

24 Environmental management

This chapter outlines the environmental management approach for the Project during construction and operation. The environmental management approach for the Project has been informed by a number of multi-disciplinary workshops to ensure that key Project personnel are aware of the environmental performance outcomes.

24.1 Overview

The following environmental management approach has been adopted for the Project during construction:

- The Environmental Impact Statement provides an overview of how environmental impacts would be managed during construction and includes the:
 - Construction Environmental Management Framework (CEMF) (**Appendix D**)
 - Construction Noise and Vibration Strategy (CNVS) (**Appendix E**)
 - Performance outcomes and mitigation measures (**Section 24.4**).
- Construction environmental management documentation to be prepared in line with the CEMF and this EIS includes the:
 - Construction Environmental Management Plan (CEMP)
 - CEMP Sub-Plans
 - Performance and compliance reports.

This approach is illustrated in **Figure 24-1** and has been developed to be consistent with legislative and regulatory requirements. The key piece of legislation that will govern environmental management for the Project is the EP&A Act. A range of other legislation is also applicable to the construction of the Project as identified in Section 2 of the CEMF (**Appendix D**).

During operation, the Project would be operated in accordance with Sydney Trains Safety and Environmental Management System.

The Project would need to be delivered in accordance with any conditions of approval issued under the EP&A Act, as well as any other permits or licences required.

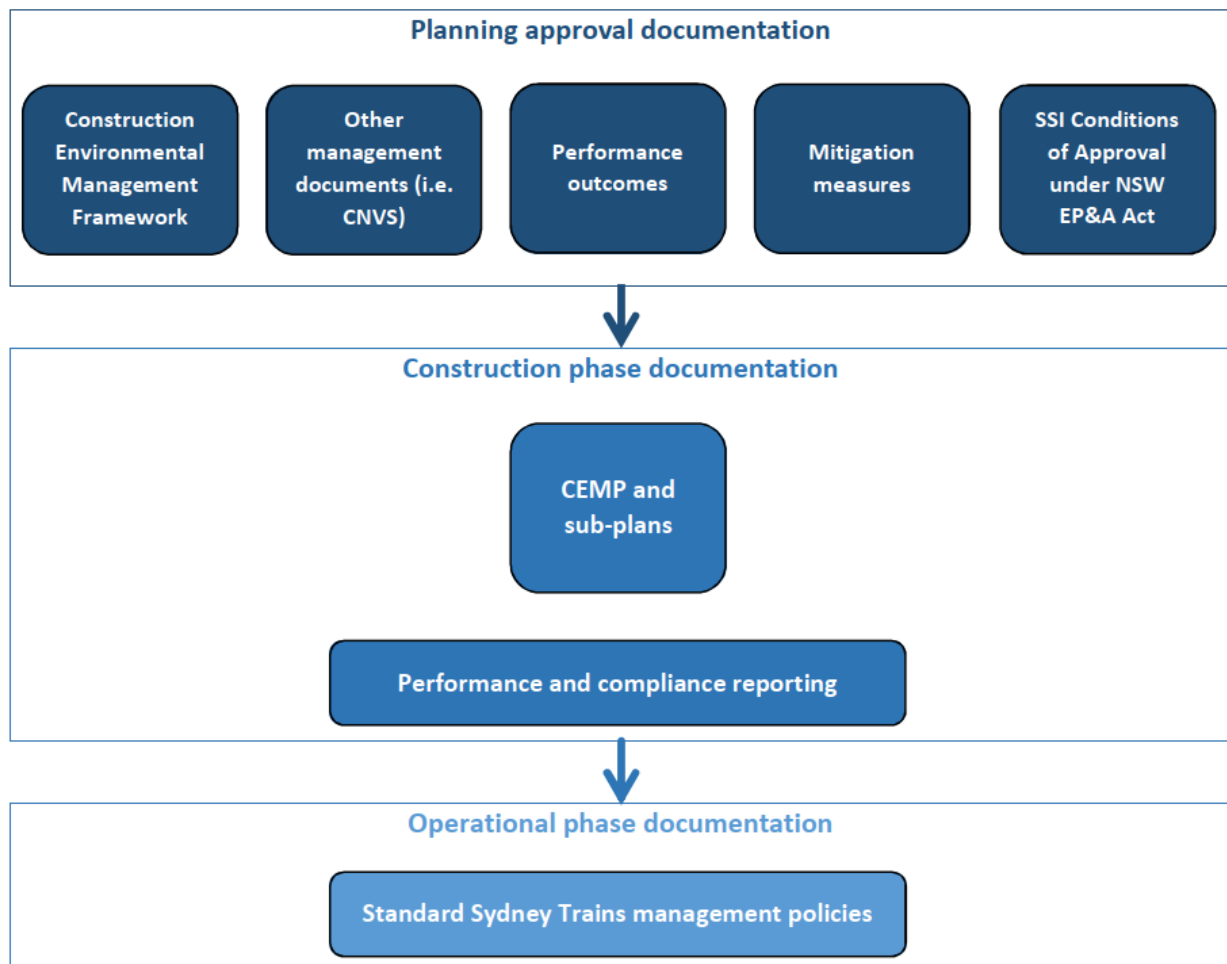


Figure 24-1 Construction and operation environmental management approach

24.2 Construction Environmental Management Approach

24.2.1 Construction Environmental Management Framework

The CEMF is the primary document that will drive the environmental management approach during construction (**Appendix D**). The CEMF provides a whole-of-construction life-cycle approach to construction environmental management and includes a range of commitments including the preparation of specific environmental management plans and sub-plans. The early engagement of a construction contractor has enabled TfNSW to prepare the CEMF tailored to the construction contractors' systems.

The CEMF identifies the environmental, stakeholder, and community management systems and processes that would be applied during each stage of construction. Specifically, it lists the requirements to be addressed in developing the CEMP, sub-plans, and other supporting documentation for each specific environmental aspect. The CEMF also identifies protocols for approvals, environmental monitoring, inspections, auditing, reporting and review.

24.2.2 Construction Noise and Vibration Strategy

The TfNSW CNVS (refer to **Appendix E**) defines how construction noise and vibration impacts would be managed for the Project.

The strategy identifies the requirements and methodology to develop construction noise and vibration impact statements. These would be prepared prior to specific construction activities, based on a more detailed understanding of construction methods, including the size and type of construction equipment.

The strategy is based on the following strategic objectives:

- a risk-based approach to implementing a hierarchy of controls at each stage of the Project lifecycle to minimise potential impacts
- active collaboration with internal and external stakeholders in building the approach to reducing potential noise and vibration impacts at each stage of the Project lifecycle
- development of a clear understanding of potential noise and vibration impacts and the application of best-practice management techniques
- community engagement that is sensitive to the needs and expectations of local communities and businesses
- commitment to the continuous improvement of noise and vibration management.

24.2.3 Construction Environmental Management Plan and sub-plans

A CEMP would be prepared for the Project. The CEMP would address the relevant requirements of CEMF and CNVS and include performance outcomes, mitigation measures and applicable conditions of approval.

The CEMP would include relevant sub-plans for the management of potential environmental impacts and opportunities in relation to specific environmental issues such as air quality, biodiversity, etc. The CEMP would also include the following:

- a description of applicable activities to be undertaken during construction
- an environmental risk and opportunities methodology
- a matrix of the relevant Conditions of Approval or Consent referencing where each requirement is addressed
- outline the objectives and targets, in defined performance outcomes
- environmental accountabilities or responsibilities
- induction and training requirements
- management strategies for reviewing the effectiveness of mitigation measures
- processes and methodologies for surveillance and monitoring, auditing and review, and reporting on environmental and sustainability performance including compliance tracking
- procedures for emergency and incident management, non-compliance management, and corrective and preventative action
- procedures for the control of environmental records.

This is described in further detail in Section 3.3 of the CEMF.

24.2.4 Construction performance and compliance reporting

The CEMP would include a range of construction performance and compliance reporting requirements to ensure the SSI conditions of approval and performance outcomes (refer to Section 25.5.1) are met. A compliance monitoring and reporting program would be implemented to ensure non-compliances, corrective and preventative actions are properly identified, managed and documented.

24.3 Operational environmental management

The Project has been designed to minimise environmental impacts during operation.

The approach to environmental management during operation involves:

- performance outcomes and mitigation measures for the Project (refer to **Section 24.4**)
- operational environmental management and maintenance would be undertaken in line with the Sydney Trains and Safety Environmental Management System. These standard policies include incident and emergency management procedures.

24.4 Performance outcomes and mitigation measures

24.4.1 Performance outcomes

Performance outcomes for the Project have been developed, and included in technical chapters throughout the EIS, consistent with the requirements of the SEARs. The performance outcomes for the Project are summarised in Section 25.7 of **Chapter 25** of this EIS and identify measurable, performance-based standards for environmental management.

24.4.2 Mitigation measures

As outlined above, a framework for the development of a CEMP and its sub-plans to manage potential environmental impacts are included in the CEMF and CNVS.

Project specific mitigation measures have been developed through the preparation of this EIS to mitigate and manage the potential impacts of the Project. These are summarised in Section 25.6 of **Chapter 25** of this EIS. These project specific mitigation measures would also be included within the CEMP and its sub-plans.

The mitigation measures may be revised in response to submissions raised during public exhibition and/or any design changes made following exhibition. The revised list of mitigation measures would be provided in the Response to Submissions.