

**Pacific National Pty Ltd**

**Environmental Protection Licence 21364**

**Annual Rolling Stock Performance Report**

**5 August – 31 December 2020**

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# 1. Annual Rolling Stock Report

Pacific National Pty Ltd ('PN') is the holder of Environmental Protection Licence 21364 ('EPL 21364'). In accordance with Condition R4.2, PN is required to submit an Annual Rolling Stock Report ('the Report') by 28 February for the previous calendar year reporting period.

As EPL 21364 was not activated until the 5 August 2020, this Annual report is for the reporting period 5 August 2020 to 31 December 2020.

Requirements for this Report and listed in **Table 1**.

**Table 1: Condition R 4.2: Annual Rolling Stock Report**

No.	Requirement	Location in Report
<b>R4.2</b>	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:	
<b>a</b>	a) the number of the licensee's locomotives that underwent a Major Engine Overhaul in the calendar year and, for each locomotive:	Section 2.1
<b>i</b>	<i>the unique identification number of the locomotive;</i>	Table 2 Appendix A
<b>ii</b>	<i>details of the class, type/model, the engine manufacturer and engine model; and</i>	Table 2 Appendix A
<b>iii</b>	<i>the date of the Major Engine Overhaul.</i>	Table 2 Appendix A
<b>b</b>	<i>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.</i>	Section 2.2 Table 2 Appendix A
<b>c</b>	<i>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>	Section 2.2
<b>i</b>	<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;</i>	Appendix A
<b>ii</b>	<i>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,</i>	Appendix A
<b>iii</b>	<i>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,</i>	Not Yet Applicable

No.	Requirement	Location in Report
	<i>the additional measures to ensure the wagon has an acceptable Angle of Attack and timeframes for implementation of those measures.</i>	
<b>d</b>	<i>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>	
<b>i</b>	<i>the unique identification number of the freight wagon;</i>	Appendix A
<b>ii</b>	<i>details of the class of the freight wagon; and</i>	Appendix A
<b>iii</b>	<i>a summary of the corrective measures undertaken to rectify the freight wagon, including the date of freight wagon rectification.</i>	Appendix A

## 2. Major Engine Overhaul

A locomotive Major Engine Overhaul is defined as per the Stock Licence Dictionary of EPL 21364 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.*

**Table 2** provides a overview of locomotives which underwent major engine overhauls during this reporting period.

**Table 2: Locomotive Major Engine Overhauls for Reporting Period**

Loco ID	Locomotive Class	Engine Manufacturer	Engine Model	Date of Overhaul	Noise testing completed (Y/N)
TT113	TT class	EMD	16-710G3C-ES2	7/08/2020	No
NR106	NR Class	GE	7FDL	7/08/2020	No
NR108	NR Class	GE	7FDL	13/08/2020	No

Loco ID	Locomotive Class	Engine Manufacturer	Engine Model	Date of Overhaul	Noise testing completed (Y/N)
9206	92 class	GE	7FDL	21/08/2020	No
TT109	TT class	EMD	16-710G3C-ES2	28/08/2020	No
NR039	NR Class	GE	7FDL	1/09/2020	No
NR038	NR Class	GE	7FDL	9/09/2020	No
9030	90 class	EMD	16-710G3A	21/09/2020	No
NR052	NR Class	GE	7FDL	29/09/2020	No
NR094	NR Class	GE	7FDL	7/10/2020	No
TT111	TT class	EMD	16-710G3C-ES2	8/10/2020	No
9214	92 class	GE	7FDL	16/10/2020	No
NR015	NR Class	GE	7FDL	16/10/2020	No
TT114	TT class	EMD	16-710G3C-ES2	3/11/2020	No
NR049	NR Class	GE	7FDL	4/11/2020	No
9211	92 class	GE	7FDL	6/11/2020	No
NR005	NR Class	GE	7FDL	13/11/2020	No
NR037	NR Class	GE	7FDL	30/11/2020	No
9029	90 class	EMD	16-710G3A	7/12/2020	No
NR016	NR Class	GE	7FDL	9/12/2020	No
9215	92 class	GE	7FDL	10/12/2020	No
TT118	TT class	EMD	16-710G3C-ES2	11/12/2020	No
NR024	NR Class	GE	7FDL	18/12/2020	No

### 3. Locomotive Noise Testing

Condition M5.3 and R4.2 b requires noise performance testing on locomotives undergoing a major engine overhaul.

For the reporting period, the required noise monitoring of locomotives as per conditions prescribed in EPL 21364 were not undertaken. Pacific National takes seriously this omission and offers the following explanation and rectification steps to ensure that future compliance obligations are met in accordance with EPL 21364.

In July 2020, Pacific National had completed a significant internal corporate and company restructure which ultimately led to a significant number of internal redundancies and re-alignment of accountabilities and responsibilities throughout the organisation. This significant internal transformation contributed to a lack of change management process in relation to the obligations under the EPL, which contributed to the oversight of not ensuring that noise monitoring was being scheduled in-line with the scheduled major engine overhauls.

This lack of change management process and communication was further complicated by the current arrangement of all our major engine overhauls being conducted by external third parties who were not aware of or informed of the new EPL obligations.

Since becoming aware of this significant failure in our change management procedure. Pacific National has implemented the following.

Pacific National has in the last 12 months implemented a compliance/obligations management platform (CAMMS) to ensure that obligations required under our EPL are captured and managed within CAMMS. CAMMS records the obligation, assigns an obligation Owner and an obligation Action owner who has accountability and responsibility to ensure that compliance and obligation requirements are met. We have also inserted EPL requirements into our overarching internal HSE Assurance program to ensure that where relevant, specific obligations are reviewed and assessed for internal compliance on an annual basis.

Pacific National are in the process of finalising the engagement of a “competent acoustic practitioner” to undertake this work and have engaged with our external service providers contracted to undertake the engine overhauls to ensure alignment and requirements.

Pacific National regrets this failure in our change management process and is committed to ensure that all obligations under the EPL are adhered to.

## 4. Angle of Attack

Priority Wagon Classes are defined<sup>1</sup> to as:

*a class of freight wagons, as identified to the licensee by Transport for NSW, requiring rectification in accordance with Transport for NSW’s standard titled THR RS 00400 ST RSU 400 Series – Minimum Operating Standards for Rolling Stock – Freight Vehicle Specific Interface Requirements Version 2.0 Issued date: 24 August 2017, and being one of the following priority wagon classes: RKWY, RQCY, VQCY, RKFX, RRY, CQWY, RKM, RKY, RBY, RRY, RKCX, RKHF, VQTY, RQTY, PBGY, ABSY, CQJY, CQGY, CQYY, CQEY, CQPY.*

For reporting year Appendix A summaries the AoA events and wheel recitation status for identified priority wagons.

- The priority wagon AoA exceedance data set as provided by TfNSW is provided as **Appendix A** (Sheet 2).
- Identification of wagons exceeding the AoA threshold at Beecroft are identified in **Column B** of **Appendix A** (Sheet 2).
- The rectification status of the priority wagons is detailed in **Column K** of **Appendix A** (Sheet 2).

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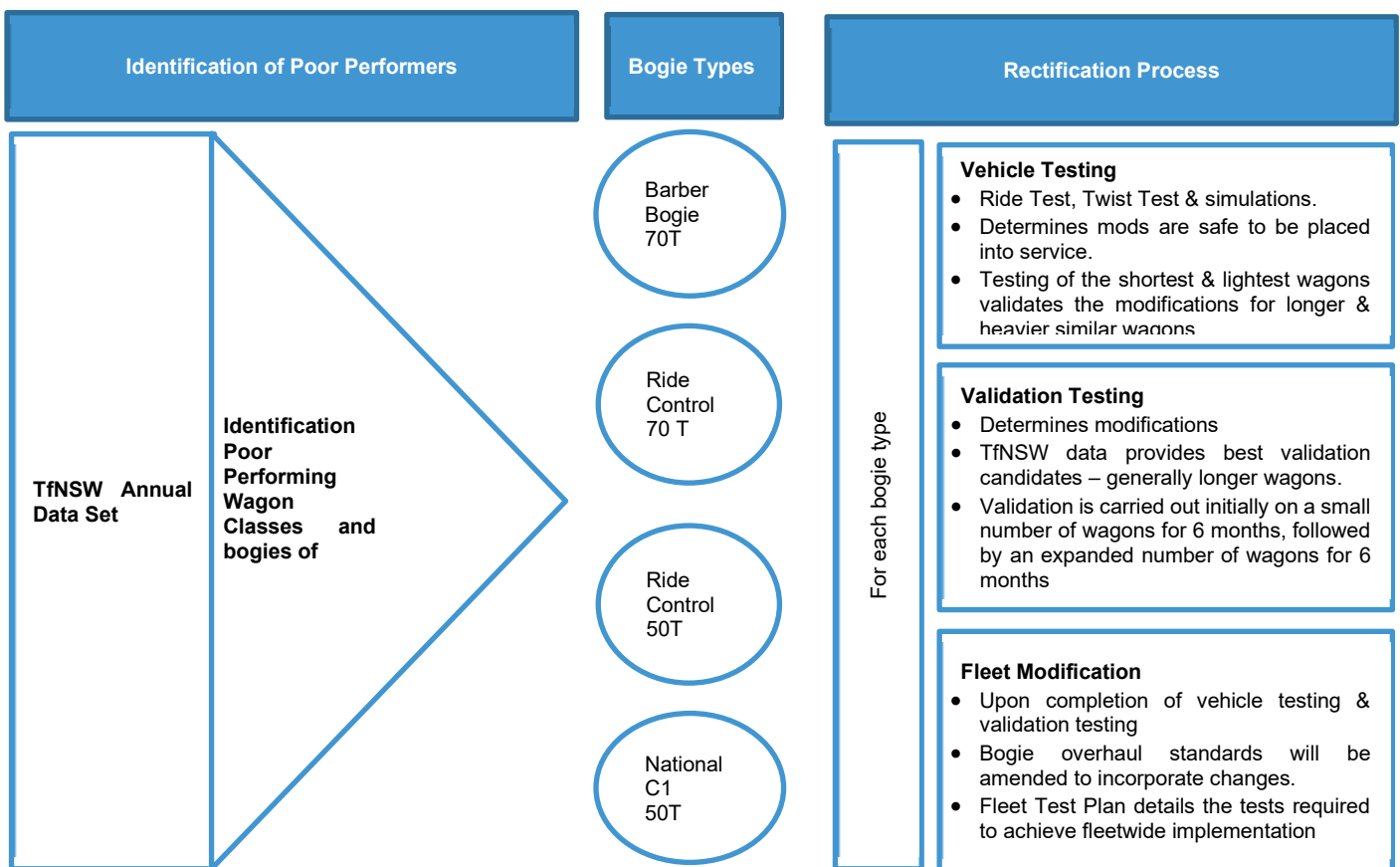
<sup>1</sup> EPL 21364 Part 8, Condition E1 Rolling Stock Operations Licence Dictionary, p23.

## 5. Wagon Wheel Rectification

The scheduling of priority wagon rectifications is dependent upon the final results of wagon testing and verification currently being undertaken by Pacific National in accordance with the Annual Wheel Squeal Rectification Plan submitted to Transport for NSW<sup>2</sup>.

Pacific Nationals 2020 Rectification Plan presented a fleet wide approach targeting bogie types that are represented in the TfNSW AoA exceedance data, rather than a focus on individual wagons reporting exceedances.

The process for rectification adopted by PN in 2021 is unchanged from that presented in the 2020 Rectification Plan and is summarised in **Figure 1**.



Pacific National identified 4 bogie types that represent the extent of the PN fleet that require investigation for the priority wagons. These bogies types are;

<sup>2</sup> Asset Standard Authority in accordance with RSU 400 Series – Minimum Operating Standards for Rolling Stock – Freight Vehicle Specific Interface Requirements - 2.7.1 Wagon (bogie) steering performance requirements.

- 70 T Barber Bogie;
- 70 T Ride Control;
- 50 T Ride Control; and
- 50 T National C1.

Using a staged rectification process, each of the bogie type will undergo **Vehicle Testing** and **Validation Testing** prior to the implementation of **Fleet Modification**.

Pacific National has made progress despite the constraints imposed upon operations during 2020 as a result of the COVID19 pandemic with wagon testing and advancing the position of validation tests.

- 70T Ride Control bogie modifications provide the most promising prospects of timely roll out of fleet modifications at this time.
- 70T Barber bogie modifications still require improvement to meet TfNSW performance expectations and PN have implemented trials of further modifications towards this.
- 50T Ride Control bogie modifications closely follow that of the 70T variant; therefore we remain hopeful that this modification proves effective.

Completing wagon testing and progressing validation trials remains our focus for 2021.

Regards,

A handwritten signature in black ink, appearing to read 'Troy Favell'.

Troy Favell

**Manager: Environment & Sustainability**

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## Appendix A: Annual Rolling Stock Performance Data