


# Aurizon EPL 21379 Condition R4.2 – Annual Rolling Stock Performance Report (2021)

---

21 February 2022



## Plan Approval Table

Position	Name	Signature	Date
Senior Adviser Environment	Harry Egan		21/02/22

---

## Revision History

Rev	Date	Author	Comments
1	21/02/22	Harry Egan	Nil

---

# Table of Contents

<b>1.0</b>	<b>Introduction.....</b>	<b>2</b>
1.1	<i>Purpose.....</i>	2
1.2	<i>Objective.....</i>	2
1.3	<i>Scope.....</i>	3
<b>2.0</b>	<b>Rolling Stock Compliance and Maintenance Summary .....</b>	<b>4</b>
2.1	<i>Major Engine Overhauls .....</i>	4
2.2	<i>Wagon Angle of Attack .....</i>	4

## Table of Tables

<b>Table 1 – Major Engine Overhauls.....</b>	<b>5</b>
--	----------

# 1.0 Introduction

## 1.1 Purpose

Aurizon Operations Limited (Aurizon) was issued Environment Protection Licence (EPL) 21379 by the New South Wales (NSW) Environment Protection Authority (EPA) on the 05 August 2020 under the *Protection of the Environment Operations Act 1997* (the POEO Act). The EPL permits the scheduled activity 'Railway activities – rolling stock operations' on a licenced rail network.

Condition R4.2 – Annual Rolling Stock Performance Report of EPL 21379 requires Aurizon to develop an Annual Rolling Stock Performance Report for the previous calendar year and submit it to the NSW EPA by the 28 February of each year. This rolling stock performance report considers the period from the 01 January 2021 – 31 December 2021.

## 1.2 Objective

The objective of the Report is to satisfy the following EPL conditions:

*R4.2 - The licensee must submit to the EPA no later than 28 February of each year an Annual Rolling Stock Performance report for the previous calendar year (1 January to 31 December).*

*The report must include:*

- a) *the number of the licensee's locomotives that underwent a Major Engine Overhaul in the calendar year and, for each locomotive:*
  - i. *the unique identification number of the locomotive;*
  - ii. *details of the class, type/model, the engine manufacturer and engine model; and*
  - iii. *the date of the Major Engine Overhaul.*
  
- b) *details of all locomotives identified under Condition M5.3(e) and a summary of the noise mitigation measures in the plan of management required by Condition M5.3(e) that were undertaken and completed during the calendar year, if any.*
  
- c) *details of any unacceptable Angle of Attack event identified for a freight wagon of a priority wagon class within the meaning of this licence during the calendar year for the purposes of Condition M5.2. These details must include:*
  - i. *the unique identification number of each freight wagon involved and the time and date of any unacceptable Angle of Attack event at a Wayside Monitoring System location;*
  - ii. *whether the freight wagon identified under Condition R4.2(c)(i) has been rectified in accordance with Condition U5 of this licence, or when rectification is scheduled to occur for the identified freight wagon; and,*
  - iii. *where a freight wagon of a priority wagon class that has been subject to rectification under Condition U5 has recorded an unacceptable Angle of Attack, the additional measures to ensure the wagon has an acceptable Angle of Attack and timeframes for implementation of those measures.*
  
- d) *the number of freight wagons of a priority wagon class that underwent rectification under Condition U5 during the reporting period and for each freight wagon:*

- i. the unique identification number of the freight wagon;*
- ii. details of the class of the freight wagon; and*
- iii. a summary of the corrective measures undertaken to rectify the freight wagon, including the date of freight wagon rectification.*

### 1.3 Scope

The Report considers Aurizon wagons and locomotives that operated or were scheduled to operate over the John Holland Rail, Transport for NSW (TfNSW) and Australian Rail Track Corporation (ARTC) NSW licenced rail networks from the 05 August 2020 – 31 December 2020.

## 2.0 Rolling Stock Compliance and Maintenance Summary

### 2.1 Major Engine Overhauls

A summary of Aurizon locomotives that underwent a major engine overhaul, inclusive of locomotives identified under Condition M5.3(e) which require mitigation measures to address noise level or tonal non-compliances are listed in **Table 1**. Where reasonable and feasible mitigation measures have been proposed and submitted to the EPA for approval as part of a rectification management plan this has also been included.

As per the Condition E.1.1 of the EPL a major engine overhaul is defined as either:

*“A scheduled maintenance procedure that either replaces, or inspects and qualifies each and every power assembly of the locomotive engine. A major engine overhaul will not include unscheduled maintenance to replace these components due to unforeseen failure of engine component(s) prior to scheduled maintenance; or*

*Installation of a remanufactured or freshly manufactured engine into an existing locomotive...”*

### 2.2 Wagon Angle of Attack

During the reporting period and in consultation with TfNSW, Aurizon undertook a review of its operational fleet and recorded Angle of Attack (AoA) alarms respectively. Following this review, Aurizon confirms that it is currently not operating any freight wagons of a priority class that have a non-complaint AoA.

As no priority wagons with an unacceptable AoA or having recorded an AoA event were identified no rectifications measures were required during the reporting period.

**Table 1 – Major Engine Overhauls**

Class	Locomotive Identification #	Type	Engine Manufacturer	Engine Model	Date of Overhaul <sup>^</sup>	Mitigation Measures	Mitigation Measure Time Frame	Date Mgmt Plan Submitted to EPA*	Date Plan Approved by EPA
5020	5022	C44aci	Wabtec	GE 7FDL-16	8/04/2021	Nil	Nil	22/09/2021	N/A
5020	5030	C44aci	Wabtec	GE 7FDL-16	27/09/2021	Nil	Nil	25/10/2021	N/A
5020	5035	C44aci	Wabtec	GE 7FDL-16	29/06/2021	Nil	Nil	22/09/2021	N/A
5020	5037	C44aci	Wabtec	GE 7FDL-16	24/08/2021	Nil	Nil	22/09/2021	N/A
6000	6006	C44aci	Wabtec	GE 7FDL-16	11/08/2021	Nil	Nil	22/09/2021	N/A
6000	6024	C44aci	Wabtec	GE 7FDL-16	1/01/2021	Nil	Nil	22/09/2021	N/A
6000	6027	C44aci	Wabtec	GE 7FDL-16	1/04/2021	Nil	Nil	22/09/2021	N/A
6000	6029	C44aci	Wabtec	GE 7FDL-16	2/01/2021	Nil	Nil	22/09/2021	N/A
6000	6021	C44aci	Wabtec	GE 7FDL-16	17/12/2021	Nil	Nil	17/02/2022	N/A
6000	6026	C44aci	Wabtec	GE 7FDL-16	8/12/2021	Nil	Nil	17/02/2022	N/A
<b>Total Number of Locomotives that underwent a Major Engine Overhaul between 01 January 2021 to 31 December 2021:</b>									<b>10</b>

\* RE: EPL 21379 Condition M5.3(e): In Services Noise Testing Reporting (Aurizon) Issued on the 22 September 2021, 25 October 2021 and 17 February 2022.

<sup>^</sup> Release date.