersected All proper or improved significant or improved and property or to the development to be control out to the sanifoction of the Director-General. The property of the Control of the Cont	06 0220 Schodul	a E. Environmental Management Penerting & Auditing					
The Proposance start program and important of Control	00_0220 - 3criedu						
Professionated Disrepassion Condition 2   Professionated Disrepassion and professional Environmental Management Plan for the Project to the satisfaction of the Director General. This pian must:	Condition 1	The Proponent shall prepare and implement a Construction Management Plan for the development to be carried out to the satisfaction of the Director-General. The	Yes	Compliant	Environmental Management Plan Rev D (AECOM 29 September 2015)	September 2015. DPE approved the CEMP in letter	
Cardison 2 In the Prognetion As build programe and implemental Surveyancement Vision for the Projects to the satisfaction of the Director General. This plan music  3 In the Prognetion As building of experience departs which appropriate the Director General and Surveyance (as provided and Surveyance departs which appropriate and prognetic progne		Environmental Management - Landfill Environmental Management Plan			DPE letter to ARC (dated 5 July 2016)		
The Proponent shall prepare and implement a landfill closure and site rehabilitation plan. The plan must: a) be prepared in consultation with EPA by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General; b) be approved by the Director General prior to the commencement of operation; c) describe the final landform generally in accordance with the final landform diagram in APPENDIX C; d) ensure the site including capped landfill cells are equivalent to Class 4 agricultural land under the Agricultural Land Suitability Classification guideline; e) include post-closure monitoring of ground and surface waters; and f) include post-closure monitoring of leachate.  Non-Compliant  Site inspection and interviews  The Landfill Closure and Site Rehabilitation Plan was provided to DPE and DEE for 17 July 2016 identified the need for groundwater and leachate monitoring and leachate monitoring with the plan to be approved once outstanding issues were resolved to expert once of issue resolution and/or DPE and DEE and DEE and DEE and DEE for 17 July 2015)  Include post-closure monitoring of ground and surface waters; and f) include post-closure monitoring of leachate.  Landfill Closure and Rehabilitation Management Plan Rev C (AECOM 17 July 2015)  The Landfill Closure and Site Rehabilitation Plan was provided to DPE and DEE for 17 July 2015 in and leachate monitoring with the plan to deep approved to the approved once outstanding issues were resolved. The leachate monitoring once outstanding issues were resolved to evidence of issue resolution and/or DPE approval provided.  The Landfill Closure and Site Rehabilitation Plan was provided to DPE and DEE for 17 July 2015 in and leachate monitoring with the plan to custanding issues were resolved to the plan the plan to custanding issues were resolved to the plan the plan to the plan the plan to the plan the plan the plan to the Landfill Closure and Site Rehabilitation Plan was provided to DPE and DEE for 17 July 2015 in and leachate m	Condition 2	The Proponent shall prepare and implement a Landfill Environmental Management Plan for the Project to the satisfaction of the Director-General. This plan must:  a) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;  b) be prepared in consultation with the EPA and approved by the Secretary prior to the commencement of operation;  c) include detailed baseline data;  d) incorporate management plans and programs required by this approval;  e) address the Benchmark Techniques in Appendix 1 of Environmental Guidelines for Solid Waste Landfills (1996, Environment Protection Authority) and the conditions of this approval;  f) describe:  * statutory requirements (including any approval, licence or lease conditions);  * any limits or performance criteria; and  * specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Project or any management measures;  a) include a protocol for managing and reporting any:  * incidents;  * non-compliances with statutory requirements; and  * exceedances of the relevant limits and/or performance measures / criteria; and  g) include a protocol to:  * inform the local community and relevant agencies about the operation and environmental performance of the project;  * receive, handle, respond to, and record complaints;  * respond to emergencies; and  h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.  i) include a contingency plan to manage any unpredicted impacts and their consequences;  i) include a protocol for periodic review of the plan.  k) include a program to monitor and report on the impacts and environmental performance of the Project and the effectiveness of any management measures; and		Non-Compliant	Landfill Environmental Management Plan Rev G		17
	Condition 3	The Proponent shall prepare and implement a landfill closure and site rehabilitation plan. The plan must:  a) be prepared in consultation with EPA by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General; b) be approved by the Director General prior to the commencement of operation; c) describe the final landform generally in accordance with the final landform diagram in APPENDIX C; d) ensure the site including capped landfill cells are equivalent to Class 4 agricultural land under the Agricultural Land Suitability Classification guideline; e) include post-closure monitoring of ground and surface waters; and	Yes	Non-Compliant	DPE letter to ARC (dated 5 July 2016)  Landfill Closure and Rehabilitation Management Plan Rev C (AECOM 17 July 2015)  Landfill Closure and Rehabilitation Management Plan Rev C (AECOM 17 July 2015) Appendix C - Consultation with EPA on LCRMP	provided to DPE and DEE on 17 July 2015. DPE letter dated 5 July 2016 identified the need for groundwater and leachate monitoring with the plan to be approved once outstanding issues were resolved. No evidence of issue resolution and/or DPE approval provided.  The Commonwealth Department of the Environment and Energy approved the Landfill Closure and Site	
		Environmental Management - Annual Review					
of the Director-General. This review must: a) describe the operations that were carried out in the past year; b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EA; c) Corroboration of leachate and stormwater monitoring results with modelled conditions; d) identify any trends in the monitoring data over the life of the Project, and e) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; and f) describe what measure will be implemented over the next year to improve the environmental performance of the Project.	Condition 4	<ul> <li>a) describe the operations that were carried out in the past year;</li> <li>b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the:</li> <li>relevant statutory requirements, limits or performance measures/criteria;</li> <li>monitoring results of previous years; and</li> <li>relevant predictions in the EA;</li> <li>c) Corroboration of leachate and stormwater monitoring results with modelled conditions;</li> <li>d) identify any trends in the monitoring data over the life of the Project; and</li> <li>e) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; and</li> </ul>	Yes	Non-Compliant	Document review and interviews	The facility has been operational since 2019.  No annual reviews have been undertaken to date.	19
Environmental Management - Revision of Plans & Programs		Environmental Management - Revision of Plans & Programs					

СоА	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 5	Within 3 months of the submission of an: a) annual review under condition 4 of SCHEDULE 5; b) incident report under condition 6 of SCHEDULE 5; c) independent environmental audit under condition 8 of SCHEDULE 5, the Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General.  Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.	Yes	Non-Compliant	Document review and interviews	No evidence of plan revisions provided.	20
Condition 6	Reporting - Incident  Upon detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall immediately (or as soon as practical thereafter) notify the Department and other relevant agencies of the exceedance/incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	No	Non Triggered	Document review and interviews	ARC advised there have been no incidents since operation and none reported to EPA.	
	Reporting - Regular					
Condition 7	The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.	Yes	Non-Compliant	Document review and interviews	There appears to be no evidence of environmental performance reporting provided on the website.	21
	Independent Environmental Audit					
Condition 8	Within a year of the commencement of operations of the project, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:  a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General; b) include consultation with the relevant agencies; c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any plan or program required under these approvals); d) review the adequacy of any plans or programs required under these approvals; and, if appropriate; e) recommend measures or actions to improve the environmental performance of the project, and/or any plan or program required under these approvals.  Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.	Yes	Non-Compliant	Document review and interviews	Operation of the facility commenced in 2019. This is the first Independent Environmental Audit completed.	22
Condition 9	Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.	Yes	Non-Compliant	Document review and interviews	This is the first Independent Environmental Audit completed for this project and it has taken longer than 6 weeks.	23
	Access to Information					
Condition 10	From the commencement of the construction of the project, the Proponent shall make the following information publicly available on its website as it is progressively required by the approval:  a) a copy of all current statutory approvals; b) a copy of the current plans and programs required under this approval; c) a summary of the monitoring results of the Project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval; d) a complaints register, which is to be updated on a monthly basis; e) a copy of the Annual Reviews (over the last 5 years); f) a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and g) any other matter required by the Director-General.	Yes	Non-Compliant	Document review and interviews	ARC website for this facility: https://www.armidaleregional.nsw.gov.au/environme nt/waste-and-recycling/new-landfill  Evidence of c), d), e), f) and g) has not been provided.	24

SoC	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Appendix A - St	atement of Commitments					
Condition 1	General Commitments  The Proponent will undertake the activites, the subject of the Project Approval in accordance with the general descriptions and details provided in this EA, including the mitigation and management measures identified in the EA	Yes	Compliant	Document review and interviews	ARC has implemented and constructed the project generally in accordance with the details provided in the EA.	
Condition 2	The Proponent will gain all necessary approvals and permits supporting both construction and operation	Yes	Compliant	MCoA dated 4 July 2012 MCoA Modification 1 dated 11 August 2015 MCoA Modification 2 dated 30 April 2018 EPL 26362	ARC sought the necessary approvals and permits to support both construction and operation of the project.	
Condition 3	The Proponent will prepare and implement the following management plans for the project:  - A LEMP and associated sub-plans; and  - a Biodiversity Offset Management Plan	Yes	Non-Compliant	Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)  Biodiversity Offset Management Plan Rev 0 (E.A. Systems 8 August 2014)	Approval of the Biodiversity Offset Management Plan was provided by DPE on 5 July 2016. No evidence has been provided for the Landfill Environmental Management Plan approval.  Both plans are currently being implemented.	25
Condition 4	The Proponent will ensure that the final design landfill footprint of the proposed landfill facility is determined in consideration of relevant environmental constraints with a view to minimising the potential impacts of the proposal	Yes	Compliant	Site inspection and interviews	The final design landfill footprint considered environmental constraints with a view to minimising the potential impacts of the project.	
	Landform and Soils					
Condition 5	The Proponent will implement an ESCP as part of the LEMP	Yes	Non-Compliant	Water and Leachate Management Plan Rev C (AECOM 26 February 2016)	Construction drainage plans provided as part of Appendix A of the Water and Leachate Management Plan.	26
				Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)	Site discussions indicate that some erosion and sediment controls were amended during operation to better manage the site. No evidence of operational erosion and sediment control plan provided.	20
	Geology					
Condition 6	The Proponent will undertake investigations of the potential geological fault during construction and will then undertake further detailed assessment if evidence of a geological fault is encountered	Yes	Compliant	Landfill Cell 1 Detailed Design Report Rev B (AECOM 28 September 2015)	As detailed in Section 2.6 of the design report (AECOM 28 September 2015), it was concluded that the geological fault has no basis in fact.	
Constitution 7	Surface Water The December of the USAAD accorded to LEAAD	W	Consultant	Materia and Landards Management Blan Basic	ADC is involved at the West and Lookets Management Discount of the Hill Engineers and	
Condition 7	The Proponent will implement a WLMP as part of the LEMP	Yes	Compliant	Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)	ARC is implementing the Water and Leachate Management Plan and Landfill Environmental Management Plan as part of the ongoing operations of the site.	
Condition 8	The Proponent will adopt the Water Sensitive Urban Design (WSUD) principles in the design criteria for the control and treatment of drainage runoff	Yes	Compliant	Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  Water Quality Monitoring Plan Rev D (AECOM 26	ARC confirmed that engineering staff reviewed the Water and Leachate Management Plan at the time of preparation to ensure the design citeria for the control and treatment of drainage runoff adopted WSUD principles.	
Condition 9	The Proponent will ensure all leachate produced is monitored in accordance with the proposed landfill facility's licensing arrangements under the <i>POEO Act</i>	Yes	Compliant	February 2016) Water and Leachate Management Plan Rev C (AECOM 26 February 2016)	EPL 21362 applies to the site. EPL annual return monitoring results were cited for the 2021 to 2022 reporting period.	
				Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)		
Condition 10	The Proponent will ensure that monitoring is undertaken as detailed in the Water Quality	Yes	Non-Compliant	EPL 21362 Water Quality Monitoring Plan Rev D (AECOM 26	EPL 21362 applies to the site. EPL annual return monitoring results were cited for the 2021 to 2022	
Condition 10	Monitoring Program and Management Plan	165	Non-compliant	February 2016)	reporting period.	
				EPL 21362 EPL Annual Return 21362 monitoring results 1 July 2021 to 30 June 2022	Section 6 of the monitoring plan outlines the monitoring program for surface water, groundwater and leachate. Evidence of Water Quality Monitoring Plan revision following the issue of the EPL was not provided (as required in section 9.3 of the Water and Leachate Management Plan). ARC advised the plans will be revised once the PFAS treatment plant has been operational. It is unclear if the monitoring program outlined in the Water Quality Monitoring Plan is consistent with the monitoring required by the EPL.	27
	Groundwater					

SoC	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 11	The Proponent will implement a Leachate Management System as part of the LEMP and designed in accordance with the relevant Landfill Guidelines Benchmark Techniques	Yes	Compliant	Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)  DPE letter to ARC (dated 5 July 2016)	Leachate management has been undertaken as part of the Water and Leachate Management Plan and designed in accordance with relevant guidelines. The Water and Leachate Management Plan was prepared and provided to EPA and DPI Water in 2015.	
Condition 12	The Proponent will implement a Water and Leachate Management Plan	Yes	Compliant	Water and Leachate Management Plan Rev C (AECOM 26 February 2016)	ARC is implementing the Water and Leachate Management Plan as part of the ongoing operations of the site.	
Condition 13	The Proponent will ensure that monitoring is undertaken as detailed in the Water Quality Monitoring Program and Management Plan and in accordance with an EPL	Yes	Non-Compliant	February 2016)  EPL 21362  EPL Annual Return 21362 monitoring results 1 July 2021 to 30 June 2022	EPL 21362 applies to the site. EPL annual return monitoring results were cited for the 2021 to 2022 reporting period.  Section 6 of the monitoring plan outlines the monitoring program for surface water, groundwater and leachate. Evidence of Water Quality Monitoring Plan revision following the issue of the EPL was not provided (as required in section 9.3 of the Water and Leachate Management Plan). ARC advised the plans will be revised once the PFAS treatment plant has been operational. It is unclear if the monitoring program outlined in the Water Quality Monitoring Plan is consistent with the monitoring required by the EPL.	28
	Air Quality					
Condition 14	The Proponent will ensure that air quality management practices identified in the EA will be included in the Landfill Environmental Management Plan	Yes	Compliant	C (AECOM 23 June 2015)	Air quality management practices have been incorporated into Section 7.3.2 of the Landfill Environmental Management Plan. An Air Quality Management and Monitoring Plan was also prepared.	
Condition 15	Greenhouse Gas  The Proponent will undertake a regular review of the viability of retro fitting the landfill with alternative landfill gas management techniques	No	Non Triggered	Site inspection and interviews	ARC confirmed no reviews have been undertaken to date as Cell 1 has not been completed.	
	Noise					
Condition 16	As part of the Landfill Environmental Management Plan, the Proponent will prepare a Construction Noise Management Plan in accordance with the relevant DECCW <i>Guidelines</i> Biodiversity Issues	Yes	Compliant	Noise Management Plan Rev D (AECOM 3 June 2015)  Landfill Environmental Management Plan Rev G (AECOM 20 November 2019)	A Construction Noise Management Plan was prepared in 2015 in accordance with relevant guidelines.	
Condition 17	The Proponent will ensure that the Landfill Environmental Management Plan contains	Yes	Compliant	Biodiversity Offset Management Plan Rev 0 (E.A.	These plans form Appendix D, E, F and G of the Biodiversity Offset Management Plan Rev 0 (E.A.	
553.00117	appropriate measures to avoid or reduce secondary/downstream impacts on biodiversity. The LEMP will include the following management sub plans: - Native Fauna Management Plan - Fire Management Plan - Pest Management Plan - Disease Monitoring Protocol			•	Systems 8 August 2014).	
Condition 18	The Proponent will adhere to the mitigation measures identified in the Biodiversity Offset Management Plan	Yes	Non-Compliant	Biodiversity Offset Management Plan Rev 0 (E.A. Systems 8 August 2014)  Site inspection and interviews	Management measures are outlined in Section 5 and 6 of the Biodiversity Offset Management Plan.  No evidence has been provided to demonstrate compliance with the plan.	29
	Socio-Economic					
Condition 19	The Proponent will undertake community consultation as identified in the EA	Yes	Compliant		Section 7.6 of the EA identifies ongoing community consultation. Council's website provides ongoing community updates regarding the site as well as other waste operations.	
	Indigenous Heritage					
	Indigenous Heritage					

SoC	Requirement	Triggered	Compliance Status	Evidence Collected	Independent Audit Findings and Recommendations	Unique Identification on Non Compliance
Condition 20	The Proponent will prepare and implement an Indigenous Heritage Management Plan	Yes	Compliant	Aboriginal Heritage Management Plan Rev 3 (AECOM 3 May 2016)	An Aboriginal Heritage Management Plan was prepared in 2016. The management procedures are outlined in Section 5 of the plan.  ARC has verbally confirmed that the plan is semplied with and implemented.	
Condition 21	The Proponent will fence off and avoid significant Aboriginal heritage sites	Yes	Compliant	Site inspection and interviews	ARC has verbally confirmed that the plan is complied with and implemented.  ARC have fenced off and avoided significant Aboriginal heritage sites as confirmed during the site inspection.	
Condition 22	National Environmental Heritage  The Proponent will implement a Water and Leachate Management Plan to appropriately manage both surface water and leachate during the operational life of the landfill	Yes	Compliant	Water and Leachate Management Plan Rev C (AECOM 26 February 2016)  Site inspection and interviews	The Water and Leachate Management Plan has been implemented and evidence of surface water and leachate management was cited during the site inspection.	
Condition 23	The Proponent will install a gate from Waterfall Way to the access road and install perimeter stock fencing around the site to exclude cattle		Compliant	Site inspection and interviews	A gate has been installed from Waterfall Way to the access road and perimeter stock fencing has been installed around the site.	
Condition 24 Condition 25	The Proponent will ensure grazing stock do not enter the landfill area  Traffic and Transport  The Proponent will upgrade the T-junction intersection on Waterfall Way  Hazards	Yes Yes	Compliant Compliant	Site inspection and interviews  Site inspection and interviews	ARC has confirmed that grazing stock has not entered the landfill area.  ARC upgraded the T-junction intersection on Waterfall Way.	
Condition 26	The Proponent will ensure relevant Materials Safety Data Sheets, spill containment and safety equipment is installed at the proposed landfill facility	Yes	Compliant	Site inspection and interviews	ARC confirmed there are no chemicals stored onsite so there is no reason to keep MSDS at the site.  Relevant spill containment and safety equipment was cited during the site inspection.	
Condition 27	The Proponent will ensure the proposed landfill facility is fenced to prevent vandalism	Yes	Compliant	Site inspection and interviews	Fencing has been installed.	
Condition 28	The Proponent will monitor landfill gas accumulation	No	Non Triggered	Site inspection and interviews  Greenhouse Gas Management Plan Rev C (AECOM 17 July 2015)  Air Quality Management and Monitoring Plan Rev C (AECOM 23 June 2015)	ARC do not monitor landfill gas accumulation as yet. Section 6.1 of the Greenhouse Gas Management Plan refers undertaking monitoring once the filling of Cell 1 is complete.	
Condition 29	The Proponent will prepare and implement an emergency response plan for fire protection, flood hazards, and OH&S practices	Yes	Compliant	Emergency Response Plan - Regional Landfill DRAFT (Armidale Regional Council 2022)	A draft Emergency Response Plan has been prepared for the site.	
Condition 30	Visual  The Proponent will provide vegetation screening of the landfill facility using plantings of species endemic to the local area	Yes	Compliant	Site inspection and interviews  Vegetation Management Plan and Vegetation Clearing Protocol Rev 0 (E.A. Systems 13 August 2014)	The eastern side of the facility includes a vegetation screening with plantings proposed for the western side of the facility.	
Condition 31	The Proponent will maintain all vegetation outside the landfill footprint but within the boundaries of the Project Site for the life of the landfill	Yes	Compliant	Site inspection and interviews  Vegetation Management Plan and Vegetation Clearing Protocol Rev 0 (E.A. Systems 13 August 2014)	The vegetation outside the landfill footprint but within the boundaries of the project site are maintained in situ.	
	Climate Change					
Condition 32	The Proponent will allow a freeboard in the design of the landfill dry basin (that captures overflows from the leachate pond and sedimentation basin) to capture the 100 year storm event	Yes	Compliant	Armidale Regional Landfill: Landfill Cell 1 Detailed Design Report Rev B (AECOM 28 September 2015)	The dry basin has been designed in accordance with this condition as detailed in Section 5.7 of the report.	
Condition 33	The Proponent will implement and adhere to the mitigation measures identified in the Biodiversity Offset Management Plan	Yes	Non-Compliant	Biodiversity Offset Management Plan Rev 0 (E.A. Systems 8 August 2014)  Site inspection and interviews	Management measures are outlined in Section 5 and 6 of the Biodiversity Offset Management Plan.  No evidence has been provided to demonstrate compliance with the plan.	30

# **Appendix C**

## **Audit Team Curriculum Vitae**





2/119 Rusden **ARMIDALE** NSW 2350

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## Simon WILLIAMS

BEnvP, MEnvLaw, CEnvP, Registered Lead Auditor (IEMA)

Principal Environmental Planner & Auditor | Director

#### Qualifications

Master of Environment Law, University of Sydney Bachelor of Environmental Planning, University of Western Sydney

#### **Professional Summary**

Simon is a Principal environment and planning specialist with extensive experience in the development consulting industry. Simon is experienced in the areas of environmental regulations, environmental auditing, impact assessment, expert evidence, community consultation and environmental approvals and permitting.

Simon has extensive experience in environmental auditing of large construction and commercial operation including road construction, quarry, mining, bridges, dams and pipelines.

With specific expertise in environmental regulations, Simon has been the Government appointed Environmental Representative for a number of project including the Coffs Harbour Bypass Project, The Newcastle Inner City Bypass Project, the new Grafton Bridge and Keepit Dam upgrade project. His auditing experience includes working on mining, quarries, roads, bridges and dam projects.

Simon is a member of the Environmental Institute of Australia and New Zealand, Certified Environmental Practitioner, and a registered environmental auditor. NSW Department of Environment, Planning and Infrastructure approved Environmental Representative with specific experience on roads, mining, bridge and water infrastructure projects.

#### **Key Skills**

- Environmental auditing of construction, industrial and mining, dam and pipeline construction and
- Department of Planning, Industry and Environmental approved and experienced Environmental Representative.
- Preparation of environment and planning advice, including specialist advice on NSW and Commonwealth environmental legislation.
- Expert evidence and witness for the NSW Land and Environment Court and Commonwealth Administrative Appeals Tribunal.
- Management and preparation of Environmental Impact Assessment reports, including Statements of Environmental Effects, Environmental Impact Statements and Reviews of Environmental Factors.
- Preparation of environment and planning advice, including specialist advice on NSW and Commonwealth environmental legislation.
- Community Consultation.

#### **Key Projects**

- Coffs Harbour Bypass, Transport for NSW
- Newcastle Inner City Bypass Rankin Park to Jesmond, Transport for NSW
- Keepit Dam Safety Upgrade, Water NSW
- Additional Crossing of the Clarence River at Grafton (Grafton Bridge), Transport for NSW
- Eviron Quarry and Landfill, Tweed Shire Council
- Grafton Correctional Centre, John Holland





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## **Duncan THOMSON**

BE (Env) (Hons)

### **Principal Environmental Engineer | Director**



#### Qualifications

Bachelor of Environmental Engineering (1st Class Honours), University of Queensland (1999)

#### **Professional Summary**

Duncan is a qualified environmental auditor with a broad range of skills and experience. He has worked for environmental consulting firms for more than 20 years and has been involved in a variety of infrastructure, development and environmental management projects. He has undertaken environmental management system audits, sometimes as an external independent auditor and other times as an internal auditor. He has been the NSW government appointed Environmental Representative on several large infrastructure construction projects and he has completed water and energy audits of commercial buildings and factories.

Duncan has also provided on-site environmental management services for infrastructure construction sites and industrial facilities. He has substantial experience liaising with regulatory authorities regarding environmental approvals and has prepared a range of environmental assessment and management documents.

Aside from his technical skills and knowledge, Duncan has substantial experience in project management, team collaboration, strategy development and stakeholder consultation. He can provide services ranging from general advice on environmental improvement opportunities through to full independent environmental audits.

#### **Key Skills**

- Environmental audits, including independent audits required by development consents.
- Assess compliance with approvals, permits and licenses.
- Undertake environmental reporting to regulatory authorities and management.
- On-site environmental management of infrastructure projects and industrial facilities.
- Audits of sites with high energy and/or water use, including commercial buildings and factories.

#### **Key Projects**

- Coffs Harbour Bypass, *Transport for NSW* (Environmental Representative)
- Blakebrook Quarry Environmental Audit, Lismore City Council
- Newcastle Inner City Bypass Rankin Park to Jesmond, Transport for NSW (Environmental Representative)
- Lead auditor for an independent environmental audit of Lismore City Council's Blakebrook Quarry.
- Keepit Dam Safety Upgrade, Water NSW (Environmental Representative)
- Additional Crossing of the Clarence River at Grafton (Grafton Bridge), Transport for NSW (Environmental Representative)
- Clarence Correctional Centre Independent Environmental Audit, John Holland Pty Ltd
- Ballina Bypass Pacific Highway Upgrade, Transport for NSW

#### Department of Planning and Environment



Mr. Mike Brooks Senior Engineer Armidale Regional Council 135 RUSDEN STREET ARMIDALE NSW 2350

14/02/2023

Dear Mike Brooks

## Armidale Waste Facility (MP06\_0220) Auditors Approval / IEA 2023

I refer to your request (MP06\_0220-PA-2) for the Secretary's approval of suitably qualified persons to prepare the 2023 Independent Environmental Audit for the Armidale Waste Facility.

The Department of Planning and Environment (the department) has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Secretary approves the appointment of the experts nominated below to prepare the Independent Environmental Audit.

In accordance with Schedule 5, Condition 8 of MP06\_0220 (the 'Consent' as modified) and the Independent Audit Post Approval Requirements, the Secretary has agreed to the following audit team:

- Mr Simon Williams (Lead Auditor);
- Mr Duncan Thomson (Lead Auditor); and
- Ms Sarah Viney.

Please ensure this correspondence is appended to the Independent Audit Report.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Independent Audit Post Approval Requirements. Failure to meet these requirements will require revision and resubmission.

The department reserves the right to request an alternate auditor or audit team for future audits. Further, the department note that some of the Exemplar Global certifications for the above auditors will expire before the final audit for this project has been completed. Please note that this approval of the above audit team is conditional upon them maintaining certification as a lead or principal auditor with a relevant industry body.

Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the department, for consideration of the Secretary. Each request is reviewed and depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

# **Appendix E**

# **Independent Audit Certification Form**

Declaration of Independence - Auditor				
Project Name	Armidale Regional Landfill			
Consent Number	06_0220			
Description of Project	Construction and operation of a landfill including site preparation works, construction of site services and amenities, cell preparation (excavation and lining), leachate collection system construction, filling and cover and final capping and site remediation.			
Project Address	Waterfall Way, Armidale			
Proponent	Armidale Regional Council			
Date	8/2/2023			

#### I declare that:

- i. I am not related to any proponent, owner, operator or other entity involved in the delivery of the project. Such a relationship includes that of employer/employee, a business partnership, sharing a common employer, a contractual arrangement outside an Independent Audit, or that of a spouse, partner, sibling, parent, or child:
- ii. I do not have any pecuniary interest in the project, proponent or related entities. Such an interest includes where there is a reasonable likelihood or expectation of financial gain (other than being reimbursed for performing the audit) or loss to the auditor, or their spouse, partner, sibling, parent, or child;
- iii. I have not provided services (not including independent reviews or auditing) to the project with the result that the audit work performed by themselves or their company, except as otherwise declared to the Department prior to the audit;
- iv. I am not an Environmental Representative for the project; and
- v. I will not accept any inducement, commission, gift or any other benefit from auditee organisations, their employees or any interested party, or knowingly allow colleagues to do so.

#### Notes:

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

Name of Proposed Auditor	Simon Williams		
Signature	Sell		
Qualification	BEnvP, MEnvLaw, CEnvP, Lead Environmental Auditor (IEMA)		
Position	Director / Principal Environmental Planner		
Company	GeoLINK		
Address	2/119 Rusden Street, Armidale		
Email Address	swilliams@geolink.net.au		

Declaration of Independence - Auditor				
Project Name	Armidale Regional Landfill			
Consent Number	06_0220			
Description of Project	Construction and operation of a landfill including site preparation works, construction of site services and amenities, cell preparation (excavation and lining), leachate collection system construction, filling and cover and final capping and site remediation.			
Project Address	Waterfall Way, Armidale			
Proponent	Armidale Regional Council			
Date	14/2/2023			

#### I declare that:

- i. I am not related to any proponent, owner, operator or other entity involved in the delivery of the project. Such a relationship includes that of employer/employee, a business partnership, sharing a common employer, a contractual arrangement outside an Independent Audit, or that of a spouse, partner, sibling, parent, or child:
- ii. I do not have any pecuniary interest in the project, proponent or related entities. Such an interest includes where there is a reasonable likelihood or expectation of financial gain (other than being reimbursed for performing the audit) or loss to the auditor, or their spouse, partner, sibling, parent, or child;
- iii. I have not provided services (not including independent reviews or auditing) to the project with the result that the audit work performed by themselves or their company, except as otherwise declared to the Department prior to the audit;
- iv. I am not an Environmental Representative for the project; and
- v. I will not accept any inducement, commission, gift or any other benefit from auditee organisations, their employees or any interested party, or knowingly allow colleagues to do so.

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

Name of Proposed Auditor	Duncan Thomson		
Signature	F. Showen		
Qualification	BE Env (Hons)		
Position	Director / Principal Environmental Engineer		
Company	GeoLINK		
Address	Level 1, 64 Ballina Street, Lennox Head		
Email Address	duncan@geolink.net.au		

Declaration of Independence - Auditor				
Project Name	Armidale Regional Landfill			
Consent Number	06_0220			
Description of Project	Construction and operation of a landfill including site preparation works, construction of site services and amenities, cell preparation (excavation and lining), leachate collection system construction, filling and cover and final capping and site remediation.			
Project Address	Waterfall Way, Armidale			
Proponent	Armidale Regional Council			
Date	14/2/2023			

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- iii. I have not provided services (not including independent reviews or auditing) to the project with the result that the audit work performed by themselves or their company, except as otherwise declared to the Department prior to the audit;
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- b) The *Crimes Act 1900* contains other offences relating to the false and misleading information: section 307B (giving false or misleading information maximum penalty 2 years imprisonment or 200 penalty units, or both)

Name of Proposed Auditor	Sarah Viney		
Signature	Jo.		
Qualification	BAppSc (ERM)		
Position	Senior Environmental Scientist		
Company	GeoLINK		
Address	2/119 Rusden Street, Armidale		
Email Address	swilliams@geolink.net.au		

# Appendix F Photographs



Photograph 1: PFAS Treatment Plant



**Photograph 2: Landfill Operations** 



Photograph 3: View of Cell 1a and 1b



Photograph 4: Litter Traps



Photograph 5: Landfill Lids



**Photograph 6: Offset Planting** 



Photograph 7: Site Office, Solar Panels and Weather Station



**Photograph 5: Sediment Basin Inlet** 

# Appendix G

# **Audit Agenda and Register**



**Project** 4530-1010 **Date** 28 March 2023

Armidale Regional Landfill

Independent Environmental Audit

Time 10.00am to 4.00pm **Ref No** 4530-1010

Subject Agenda for Independent Environmental Audit – site visit

#### Attendees:

Simon Williams (Auditor, GeoLINK) Sarah Viney (Auditor, GeoLINK) Mike Brooks (Senior Engineering Officer, ARC) Shane Anderson (Acting Manager Waste Services, ARC) Guada Lado (Manager Waste Services, ARC) Josh Keene (Landfill Coordinator, ARC)

Time	Topic/Discussion Item	Personnel Required
10:00	Visitor sign-in and Induction.	Auditor
10.15 – 10.30	Opening meeting – discuss purpose, scope etc.	All
10.30 – 12.30	On-site interviews and audit. The purpose is to discuss the key environmental management Conditions of Approval/Statement of Commitments, view relevant records and assess compliance with the documents.  Key documents include the Landfill Environmental Management Plan and the Water and Leachate Management Plan.	Waste Operations Manager  Environmental Compliance Officer or responsible personel
12.30 – 1.00	Break for lunch	
1.00 – 2.30	On-site interviews and audit continued. The purpose is to discuss the key environmental management Conditions of Approval/Statement of Commitments, view relevant records and assess compliance with the documents.  Key documents include the Landfill Environmental Management Plan and the Water and Leachate Management Plan.	Waste Operations Manager  Environmental Compliance Officer or responsible personel
2.30 – 3.30	Site inspection:  Landfill Area Surrounding offsetting areas General drive and walk through of all areas that can be safely accessed	Auditor Waste Operations Manager
3.30 – 3:45	Auditor to collate notes	Auditor
3:45 – 4:00	Closing meeting – discuss preliminary findings	All
4:00	Sign-out	Auditor

#### **Register of Attendance**

Name	Role	Sign
Simon Williams	Lead Auditor	SL
Sarah Viney	Auditor	de.
Mike Brooks	Senior Engineering Officer	Martin
Shane Anderson	Acting Manager Waste Services	Solu
Guada Lado	Manager Waste Services	April
Josh Keene	Landfill Coordinator	