



**14 November 2022** 





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Mitchell Pearce	Spiecapag	Environment Manager
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#### 1. Introduction

APA Group (APA) contracted Aventus Consulting Pty Ltd (Aventus) to undertake regulatory third-party compliance audits for the construction of the Western Outer Ring Main (WORM) gas pipeline.

A condition of project approval is that a suitably qualified external auditor is contracted to audit compliance against the WORM Project's Construction Environmental Management Plan (CEMP), with the auditor selection being subject to approval from the Department of Environment, Land, Water and Planning (DELWP) under the *Pipelines Act* 2005 (Vic).

In consultation with DELWP, APA has determined that four compliance audits will take place, these being:

- 1. Initial pre-construction audit (late September 2022);
- 2. Construction progress audit (early 2023);
- 3. Reinstatement completion audit (mid-2023); and
- 4. Close-out audit (2 years after the end of construction, notionally mid-2025).

This audit report addresses the first audit.

## 1.1 Aventus Consulting

Aventus is a Melbourne-based environmental consultancy that has been operating since 2009, specialising in environmental and safety approvals, assurance and auditing for the energy industry. The company partners with titleholders and contractors to obtain project environmental and safety approvals and guide these approvals through to project completion through assurance and compliance work.

Aventus has undertaken over 60 environmental compliance audits, with 32 of these related to pipeline construction and operations, including:

- QCLNG Project 11 pipeline-specific audits (construction, rehabilitation operations), with an additional 19 Environmental Authority (EA) audits that factored in pipeline activities (Qld);
- Origin Energy Halladale Speculant pipeline construction (Vic);
- Santos Central Project Area, Munro, Marengo, East & West EAs (Qld); and
- Cooper Energy Athena gas pipeline cutover (Vic).

More information about the company can be found on its website at: www.aventusconsulting.com.au



## 1.2 Objectives

The objectives of the pre-construction audit is to ascertain whether APA, and its construction contractors Spiecapag Australia Pty Ltd (pipeline construction) and Wasco (Australia) Pty Ltd (compressor station modifications), have the necessary environmental management documentation in place to support the construction phase, and to determine whether this documentation is fit for purpose.

#### 1.3 Limitations

Due to the inherent limitations of any compliance audit (i.e., its 'snap-shot' nature), it is possible that error or non-compliance may occur and may not be detected. A one-off compliance audit cannot detect all instances of compliance or otherwise with the conditions as set out in the approval documents, as the audit is not performed continuously throughout the project period.

The content of this report applies only to matters that were available to and/or evident to the auditors at the time of this audit and within the scope of the audit. The status of legal compliance can change in a limited time.

No other warranty, expressed or implied, is made as to the professional advice indicated in this report. Note that it may not contain sufficient information for the purposes of other parties or for other uses.

The conclusion reached in Section 3 of this report is formed on the basis outlined above.



#### 2. Audit Process

## 2.1 Methodology

This desktop audit was conducted in line with AS/NZS ISO 19011:2018, Guidelines for auditing management systems, which is summarised in Figure 1.

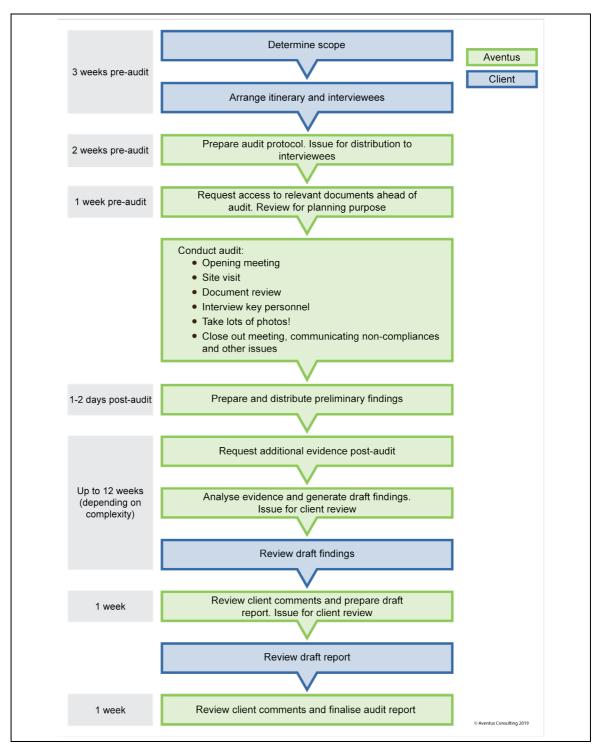


Figure 1. Generalised audit schedule



#### 2.2 Auditors

The audit team consisted of Giulio Pinzone as Lead Auditor and Siena Adorno as Assistant Auditor. Brief biographies are presented here.

#### 2.2.1 Giulio Pinzone, Principal Environmental Consultant – Lead Auditor

Giulio Pinzone is the Principal Environmental Consultant at Aventus and has over 20 years' environmental management experience. Giulio is degree-qualified with a Bachelor of Applied Science (Natural Resources Management) and Bachelor of Science (Honours).

Giulio is an Exemplar Global-accredited Environmental Management Systems (EMS) Lead Auditor (certificate 129371). DELWP has approved Giulio to be the lead auditor for this audit series.

Giulio has undertaken over 70 environmental compliance audits, with his pipeline experience listed in Section 1.1. Prior to founding Aventus, Giulio undertook several pipeline construction environmental compliance audits for GasNet (now APA) and Santos. Giulio held the role of Filed Environment Advisor during the construction of the Casino Gas Pipeline in southwest Victoria and is very familiar with pipeline construction environmental management issues.

## 2.2.2 Siena Adorno, Environmental Consultant – Assistant Auditor

Siena joined Aventus in early 2022 as a graduate Environmental Consultant. Siena is learning about all facets of the energy industry, including its unique environmental management challenges and regulatory framework.

Siena does not have any formal auditing qualifications and this audit formed part of her professional development.

#### 2.3 Auditees

Thank you to the personnel listed in Table 1 for their assistance with the audit.

Table 1. Auditees

Name	Title	Company
Kim Stewart	WORM Approvals Lead	APA
Ian Spence	an Spence Acting Access & Approvals Manager, SE Australia	
Mitchell Pearce	Mitchell Pearce Environment Manager	
Andrew McLachlan	HSE Advisor	Wasco



#### 2.4 Audit Process

The process undertaken for this audit is outlined below.

- Aventus prepared an audit protocol which was distributed to APA ahead of the audit.
- APA provided auditees (Spiecapag and Wasco) with a copy of the audit protocol in advance of the audit.
- The auditors were accompanied by APA's Approvals Lead for the WORM Project.
- The audit was conducted at the project site office in Essendon on Wednesday 28<sup>th</sup> September 2022.
- A brief opening meeting was conducted with APA and Spiecapag's Environment Manager (Attachment 1).
- The auditors received electronic copies of documentation referenced in the APA CEMP, from a list that the auditors had generated prior to the on-site audit. The status of the documents was discussed and their content was reviewed.
- The APA WORM Approvals Lead and Spiecapag Environment Manager were interviewed about the state of readiness to implement the CEMP and associated plans.
- Hard copies of documents not available in electronic form was reviewed.
- A brief exit meeting was held with auditees at the conclusion of the day, discussing preliminary findings (Attachment 1).
- A list of preliminary findings was issued to APA the day after of the audit.



# 3. Audit Findings

# 3.1 Definitions of Findings

APA has requested that the audit findings are reported in accordance with the definitions provided in APA HSE GP 15.01 T1 Audit and Self-Assessment Supplementary Information, which is presented in Table 2.

Table 2. APA audit finding definitions

Category	Definition	
Acceptable	Compliant with requirements.	
Major non- conformance	<ul> <li>A complete or near complete absence of a required management system; and/or</li> <li>Supporting system document is available but the requirements are, to a large degree, not implemented (being followed); and/or</li> </ul>	
	<ul> <li>Where the design intent of a management system significantly fails to produce the required results; and/or</li> </ul>	
	<ul> <li>Where a number of related minor non-conformances indicates that a management system fails to produce the desired results or control.</li> </ul>	
Minor non- conformance	Where a non conformance(s) is considered to have only a minor effect on the overall management system.	
Observation	The auditor has observed an area that appeared not to conform but could not confirm a non-conformance.	
Opportunity for improvement	A suggestion for improvement.	
Not applicable	The requirement is not applicable in this instance.	

## 3.2 Audit Results

Table 3 lists the documents that were reviewed during the pre-construction document review audit, and provides notes regarding their approval status and adequacy of content.



Table 3. Document review list

Document	Document number	Date and version	Approval status	Notes					
APA									
Project-specific plans	Project-specific plans								
СЕМР	18035-PL-HSE-0004	Rev 7, September 2022	DELWP reviewed	DELWP reviewed an earlier version of the CEMP (Rev 4), modifications were made in response to the review and re-issued to DELWP (Rev 5, July 2022). This indicates adequacy of the plan.					
Bushfire Management Plan (2015)	320-PR-HS-0007	Version 2, 13 August 2015	N/A	The bushfire management plan is not project specific; rather, it covers all APA activities. APA is currently reviewing the plan before it is sent to Fire Rescue Victoria (FRV) and the Country Fire Authority (CFA) (see next row)					
Bushfire Management Plan (2020)	320-PL-ER-0016	Rev 1, 4 September 2020	FRC and CFA approval pending	This plan was provided post-audit. Comments from the FRV and CFA are still pending regarding any changes that may be required specific to WORM. Key parts of the plan relevant to WORM pipeline construction are contained within the list of actions required under various fire danger ratings.					
Consultation Plan	Within appendix H of CEMP	Rev 7, September 2022	N/A	Plan was sighted. Consultation for the project has concluded, new plan is brief. APA has external resources in place to manage the consultation process.					
Offset Management Plan	N/A	N/A	DAWE accepted the offset strategies (2022-	Approval of offset strategy verifies adequacy of plan.					



Document	Document number	Date and version	Approval status	Notes
			0595 & 2022- 0594)	DELWP Native Vegetation Register verifies that allocated credit has been assigned to the project.
Cultural Heritage Management Plan (CHMP) 16594 (KP 0-8.2)	16594	Final version 03, 24 May 2022	Approved – Director Heritage Services, First Peoples – State Relations	Approval letter verifies adequacy of document.
CHMP 18496 (KP 8.2-33)	18496	Volumes 1 & 2, Version 03, 18 July 2022.	Approved - Wurundjeri Woi-	Approval letter verifies adequacy of document.
CHMP 16593 (KP 33-51)	16593	Volumes 1, 2 & 3, version 03, 28 April 2022.	wurrung Cultural Heritage Aboriginal Corporation	Approval letter verifies adequacy of document.
Heritage Management Plan	H7822- 2283 Project No: 37334	Final version 01, 29 September 2022	Heritage Victoria consent provided on 25 October 2022 (Consent Number C1874, Consent Type: Consent to Damage under Half)	This plan was in preparation by Biosis at the time of the audit, though this was identified to not be of material concern as early construction would not impact heritage sites. It was subsequently provided post-audit.  The plan provides a thorough background to the Holden Road site and provides detailed mitigation recommendations. Heritage Victoria consent was granted, indicating adequacy of the plan.
Fauna Management Plan Includes sub-plans for:  • Kangaroo management plan.	18035-PL-LH-0094.	Rev 1, September 2022.	N/A	This plan is detailed and captures the CEMP requirement to have management plans for individual species within this single document.



Document	Document number	Date and version	Approval status	Notes
<ul> <li>Threatened fauna species handling and relocation protocol.</li> <li>Golden sun moth management plan.</li> <li>Striped legless lizard management plan.</li> <li>Growling grass frog salvage and translocation plan.</li> </ul>				The document is thorough and adequate for the project.
Template for Weekly Construction Reports	N/A	N/A	N/A	Sighted 'Daily Diary' for the Wollert compressor station site. Covers HSE issues and includes photos. It is adequate for the project.
Corporate documents (referenced	in CEMP)	•		
Management Plan Process and Design (Environmental Procedure)	APA HSE EP 13.01.03	Version 1, 23/08/2016	N/A	These are company-wide documents that are designed to provide direction, guidance and/or instruction to all company operations and
Workplace Risk Assessment and Control Tool	APA HSE GP 06.01 T1	Version 4.1, 22 March 2022	N/A	projects.  As such, they are not subject to an adequacy
Incident Reporting Procedure	APA HSE GP 07.01	Version 6, 22 October 2020	N/A	review.
Project Health and Safety Management Plan	18035-PL-HSE-0003	Rev 3, 15 July 2022	N/A	
Incident Investigation and Analysis Procedure	APA HSE GP 07.02	Version 5.2, 08 February 2022	N/A	



Document	Document number	Date and version	Approval status	Notes
Emergency Response Management Plan	18035-PL-HSE-0008	Rev 1, 07 July 2022	N/A	
Emergency Response Bridging Plan (pipeline)	18035-PL-ER-0004	Rev1, 01 September 2022	N/A	
Emergency Response Bridging Plan (compressor station)	18035-PL-ER-0001	Rev1, 22 September 2021	N/A	
Property Management Plan	N/A	N/A	N/A	Sighted. Appears adequate, with detailed plans of each property intersected by the pipeline alignment included.
Complaints Management Register	Landholder agreements register supplied from APA.	29 August 2022	N/A	Hotline is available for complaints to be made.
Schedule of Landholder Agreements	Contact log (blank) supplied	N/A	N/A	Sighted. Signed landholder agreements are in place for all properties along the pipeline alignment.
Spiecapag				
СЕМР	18035-PL-HSE-0014	Rev C, 27 September 2022	N/A	This is a comprehensive document, which includes new issues (compared to when the EES was approved) such as hygiene measures for Foot & Mouth Disease.
Soil Management Plan (including contaminated soil and Potential Acid Sulphate Soil)	Within the CEMP	N/A	N/A	This section (s11.13) of the CEMP is comprehensive and incorporates the Best Practice Erosion and Sediment Control (International Erosion Control Association, IECA) guidance.



Document	Document number	Date and version	Approval status	Notes
Blast Management Plan	18035-PL-CN-0007	Rev A, October 2022	Requires acceptance from Energy Safe Victoria (ESV)	This plan was in preparation at the time of the audit. It was subsequently provided post-audit. The plan is suitable to the nature and scale of works, with a very detailed risk assessment and safe work method statement included, as well as detailed blasting instructions.
Construction Noise and Vibration Management Plan	18035-PL-HSE-0015	Rev A, 7 October 2022	Accepted by APA	This plan was in preparation at the time of the audit. It was subsequently provided post-audit. The plan is sufficiently detailed and contains detailed mapping illustrating residential noise exceedances.  Construction can commerce without this plan; any rocky terrain that requires blasting will be avoided until the plan is in place.
Site Rehabilitation Plan (site- specific for revegetation of native vegetation)	18035-PL-HSE-0032 (Property 1, PS733045, PK23)	Rev B, 20 October 2022	Accepted by DELWP	The site-specific plan for property 1 (at KP 23) was reviewed post-audit. It contains good detail on reinstatement and rehabilitation plans, including soil treatment, seed mix and fertiliser application rates.
Planting and Remediation Plan	Sighted only	N/A	N/A	The plan does not indicate that any landholders have requested screen planting, even though with existing hedgerows that may be impacted by construction (e.g., property WPT121).
Contingency Plan for Chemical/Fuel Spill Response	Within the CEMP (18035-PL-HSE-0014)	N/A	N/A	Contained within the Spiecapag CEMP (s11.15). Prevention and response instructions are clear and appropriate to the nature and scale of the project.



Document	Document number	Date and version	Approval status	Notes
Sediment and Erosion Control Plan	18035-PL-HSE-0017	Draft, Rev A, 27 September 2022	N/A	Site specific plans can be triggered, only major ones to be approved.
Sodic and Dispersive Soils Management Plan	18035-CON-CN-0064	Version 0, 31 August 2022	Approved by Melbourne Water Corporation	Approval letter (28 September 2022) verifies adequacy of document.
Traffic Management Plan	18035-PL-HSE-0013	Rev B, 6 October 2022	Accepted by APA	This plan was in preparation by Traffic Control Victoria at the time of the audit. It was subsequently provided post-audit.
				The plan is sufficiently detailed and contains detailed transport maps for pipe haulage and vehicle parking.
Consultation Plan	18035-PL-A-0013	Rev A, 09 September 2022.	N/A	The plan is very comprehensive and adequate for the project.
Tree Management Plan	18035-PL-HSE-0016	Rev A, 22 August 2022.	N/A	This is a comprehensive plan, with detailed site plans included.
				APA is supplying an arborist report to implement the plan.
Emergency Response Management Plan	18035-PL-ER-0002	Rev 0, 19 September 2022	N/A	The plan is adequate for the project.
Project Health and Safety Management Plan	18035-PL-HSE-0010	Rev B, 25 August 2022	N/A	The plan is adequate for the project.
Air Quality Monitoring Plan	Within CEMP (18035- PL-HSE-0014)	Rev C, 27 September 2022	N/A	The plan is adequate for the project.
Landfill Gas Monitoring Plan	N/A	N/A	N/A	There is no plan per se for landfill gas monitoring (which applies to the landfill site at



Document	Document number	Date and version	Approval status	Notes
				Bulla). The auditors were advised that this will be managed via Safe Work Method Statements (SWMS), and the auditors are of the opinion that this is adequate.
Greenhouse Gas Monitoring Plan	Within CEMP (18035- PL-HSE-0014)	Rev C, 27 September 2022.	N/A	Blank spreadsheet only.
Waste Register	N/A	N/A	N/A	Template is adequate.
Energy Consumption Register	N/A	N/A	N/A	Template is adequate.
Complaints Register	N/A	N/A	N/A	Template is adequate.
Daily Inspections Template	N/A	N/A	N/A	Template is adequate.
Site-specific EMPs		•		
Jacksons Creek SSEMP and Flood Management Response Plan	18035-PL-HSE-0027	Rev A, 9/09/2022	Awaiting Melbourne Water approval	The plan is adequate for the project.
Merri Creek and Conservation Area 34a SSEMP including Flood Management Response Plan	18035-PL-HSE-0028	Rev A, 21 October 2022	Awaiting Melbourne Water approval	At the time of the audit, this plan had been delayed due to a later construction schedule. It was subsequently provided post-audit.
and Rehabilitation Plan				The plan is very detailed, including detailed controls for managing risks to biosecurity and chytrid fungus, along with detailed site drawing illustrating control measures during construction and rehabilitation.
Deep Creek SSEMP including Flood Management Response Plan	18035-PL-HSE-0029	Rev B, 27/09/22.	Awaiting Melbourne Water approval	The plan is adequate for the project.



Document	Document number	Date and version	Approval status	Notes
Minor SSEMP water course crossing procedure including Flood Management Response Plan for Kalkallo Creek	18035-PR-CN-0008	Draft, Rev A, 22/08/22.	Awaiting Melbourne Water approval	The plan is adequate for the project.
Surface water monitoring plan (Merri Creek)	Part of the SSEMP 9 (awaiting development)	Awaiting development.	Will need to be signed off by the minister	The Creek cannot be accessed until December. Construction will avoid the creek until the plan is approved.
SSEMP – Conservation Area 28B	18035-PL-HSE-0031	Rev A, no date	Accepted by DELWP	This plan covers activities between KP 48 and KP 50 to protect grassy eucalypt woodland. This plan was provided post-audit. The plan is adequate considering the nature and scale of works at this location.
Wasco				
CEMP	2166-CEMP-PLN-001	Rev C, 21/09/22.	N/A	Document is comprehensive, addresses all key issues.
				It is missing a site plan that delineates sensitive areas, but this will be provided separately. Sensitive sites (e.g., trees, threatened flora) are outside the compressor station boundary.
Hazardous Substance Register	WAPL-HSS-REG-003	N/A	N/A	Document is adequate.
Corrective Actions Register	166-HSS-REG-008_A	N/A	N/A	Document is adequate.



#### 3.3 Audit Results

This section summarises the findings of the audit.

No non-compliances were observed given that all environmental management documents referenced in the approved APA CEMP are in place or in preparation.

#### 3.3.1 Positive Observations

The following positive observations were made:

- The APA, Spiecapag and Wasco CEMPs are comprehensive and appear adequate with regard to the nature and scale of the project and each contractor's responsibilities.
- The Cultural Heritage Management Plans (CHMPs) are in place and approved. These are 'long-lead' items on the environmental approvals schedule, so it is positive that these have been approved ahead of construction.
- Good cooperation was observed in the office between the environmental personnel for APA, Spiecapag and Wasco, which on the day of the audit, was noted to lead to rapid resolution of issues as they arise. This positive working relationship will stand the project in good step as construction progresses.
- The Spiecapag pipeline environmental line list is in place (hard copies were sighted) and will largely be managed electronically (via electronic tablets) for ease of access and use in the field by all personnel and for ease of ongoing updates.
   The line list notes environmental issues and constraints on a kilometre point (KP) basis.
- Spiecapag will have a Field Environment Officer in place for each of the two spreads (commencing at each end of the alignment) that will implement all the environmental management measures. One of the field officers was in the office at the time of the audit in order to familiarise herself with project requirements.
- The APA Communications Plan (for communications with directly affected landholders and surrounding communities) is very detailed, with an external consultancy in place to manage its implementation.
- The Spiecapag project induction is very detailed and designed to be completed online. This will be supplemented by an on-site project-specific induction.

#### 3.3.2 Opportunities for Improvement

The following opportunities for improvement were made:

- There are several plans that were in preparation at the time of the audit that would be expected to be complete so close to the start of construction. These are listed below, but as noted in Table 3 have since been prepared:
  - Blast MP.
  - o Construction Noise & Vibration MP.
  - Traffic MP.
  - o Heritage MPs.
  - o Merri Creek & Conservation Area 34a MP.



- Site Rehabilitation MP.
- The key contacts list for regulatory reporting (per APA CEMP Section 9.6) was not complete at the time of the audit. It was subsequently made available post-audit.
- Site-specific erosion and sedimentation control (ESC) plans are in preparation (sighted by the auditor) (as required by APA CEMP Section 11.13.1) but not yet finalised
  - O Given recent wet weather, the forecast of a wetter than normal summer, and the steep topography along several areas of the pipeline alignment (particularly near creeks), these are very important construction documents. It was explained to the auditors that land access issues, wet weather and schedule conflicts had prevented site visits to allow these 40-odd plans to be field verified. These will be prepared by Spiecapag and certified by a Certified Professional in Erosion and Sediment Control (CPESC) on a progressive basis, with the aim being to have each site plan finalised at least two weeks before construction at that site is due to commence. Early drafts of these documents were sighted at the time of the audit.

#### 3.4 Conclusions

The Lead Auditor is satisfied that the sub-plans referenced in the APA CEMP are in place (either finalised, about to be finalised or in preparation) and the content of the documents, the commitments and the implementation strategies within them are adequate with regards to the nature and scale of the project.

Resources are in place to implement the environmental management measures within the CEMPs and sub-plans, and APA has in place an internal environmental compliance audit program that will kick off soon after construction commences.

This desktop document review has not identified any issues preventing the commencement of construction from an environmental management perspective.

A field-based CEMP compliance audit will be conducted by this audit team in early 2023 to assess compliance against all the project's environmental commitments during the construction phase.



# **ATTACHMENT 1: ENTRY AND EXIT MEETING ATTENDANCE SHEETS**

WORM Pipel	line pre-constructio compliance audi	
Oper	ning meeting attendan	ce sheet
<u>Date:</u> 28	September 2022 <u>Time:</u>	09.00
Name	Title/Role	Signature
1. Giulio Pinzone	Auditor	dire
2. Siena Adorno	Trainee auditor	zena Selom
3. Kim Stewart	APA Apovels	Little
3. Kim Stewart 4. Mild Peace	ALL FENUIRONMENT MAN	OCER TILL
5.		
6.		
7.		
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# WORM Pipeline pre-construction preparedness compliance audit

# Exit meeting attendance sheet

Date: 28 September 2022 Time: 17.44

Name	Title/Role	Signature
1. Giulio Pinzone	Auditor	dine
2. Siena Adorno	Trainee auditor	Siersterono
3. Lim Sewant	APA Approvals lead ENVIRONMENT MUC	MMU
3. KIM Stewart 4. MITCH PEARCE	ENVIRONMENT MNC	AL I
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