

Management of Locomotive Exhaust Emissions

CODE OF PRACTICE



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1 Introduction

1.1 Purpose

This Code of Practice describes recommended practices for the management and improvement of exhaust emissions of diesel freight locomotives in the Australian railway industry.

Diesel locomotives create several emissions with adverse effects on the environment or human health, including diesel particulates (PM), oxides of nitrogen (NOx) and greenhouse gases (GHG).

In the Australian context, PM and GHG emissions are considered higher priority issues than NOx emissions. This Code of Practice seeks to address these Australian environmental considerations through a balanced approach to these competing emissions outcomes. As such this Code of Practice has reflected the broader priorities in addressing locomotive emissions.

It is recognised that equivalent or better ways of achieving the required emissions outcomes may be possible. For this reason, compliance with this Code of Practice is not mandatory, providing that any other method used provides an equivalent or improved emissions outcome than is defined in this Code of Practice.

1.2 Scope

This Code of Practice covers all diesel locomotives used for the haulage of freight in Australia, including both for hire and reward, and those used as part of the production process.

It is not applicable to:

- heritage locomotives not used for any commercial freight tasks;
- locomotives used solely for the haulage of passengers;
- other on-rail diesel engines e.g. those used in track maintenance machinery.

1.3 Definitions

Capability compliant: a locomotive which meets or exceeds the relevant standards in Table 1.

Certification: means a formal statement from a supplier (or where applicable an operator) of the emission level from a locomotive confirming that equipment (either an engine, locomotive, or parts installed for reducing locomotive emissions) has been tested and is compliant with the relevant emission level in this Code of Practice. Certification of one engine as compliant shall be accepted as evidence of compliance by all locomotives similarly engined and configured. ("type testing").

Testing data or certification of an engine or kit undertaken overseas shall be accepted as evidence of performance in Australia unless such use is expressly forbidden by the supplier.

Compliant maintenance: means the configuration, operation and maintenance of components and systems affecting locomotive emissions as directed by the original equipment manufacturer (OEM), or in the case of an upgrade, the kit supplier, or as modified by changes to best practice, so that emissions conform to the certification provided.

Due date: is 10 years after the effective date.

Duty cycle: The amount of time a locomotive spends in each throttle notch setting ("notch").

Effective date: is 1 December 2018 being the first day of the first month falling more than 12 months after the publication of this Code of Practice.