

# Project Caymus Compliance Assessment Report

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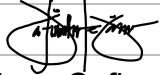


## Authorisation

Version	Prepared	Checked	Authorised	Date
0	Jacobs (DC)	Jacobs (DS)	Crowley (JC)	28/2/2024

## Declaration of Accuracy

In making this declaration, I am aware that section 150 of the *Environment Protection Act 2019* makes it an offence in certain circumstances to knowingly provide false or misleading information or documents. I declare that all the information and documentation supporting this compliance report is true and correct in every particular.

<b>Signature</b>	
<b>Full Name</b>	June Cafirma
<b>Position</b>	HSSE Manager
<b>Organisation</b>	Crowley Australia Pty Ltd
<b>Date</b>	28/02/2024

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## 1. Introduction

Crowley Australia (Crowley) as proponent for the Project Caymus Bulk Fuel Storage Facility was issued with an approval under the Environment Protection Act 2019 (EP Act) (EP2021/008 – 001) on 29 November 2021. The approval was subsequently amended by variations to conditions 6(d), 11(i), 11(j) made pursuant to Section 65 of the EP Act. Approval now referenced as EP2021/008 – 002.

Condition 6(f) of EP2021/008 – 002 requires Crowley to submit a Compliance Assessment Report (CAR) to the CEO of the Department of Environment, Parks and Water Security (DEPWS) within 15 months from commencement of operation with each subsequent report submitted within 12 months from the date of the previous report. This is the first CAR to be submitted following commencement of construction in December 2021.

Specific Project details are provided in Table 1-1, with an overview and status of activities described in Section 2.

**Table 1-1: Project Caymus details**

Item	Project Details
EP Number	EP2021/008 – 002
Project Name	Project Caymus
Approval Holder	Crowley Australia
Approval holder ABN	654 468 836
Approved Action	To construct and operate a bulk fuel storage facility and ancillary infrastructure for the transfer and storage of jet fuel, East Arm, Darwin.

### 1.1 Purpose and Scope

The purpose of this Compliance Assessment Report is to meet the requirements of EP2021/008 – 002: -

- Condition 6f:

*The approval holder shall submit to the CEO the first Compliance Assessment Report fifteen (15) months from the date of issue of this approval addressing the twelve (12) month period from the date of issue of this approval and then annually from the date of submission of the first Compliance Assessment Report, or as otherwise agreed in writing by the CEO.*

*Note: DEPWS granted Crowley an extension for the submission date of the CAR on October 31, 2023. DEPWS requested that the reporting period cover a period of 24 months (November 29, 2021 – November 28, 2023; see reference to this in Appendix A).*

- Condition 6g:

*The Compliance Assessment Report shall:*

- i. have the company seal affixed and be endorsed by the approval holder's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf;*
- ii. include a statement as to whether the approval holder has complied with the conditions;*
- iii. identify all potential non-compliances and describe corrective and preventative actions taken;*
- iv. be made publicly available at [www.crowley.com](http://www.crowley.com) in accordance with the approved Compliance Assessment Plan; and*

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- v. *indicate any proposed changes to the Compliance Assessment Plan required by condition 6a.*

This Compliance Report addresses compliance with above conditions and associated plans, programs or strategies during the **period of 29 November 2021 to 28 November 2023**.

### 1.1.1 Variations to EP2021/008 – 002

Conditions amended during the reporting period through the “Application for a review of a decision” under the Environment Protection Act 2019 was submitted to DEPWS on 18<sup>th</sup> January, 2023. With formal response received on 16 May 2023 including the amendments below:

#### Condition 6(d):

*The approval holder shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 6a for a period of seven years from the finalisation of each report. The approval holder shall make those reports available when requested by the CEO.*

#### Condition 11(i):

*Within six weeks of sampling referred to in condition 11h (unless otherwise agreed by the CEO), provide a written verification report to the CEO. The report will include:*

- i. *all analytical results of sampling required for all discharge points (any external report must be reproduced in full);*
- ii. *all relevant Australian Standard (AS) information in relation to establishing, siting, operating and maintaining meteorological monitoring equipment i.e. the latest versions of:*
  - a. M-1 Guide for the siting of sampling units (AS/NZS 3580.1.1)
  - b. AM-2 Guide for measurement of horizontal wind for air quality applications (AS 3580.14)
  - c. AM-4 Meteorological monitoring guidance for regulatory modelling applications (AS 3580.14 or USEPA 454/R-99-005).

*Also, the meteorological stations will use an anemometer with a stall speed of 0.5 m/s or less;*

- iii. *a description of operational parameters during sampling relevant for air emissions estimates; and*
- iv. *a comparison of analytical results from sampling against final design emission specifications and modelled emission parameters in the AQIA required under conditions 11c and 11d.*

On 29 November 2021, Crowley Australia Pty. Ltd. (Crowley) received Ministerial approval to construct and operate a bulk fuel storage facility and ancillary infrastructure for the transfer and storage of jet fuel, East Arm, Darwin (the Project), under Section 65 of the *Environment Protection Act 2019* in line with Environmental approval EP2021/008-001 (the approval).

#### Condition 11(j):

*Ensure that where any comparison under condition 11i identifies measured emission concentrations or rates that are significantly greater than the emissions characteristics used in the AQIA or are greater than the Protection of the Environment Operations (Clean Air) Regulation 2021 standards of concentration:*

- i. *provide an updated validated air dispersion model report to confirm compliance with the impact assessment criteria contained in the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA 2016) or the latest version; and*
- ii. *if requested by the CEO, identify and record as part of the EMS, measures to be implemented to reduce emissions of air pollutants so that they comply with the relevant NSW Clean Air Regulation standards and*

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*assessment criteria in the Approved Methods for the Modelling and Assessments of Air Pollutants in New South Wales (NSW EPA 2016) or the latest version.*

### Appendix 1 Approved extent Table 1: Location of Physical and operational elements:

Element: New pipeline easement

Location:

- Section 5720 Hundred of Bagot, Freehold, Town Planning Zone DV, 740 Berrimah Rd.
- Section 5719 (right of way behind Vopak), Hundred of Bagot, Freehold, Town Planning Zone MZ, 780 Berrimah Rd

Element: Pipeline route

Location:

- Section 07219 Hundred of Bagot plan LTO2015/060
- N.T. Portion 05986, East Arm plan S2000/206
- Section 05717 Hundred of Bagot plan S2003/201 (access only)
- Section 05719 Hundred of Bagot plan S2003/201
- Section 05720 Hundred of Bagot plan S2003/201
- Section 05783 Hundred of Bagot plan S2005/171A
- Section 04443 Hundred of Bagot plan S921090

### 1.1.2 DEPWS approved and/or reviewed plans

Table 1-2 provides an overview of relevant DEPWS approved/submitted plans which were in effect during the September 18 2022 to September 18 2023 reporting period.

**Table 1-2: DEPWS approved plans**

Title	Description
Air Quality Monitoring Plan	<p>The Air Quality Monitoring Plan describes the measures in place to minimise emissions of volatile organic compounds and the subsequent damage to environmental values associated with the Project Caymus Bulk Fuel Storage Facility. It describes the methodology and approach for the monitoring plan.</p> <p>The Air Quality Monitoring Plan was submitted in accordance with EP2001/008-001 Condition 11 NT EPA and response from DEPWS was received on 3/4/2023 stating that it satisfies requirements.</p>
Compliance Assessment Plan	<p>The Compliance Assessment Plan outlines how compliance reporting will be performed, the frequency of compliance reporting and retention of compliance assessments.</p> <p>The Compliance Assessment Plan was submitted in accordance with EP2001/008-001 Condition 6 and DEPWS responded on 7/9/2023 that it satisfies requirements.</p>
Construction Environmental Management Plan (CEMP)	<p>The CEMP outlines how activities undertaken during the construction phase of the project will be managed in order</p>

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Title	Description
	to avoid/mitigate environmental or nuisance impacts, and how those environmental management requirements will be implemented.
Erosion and Sediment Control Plan	<p>The Erosion and Sediment Control Plan describes the minimum required erosion control measures for the desired works.</p> <p>The Erosion and Sediment Control Plan was submitted in accordance with EP2001/008-001 Condition 10 and acknowledged receipt by DEPWS on the 14/9/2023.</p>
Wastewater release Environment Management Plan (EMP)	<p>The Wastewater release EMP describes the measures that have been implemented to ensure that discharged wastewater does not contain contaminants or waste above an approved threshold during construction. It also specifies the controls in place in order to minimise erosion due to released wastewater.</p> <p>The Wastewater release EMP was submitted in accordance with EP2001/008-002 Condition 10.</p>
Acid Sulphate Soil Management Plan (ASSMP)	The ASSMP is a supporting document to the CEMP. The ASSMP outlines a strategy to effectively manage the potential extent and severity of environmental impacts due so acid sulphate soils disturbance on the site.
Dewatering Management Plan (DMP)	The DMP describes the measures in place to ensure that any dewatering and disposal activities related to construction works do not result in an unacceptable risk to human health or the environment.

## **2. Description of Activities**

### **2.1 Project Caymus Project Overview**

The Project is to construct and operate a U.S. Defence Bulk Fuel Storage Facility (BFSF) located on Lot 5720 west of the Railway Terminal on East Arm District, Northern Territory, near Darwin. The jet fuel storage facility will have storage capacity of 300 MegaLitre (ML) jet fuel comprising the capacities:

- 700,000 barrels (111.3 ML) of F34 jet fuel (military kerosene type) aviation turbine fuel with Fuel System Icing Inhibitor (FSII) used by land-based military gas turbine engine aircraft; and
- 1,200,000 barrels (190.8 ML) F44 combustible jet fuel (military high flash-point kerosene type) aviation turbine fuel with FSII used by ship borne military gas turbine engine aircraft.

### **2.2 Current Status of Activities**

Key operations activities undertaken at Project Caymus during the reporting period were as follows:

- activities associated with the construction of bulk fuel storage facility
- activities associated with planning and constructing pipeline from the marine loading arm to the project site
- environment monitoring activities.



### 3. Compliance with Project Caymus NT Environmental Approval, 2021 (EP2021/008 – 002)

The terms and definitions provided in Table 3-1 have been used to indicate the status of compliance with relevant EP2021/008 – 002 approval conditions.

A summary of the compliance status with relevant EP2021/008-002 approval conditions (Section 1.1), applicable timeframes and reference to evidence supporting the compliance status (as applicable) is provided in Table 3-3.

**Table 3-1 Compliance status terms, acronyms and definitions**

Term	Acronym	Definition
Compliant	C	"Compliance" is achieved when all the requirements of a condition have been met, including the implementation of management plans or other measures required by those conditions.
Non-compliant	NC	A designation of "non-compliance" should be given where the requirements of a condition or elements of a conditions, including the implementation of management plans and other measures, have not been met.
Not applicable	NA	A designation of "not applicable" should be given where the requirements of a condition or elements of a condition fall outside of the scope of the current reporting period. For example, a condition which applies to activity that has not yet commenced.

#### 3.1 Audit, reviews & exercises


A summary of audits, reviews and inspections as relevant to EP2021/008 – 002 conditions undertaken during the reporting period is provided in Table 3-2. Outcomes of audits as applicable to EP2021/008 – 002 conditions are presented in Table 3-3.

**Table 3-2: Summary of audits, reviews and exercises**

Audit/review/exercise title	Scope	Date
Saunders International	The audit program included regular environmental inspections of the Caymus site by Saunders International staff and Byrne.	29 November 2021 – 22 May, 2023 (see Appendix C)
Latitude 63 Caymus Site Environmental Inspection Program	The audit program included regular environmental inspections of the Caymus site by Latitude 63 and Byrne.	23 May, 2023 to 18 September, 2023 (see Appendix C)

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**Table 3-3: EP2021/008 approval compliance table**

Condition No.	Condition	Timing	Status	Evidence/Comments
1a	<p>Commencement of action.</p> <p>I. The proponent shall not commence implementation of the proposal after two (2) years from the date on which approval has been granted, unless substantial work has physically commenced on or before that date.</p>	By 29 November 2023	Compliant	<p>Picture 1 – Photo demonstrating substantial commencement of project.</p> 
1b	<p>Commencement of action.</p> <p>The approval holder must notify in writing the Chief Executive Officer of the Department of Environment, Parks and Water Security (the CEO) of the date of commencement of the action, within 10 business days after the date of commencement of the action.</p>	Within 10 business days after commencement of the action	Compliant	<p>Letter or email to the CEO notifying the date of commencement. Photos demonstrating substantial commencement of Project. Attached as Appendix B.</p>

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Condition No.	Condition	Timing	Status	Evidence/Comments
2	<p>Proposal implementation.</p> <p>The action must be carried out:</p> <ul style="list-style-type: none"> <li>I. In accordance with the Environment Protection Act 2019;</li> <li>II. In accordance with this approval;</li> <li>III. In a competent manner; and</li> <li>IV. Wholly within the premises as identified in the approval</li> </ul>	Ongoing	Compliant	Crowley has demonstrated compliance with this condition.
3	<p>Change of contact details.</p> <p>The approval holder must notify the CEO of any change of its name, physical address, postal address and contact details for the serving of notices or other correspondence within 10 business days of such change.</p>	Within 10 business days of a change in name, physical address or postal address.	Compliant	Contact details have been updated as required.
4	<p>Operation and maintenance of plant and equipment.</p> <p>The approval holder must ensure any plant and equipment used in conducting the action:</p> <ul style="list-style-type: none"> <li>I) Is fit for the purpose and use to which it is put;</li> <li>II) Is maintained;</li> <li>III) Is operated by a person trained to use the plant and equipment; and</li> <li>IV) Is calibrated in accordance with Australian Standard methods.</li> </ul>	Ongoing	Compliant	Construction Environment Management Plan has been in place during the construction phase of the action. EMS is under development and will be fully implemented during the commissioning into operation phase of the action.

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Condition No.	Condition	Timing	Status	Evidence/Comments
5a	<p>Environmental Management.</p> <p>Prior to commencement of operation, the approval holder must develop and implement an environmental management system (EMS) that applies specifically to the action, and is consistent with the Australian Standard AS/NZS ISO 14001 Environmental Management Systems</p>	September 18, 2023	Compliant	EMS is under development and will be implemented and tested during the commissioning phase ready for commencement of operation.
5b	<p>Environmental Management.</p> <p>The approval holder must ensure that the action is designed, constructed, maintained and operated in accordance with industry best practice, and as a minimum:</p> <ul style="list-style-type: none"> <li>I) all applicable Australian Standards, including but not limited to AS1940 and AS1692, as amended from time to time.</li> <li>II) all applicable American Petroleum Industry (API) standards, including but not limited to API650 and API1581, as amended from time to time.</li> </ul>	Ongoing	Compliant	Referenced and implemented within all relevant documentation during the design, construction, maintenance and operation of the action including the Construction Environment Management Plan and the EMS.
6a	<p>Compliance Reporting.</p> <p>The approval holder shall prepare and maintain a Compliance Assessment Plan which is submitted to the CEO at least six (6) months prior to the first Compliance Assessment Report required by condition 6f, or prior to implementation of the action, whichever is sooner.</p>	By 30 June 2023	Compliant	Submitted to NT EPA Compliance Team 21/9/2022
6b	<p>Compliance Reporting.</p> <p>The Compliance Assessment Plan shall indicate:</p> <ul style="list-style-type: none"> <li>I) the frequency of compliance reporting;</li> <li>II) the approach and timing of compliance assessments;</li> </ul>	By 30 June 2023	Compliant	Acknowledgement of receipt provided by DEPWS on 7/9/2023 and satisfaction that it meets requirements.

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Condition No.	Condition	Timing	Status	Evidence/Comments
	<p>III) the retention of compliance assessments;</p> <p>IV) the method of reporting of potential non-compliances and corrective actions taken ;</p> <p>V) the table of contents of Compliance Assessment Reports; and</p> <p>VI) public availability of Compliance Assessment Reports.</p>			
6c	<p>Compliance Reporting.</p> <p>After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 6b the approval holder shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 6a.</p>	18 September 2023 and annually thereafter		Submission of CAR to the CEO
6d	<p>Compliance Reporting.</p> <p>The approval holder shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 6a and shall make those reports available when requested by the CEO.</p>	Retain CARs for 7 years following the end of life of the proposal. Make CARs available when requested by CEO.	Compliant	All reports are retained on Crowley's document management system.
6e	<p>Compliance Reporting.</p> <p>The approval holder shall advise the CEO of any potential or actual non-compliance within seven (7) days of that non-compliance being known.</p>	Within 7 days of a potential or actual non-compliance being known	Compliant	Notification has been sent regarding any potential or actual non-compliances. See following example:
6f	<p>Compliance Reporting.</p> <p>The approval holder shall submit to the CEO the first Compliance Assessment Report fifteen (15) months from the date of issue of</p>	18 September 2023 and annually thereafter or as		<p>Submission of CAR to the CEO.</p> <p>Extension of time granted and change to reporting period see Appendix A.</p>

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Condition No.	Condition	Timing	Status	Evidence/Comments
	this approval addressing the twelve (12) month period from the date of issue of this approval and then annually from the date of submission of the first Compliance Assessment Report, or as otherwise agreed in writing by the CEO.	agreed in writing by the CEO		
6g	<p>Compliance Reporting.</p> <p>The Compliance Assessment Report shall:</p> <ul style="list-style-type: none"> <li>I) have the company seal affixed and be endorsed by the approval holder's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf;</li> <li>II) include a statement as to whether the approval holder has complied with the conditions;</li> <li>III) identify all potential non-compliances and describe corrective and preventative actions taken;</li> <li>IV) be made publicly available in accordance with the approved Compliance Assessment Plan; and</li> </ul> <p>indicate any proposed changes to the Compliance Assessment Plan required by condition 6a.</p>	18 September 2023 and annually thereafter or as agreed in writing by the CEO		Submission of CAR to the CEO.
7a	<p>Monitoring and Auditing</p> <p>The approval holder must design and implement a monitoring program, to the satisfaction of the CEO, which demonstrates compliance with condition 10g and 10l of this environmental approval. The monitoring program must include:</p> <ul style="list-style-type: none"> <li>I) the collection of baseline data over an appropriate time period;</li> <li>II) appropriate monitoring of relevant parameters in accordance with Appendix 2 of this approval</li> </ul>	Ongoing	Compliant	Monitoring program in development and will be provided to the CEO for review prior to the operations action commencing.

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Condition No.	Condition	Timing	Status	Evidence/Comments
	III) a system for recording and maintaining monitoring details and data records; and a quality assurance and quality control system.			
7b	<p>Monitoring and Auditing.</p> <p>The approval holder must develop and implement an environmental audit program for the site. The program must:</p> <ul style="list-style-type: none"> <li>I) be developed by a qualified person, and approved by the CEO prior to commissioning of the action;</li> <li>II) verify that the safeguards specified in this environmental approval are implemented and maintained;</li> <li>III) evaluate the effectiveness of the safeguards for the protection of the environment applied or adopted in relation to the action;</li> <li>IV) evaluate compliance with the conditions of this environmental approval; and</li> </ul> <p>verify that environmental monitoring, maintenance and record keeping are being undertaken in accordance with the Compliance Assessment Reporting process required under condition 6, and the approval holder's EMS.</p>	Audit program to be implemented and demonstrated by 10 April 2024 and then as determined by the CEO thereafter.	Compliant	Monitoring program in development and will be provided to the CEO for review prior to the commissioning of the action.
7c	<p>Monitoring and Auditing.</p> <p>The audit program must include an audit within two (2) months of the completion of construction of the action, and an audit within two (2) months after the first year following commissioning of the action. Thereafter, auditing of the action will be conducted at a frequency determined by the CEO.</p>	Firstly by 10 April 2024 and then on 10 April 2025 then as determined by the CEO thereafter.	Compliant	Implementation and reporting of the audit program within two months of the commencement of operations.
7d	Monitoring and Auditing.	Firstly by 10 April 2024 and	Not applicable	No audits required to be conducted to date.

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Condition No.	Condition	Timing	Status	Evidence/Comments
	<p>The approval holder must ensure that, within 20 business days of conclusion of each environmental audit, it provides to the CEO:</p> <ul style="list-style-type: none"> <li>I) a written report on the environmental audit required by condition 7c that is prepared and signed by the qualified person who conducted the audit; and</li> <li>II) a written report from the approval holder that responds to each potential and actual non-compliance identified in the written audit report.</li> </ul>	then on 10 April 2025 then as determined by the CEO thereafter		
8	<p>Notification of environmental incidents.</p> <p>Notification of environmental incidents must be in accordance with Part 9 Division 8 of the Environment Protection Act 2019 and Part 10 of the Environment Protection Regulations 2020.</p> <p>In an emergency, the NT EPA Pollution Response Hotline should be notified in the first instance by telephoning 1800 064 567.</p>	18 September 2023 and annually thereafter	Compliant	<p>Environmental incidents reported:</p> <p>Stormwater discharge – 19 Oct 2022 – Civil contractor without authorisation discharged stormwater from excavation directly into storm drain. EPA were notified by Saunders.</p> <p>Abrasive blasting – 21 June 2023 – During a visit EPA an inspector witnessed abrasive blasting activities being undertaken in which blast media was observed migrating outside the immediate work area.</p> <p>Stormwater drain sheen – 6 Nov 2023 – During an inspection a small (&lt;200m diameter) sheen was observed in the water in the common drain from Salloo street commercial area. EPA were notified by Crowley and an anonymous caller.</p>
9	<p>Public availability of data.</p> <p>Subject to confidentiality of information requirements under Part 13, Division 3 of the Environment Protection Act 2019, within six (6) months of commencement of the action and for the remainder of the life of the action, the approval holder is required to publish and make publicly available, in the form and manner approved by the CEO, all available environmental data (including sampling design, sampling methodologies, empirical data and derived information products (e.g. maps}), monitoring records,</p>	29 May 2023 then ongoing for the life of the action	Compliant	<p><a href="http://www.crowley.com/darwin-australia">www.crowley.com/darwin-australia</a></p>



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Condition No.	Condition	Timing	Status	Evidence/Comments
	management plans, reports and audits relevant to the assessment of the action and implementation of the environmental approval.			
10a	<p>Marine environmental quality</p> <p>Take all reasonably practicable measures during the planning, design, construction, operation, remediation and closure of the action to avoid and mitigate impacts attributable to the action on the quality and productivity of water, sediment and biota beyond the boundary of the premises.</p>	Ongoing	Compliant	Implementation of the ISO 14001 Environment Management System (EMS) and the associated policies, manuals, procedures and registers reporting in the CAR.
10b	<p>Marine environmental quality</p> <p>Ensure there is no migration or overflow of a contaminant or waste beyond the boundary of the premises, which causes or may cause environmental harm.</p>	Ongoing	Compliant	Implementation of the ISO 14001 Environment Management System (EMS) and the Environmental Monitoring Program and reporting in the CAR.
10c	<p>Marine environmental quality</p> <p>Ensure all fuel storage tanks are designed and constructed in accordance with API Standard 650 welded tanks for oil storage, and must include:</p> <ul style="list-style-type: none"> <li>I) impermeable sub-grade release prevention barriers; and</li> <li>II) under tank leak detection systems.</li> </ul>	Ongoing	Compliant	Will be reviewed through the audit program and verification of the approved design
10d	<p>Ensure that storage tanks and bunds on the premises are designed and constructed to minimise the potential for overflow of containment structures from dynamic pressure and product wave in the event of catastrophic tank failure.</p>	Ongoing	Compliant	Will be reviewed through the audit program and verification of the approved design
10e	<p>Marine environmental quality.</p> <p>Take all reasonably practicable measures to ensure that stormwater within the premises does not come into contact with a contaminant, which causes or may cause environmental harm.</p>	Ongoing	Compliant	Will be reviewed through the audit program and verification of the approved design

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Condition No.	Condition	Timing	Status	Evidence/Comments
10f	<p>Marine environmental quality.</p> <p>Maintain capacity at all times to contain stormwater that has the potential to be contaminated within the boundary of the premises up to a 2% Annual Exceedance probability 24-hour rainfall event. The height of bund walls must not be less than 3 metres.</p>	Ongoing	Compliant	Will be reviewed through the audit program and verification of the approved design
10g	<p>Marine environmental quality.</p> <p>Ensure that any stormwater that has the potential to be contaminated with hydrocarbons is retained on the premises and treated through an oily water separation device to a quality in accordance with Table 1 of Appendix 2 of this approval.</p>	Ongoing	Compliant	Will be reviewed through the audit program, verification of the approved design, reporting on environmental monitoring
10h	<p>Marine environmental quality.</p> <p>Ensure and be able to validate that any water (including stormwater) discharged from the premises does not contain a contaminant or waste, except as specifically authorised by another condition of this approval.</p>	Ongoing	Compliant	Will be reviewed through the audit program, verification of the approved design, reporting on environmental monitoring
10i	<p>Marine environmental quality.</p> <p>Ensure that wastewater (not including sewage) is not discharged from the premises unless all other reasonably practicable measures for re-use or controlled removal of wastewater from the premises have been excluded, in accordance with the waste management hierarchy.</p>	Ongoing	Compliant	Will be reviewed through the audit program, verification of the approved design, reporting on environmental monitoring
10j	<p>Marine environmental quality.</p> <p>Ensure any discharge of wastewater to the environment from the premises, after consideration of condition 10i, must:</p> <ul style="list-style-type: none"> <li>l) be controlled, such as through a pipe, in a manner that does not cause erosion;</li> </ul>	Ongoing	Compliant	Monitoring has been performed in accordance with the Wastewater Release EMP.

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	<p>II) be recorded, including details of the date, time, discharge point location, name of the person monitoring the discharge, and the volume and rate of discharge; and</p> <p>III) be of a quality that meets 95% species protection for marine water under the Australian &amp; New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018), except as specifically authorised by another condition of this approval.</p>			
10k	<p>Marine environmental quality.</p> <p>Implement best available practices for:</p> <p>I) Handling, transport, storage, use and disposal of firefighting foams containing PFAS; and</p> <p>II) Phasing out use of firefighting foams containing PFOA, PFOS, PFHxS, and precursor compounds to PFOA, PFOS, and PFHxS where this does not compromise safety requirements.</p>	Ongoing	Compliant	Implementation of the ISO 14001 Environment Management System (EMS) and the associated policies, manuals, procedures and registers reporting in the CAR.
10l	<p>Marine environmental quality.</p> <p>The approval holder must conduct surface water and groundwater quality monitoring within the premises, in accordance with the monitoring program under condition 7 that measures the parameters listed in Appendix 2.</p>	Ongoing	Compliant	<p>Reporting on environmental monitoring</p> <p>Monitoring has been conducted in accordance with the Wastewater Release EMP.</p> <p>Appendix C provides evidence of inspections and monitoring undertaken during the reporting period and all non conformances reported and any actions closed out.</p> <p>See Appendix C.</p>
11a	<p>Air Quality.</p> <p>Take all reasonably practicable measures during the planning, design, construction, operation, remediation and closure of the</p>	Ongoing	Compliant	Audit program and verification of the approved design

## Project Caymus Compliance Assessment Report

Condition No.	Condition	Timing	Status	Evidence/Comments
	action to avoid and mitigate impacts attributable to the action on air quality beyond the boundary of the premises.			
11b	Air Quality. Plan, design, construct, operate, remediate and close the action using best available techniques to minimise emissions of volatile organic compounds to air.	Ongoing	Compliant	Audit program and verification of the approved design
11c	Air Quality. Within 20 business days after the commencement of construction of the action, complete: <ul style="list-style-type: none"> <li>I) a Level 1 air quality impact assessment (AQIA) of the operational design of the action; and</li> <li>II) if required following completion of the Level 1 assessment, a Level 2 (refined dispersion modelling) AQIA for operation of the action.</li> </ul>	By 2 March 2022 for Level 1 AQIA Level 2 TBC	Compliant	11 August 2022 Crowley provided a revised Air Quality Impact Assessment (AQIA) report for Project Caymus facility pursuant to condition 11 of Environmental Approval EP2021/008-001 to construct and operate a bulk fuel storage facility.
11d	Air Quality. Undertake the AQIA in accordance with Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (State of NSW and Environment Protection Authority [EPA] 2016 or latest version), to the satisfaction of the CEO. An AQIA report must be provided to the CEO within 20 business days of completing the AQIA.	By 30 March 2022	Compliant	11 August 2022 Crowley provided a revised Air Quality Impact Assessment (AQIA) report for Project Caymus facility pursuant to condition 11 of Environmental Approval EP2021/008-001 to construct and operate a bulk fuel storage facility.

## Project Caymus Compliance Assessment Report

Condition No.	Condition	Timing	Status	Evidence/Comments
11e	<p>Air Quality.</p> <p>Ensure control equipment for tanks storing jet fuel includes:</p> <ul style="list-style-type: none"> <li>I) in tanks with F34 flammable jet fuel, a floating cover constructed of material impervious to vapour that, under normal operating conditions, floats on the surface of the liquid inside a fixed roof; and</li> <li>II) if the AQIA undertaken in accordance with conditions 11c and 11d indicates that there is the potential for significant impacts to air quality from the action beyond the boundary of the premises, a vapour recovery system (no incineration) at loading/ unloading points.</li> </ul>	Ongoing	Compliant	Verification of the approved design during the first audit and the AQIA Report
11f	<p>Air Quality.</p> <p>Implement emission mitigation measures for volatile organic compounds (no incineration) if the turnover of the total volume of 300 million litres (ML) of stored jet fuel on the premises is exceeded in any year.</p>	Ongoing	Compliant	This will be tracked annually during operation of the facility.
11g	<p>Air Quality.</p> <p>Undertake annual monitoring for total volatile organic compounds and BTEX at the boundary of the operating premises in accordance with approved air emission monitoring techniques in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA 2016), or latest version, to the satisfaction of the CEO. The results from annual monitoring must be evaluated as part of the Compliance Assessment Reporting process required under condition 6.</p>	Ongoing	Compliant	Submission of an annual air quality monitoring report at the end of 12 months monitoring (February 2024) and reference in the CAR to the CEO in electronic form by emailing <a href="mailto:environmentalregulation@nt.gov.au">environmentalregulation@nt.gov.au</a>
11h	<p>Air Quality.</p> <p>Within the period of the first turnover and during a period in which the action is operating under predicted maximum emission levels</p>	By the completion of the first turnover TBC	Not applicable	Submission of air quality monitoring program and reports and the CAR to the CEO post first turnover.

# Project Caymus Compliance Assessment Report

Condition No.	Condition	Timing	Status	Evidence/Comments
	<p>(i.e. during tank filling}, undertake a sampling program to confirm the air emission performance of the premises. The sampling program must measure, as a minimum:</p> <ul style="list-style-type: none"> <li>I) organic vapours concentration at point source discharge point/s such as tank vents or</li> <li>II) vapour recovery systems using the appropriate test method/s.</li> </ul>			
11i	<p>Air Quality.</p> <p>Within six weeks of sampling referred to in condition 11h (unless otherwise agreed by the CEO), provide a written verification report to the CEO. The report must:</p> <ul style="list-style-type: none"> <li>I) include all analytical results of sampling required for all discharge points (any external report must be reproduced in full);</li> <li>II) include all the information listed in section 4 (meteorological data) of the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA 2016), or latest version;</li> <li>III) describe all the operational parameters during sampling;</li> <li>IV) compare analytical results from sampling against final design emission specifications and modelled emission parameters in the AQIA required under conditions 11c and 11d.</li> </ul>	Within 6 weeks of sampling conducted under the Air Quality Monitoring Program.	Not applicable	Submission of air quality monitoring program and reports and the CAR to the CEO post first turnover
11j	Air Quality.	Ongoing	Not applicable	Review air quality monitoring data and compare with AQIA modelling within the Annual Air Quality Monitoring report.

## Project Caymus Compliance Assessment Report

Condition No.	Condition	Timing	Status	Evidence/Comments
	<p>Ensure that where any comparison under condition 11 i identifies measured emission concentrations or rates above the emissions characteristics in the revised AQIA or the Protection of the Environment Operations (Clean Air) Regulation 2021 standards of concentration:</p> <p>I) re-assess and evaluate both the emission concentrations against the relevant NSW Clean Air Regulation standards of concentrations and the impacts against the relevant impact assessment criteria in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016), or the latest version; and/or</p> <p>II) identify and record as part of the EMS measures to be implemented to reduce emissions of air pollutants to no greater than those predicted in the AQIA (required under condition 11c and 11d).</p>			
11k	<p>Air Quality.</p> <p>Ensure the final design, installation and operation of the plant does not preclude the ability for air pollution emissions controls to be retrofitted.</p>	Ongoing	Compliant	Audit program and verification of the approved design
12a	<p>Closure of action.</p> <p>The approval holder is required to assess the premises for contamination in accordance with the National Environment Protection (Assessment of Site Contamination) Measure (as amended from time to time). If the premises is contaminated, it must be remediated in accordance with the CRC CARE National Remediation Framework prior to closure of the action, or as otherwise specified to the satisfaction of the CEO.</p>	As notified	Not applicable	Implementation of the ISO 14001 Environment Management System (EMS) and the associated policies, manuals, procedures and registers reporting in the CAR.
12b	<p>Closure of action.</p>	Compliant	Not applicable	Implementation of the ISO 14001 Environment Management System (EMS) and the associated policies, manuals, procedures and registers reporting in the CAR.

# Project Caymus Compliance Assessment Report

Condition No.	Condition	Timing	Status	Evidence/Comments
	The approval holder must submit to the CEO a plan for closure of the action within a period not less than three (3) years prior to closure of the action, or within a period determined by the CEO if the environmental approval is revoked by the Minister.			

Compliance Status: C = Compliant, CLD = Completed, NA = Not Audited, NC = Non-compliant, NR = Not required at this stage. Note the terms VR = Verification Required and IP = In Process are only for DEPWS use.



## References:

Project Caymus NT Environmental Approval, 2021 (EP2021/008 – 002)

Project Caymus Compliance Assessment Plan, 2023

## **Appendix A: Compliance Assessment Plan Approval**

31 October 2023

Mr June Cafirma  
HSSE Manager  
Crowley Australia Pty Ltd  
GPO Box 1018  
DARWIN NT 0801

Via email [June.Cafirma@crowley.com](mailto:June.Cafirma@crowley.com)

Dear Mr Cafirma

**Re: Project Caymus – Compliance Assessment Plan Approval**

Thank you for submitting the Compliance Assessment Plan (CAP) for Project Caymus as required by Environmental Approval EP2021/008 – 002.

I am satisfied that the Compliance Assessment Plan satisfies the requirements of condition 6b of the environmental approval. In accordance with condition 6c, Crowley Australia Pty Ltd is required to assess compliance with conditions in accordance with the Plan.

I note that Condition 6f of the approval required submission of the first Compliance Assessment Report by 29 February 2023. This requirement has not been met. Given the time since the report was due, and that the Compliance Assessment Plan has just been finalised, the Compliance Assessment Report due on 29 February 2024 must assess compliance in accordance with the Plan for the period 29 November 2021 to 28 November 2023 (that is, the first two years of the approval). Thereafter, reports must be submitted annually addressing compliance for the 12 month period commencing on 29 November each year, as per condition 6f of the approval.

If you have any questions about this matter, please contact Henry Berko, Senior Environment Officer, via email to [environmentalregulation@nt.gov.au](mailto:environmentalregulation@nt.gov.au).

Yours sincerely



Joanne Townsend  
Chief Executive Officer

## **Appendix B: Commencement of the Action**

---

From: Joanne Townsend <Joanne.Townsend@nt.gov.au>  
Sent: Thursday, 17 February 2022 12:45 PM  
To: Richard McAllister  
Cc: Amy Dennison; Gemma Sheridan; Henry Berko; Thomas, Sean; Watson, Angela; Chris Mouat  
Subject: RE: Commencement of action EP2021/008 - 001 - Project Caymus Bulk Fuel Storage Facility

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Richard,

Thank you for your email and notification advice.

We are working through a more streamlined method of notification which may result in advice on an alternate email address for future correspondence.

Regards

**Joanne Townsend**

Chief Executive Officer  
Department of Environment, Parks and Water Security  
Northern Territory Government

Floor 1, Goyder Building, Chung Wah Terrace, Palmerston  
PO Box 496, Palmerston, NT 0831

P: +61 8 8999 3662  
M: +61 401 116 180  
E: [joanne.townsend@nt.gov.au](mailto:joanne.townsend@nt.gov.au)

W: [Department of Environment, Parks and Water Security](#)

W: [Parks and Wildlife Commission](#)

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From: Richard McAllister <richard.mcallister@pfeng.com.au>  
Sent: Tuesday, 15 February 2022 11:53 AM  
To: Joanne Townsend <Joanne.Townsend@nt.gov.au>

Cc: Amy Dennison <Amy.Dennison@nt.gov.au>; Gemma Sheridan <Gemma.Sheridan@nt.gov.au>; Henry Berko <Henry.Berko@nt.gov.au>; Thomas, Sean <Sean.Thomas@crowley.com>; Watson, Angela <Angela.Watson@crowley.com>; Chris Mouat <Chris.Mouat@nt.gov.au>  
Subject: Commencement of action EP2021/008 - 001 - Project Caymus Bulk Fuel Storage Facility

Hi Jo,

Please find attached notification of commencement of action as required under section 1(b) of EP2021/008 - 001 - Project Caymus Bulk Fuel Storage Facility, signed by Sean Thomas, Director, Crowley Australia.

If you have any questions, please don't hesitate to contact myself, Sean or Angela, copied into this email.

Best Regards

Richard

Richard McAllister  
Regional Director – Northern Territory  
MEnvEngSci FIEAust CPEng EngExec MAuslMM  
President Northern Division Engineers Australia



T (08) 7922 4100  
E richard.mcallister@pfeng.com.au | W www.pfeng.com.au  
Suite 1, 8 Knuckey Street Darwin NT 0800 | PO Box 104 Parap NT 0804



## **Appendix C: Environmental Monitoring and Inspections**

**Table 1 Environmental Monitoring & Inspections**

Date	Time	Activity	Location	Inspection Team	pH	TSS	Turbidity (NTU)
23/02/2022	-		Vopak Site Outlet		-		6.4
23/02/2022	-		Basin Spillway		-		21.7
23/02/2022	-		Site Outlet		-		11
25/02/2022	11:40		Spillway Outlet		-		10.07
25/02/2022	11:45		Sed Basin		-		36.2
25/02/2022	11:50		Dirty water (upstream of forebay)		-		164
25/02/2022	12:30		Drainage Easement (US of SW)		-		13.69
25/02/2022	12:35		Drainage Easement (DS of SW)		-		25.7
25/02/2022	12:40		Drainage Easement (DS of SW - Sed Fence Issue)		-		56.9
25/02/2022	12:45		Drainage Easement (US of Site Outlet - Basin Side)		-		29.5
25/02/2022	12:50		Drainage Easement (US of Site Outlet - Access Side)		-		11.9
25/02/2022	12:55		Site Outlet		-		20
4/03/2022	11:40		Site Outlet		-		0.85
4/03/2022	11:45		Sed Basin		-		6.17
11/03/2022	11:40		Site Outlet		-		2.11
11/03/2022	11:45		Sed Basin		-		4.09
18/03/2022	11:40		Site Outlet		5.4		1.73
18/03/2022	11:45		Sed Basin		5.5		9.13
18/03/2022	11:55		Near Vopak Property Boundary		5.7		
19/10/2022	15:00		Sed Basin 1 - Upstream	Ethan Dilettoso June Cafirma	6.6		4.65
19/10/2022	15:10		Sed Basin 1 - Midway	Ethan Dilettoso June Cafirma	6.9		13.26



# Project Caymus Compliance Assessment Report

19/10/2022	15:25		Sed Basin 2 - Near outlet	Ethan Dilettoso June Cafirma	6.9		36.2
19/10/2022	15:25		Vopak Outlet	Ethan Dilettoso June Cafirma	NIL		NIL
9/11/2022	14:00		Site Inspection	Ric Kinghorn June Cafirma	NIL		NIL
21-Nov 2022			Tank 11		7.1	32	31
21 November 2022			Middle Basin				



**LATITUDE 63, AUSTRALIA**  
 CONSTRUCTION MANAGEMENT SUPPORT  
 ABN 68 666 850 488

Mike Martin, MBA, PMP  
 Chip Anderson, PMP

<b>LATITUDE 63 CAYMUS SITE ENVIRONMENTAL INSPECTIONS - MAY 2023 thru DECEMBER 2023</b>				
<b>Inspection Type</b>	<b>Performing Entity</b>	<b>Inspection Date</b>	<b>Corrective Actions</b>	<b>Status of Corrective Actions</b>
Site Inspection/Audit	Latitude 63	5/23/2023	NONE	NA
Site Inspection/Audit	Latitude 63	6/30/2023	NONE	NA
Site Inspection/Audit	Latitude 63	7/12/2023	NONE	NA
Site Inspection/Audit	Latitude 63	8/31/2023	NONE	NA
Site Inspection/Audit	Latitude 63	10/10/2023	NONE	NA
Site Inspection/Audit	Latitude 63	11/17/2023	NONE	NA
Weekly Inspection	Byrne	11/15/2023	YES	CLOSED
Weekly Inspection	Byrne	11/24/2023	YES	CLOSED

Figure 2 Latitude 63 Environmental Monitoring and Inspections