

Environmental effects of selected
Port rebuild & development plans

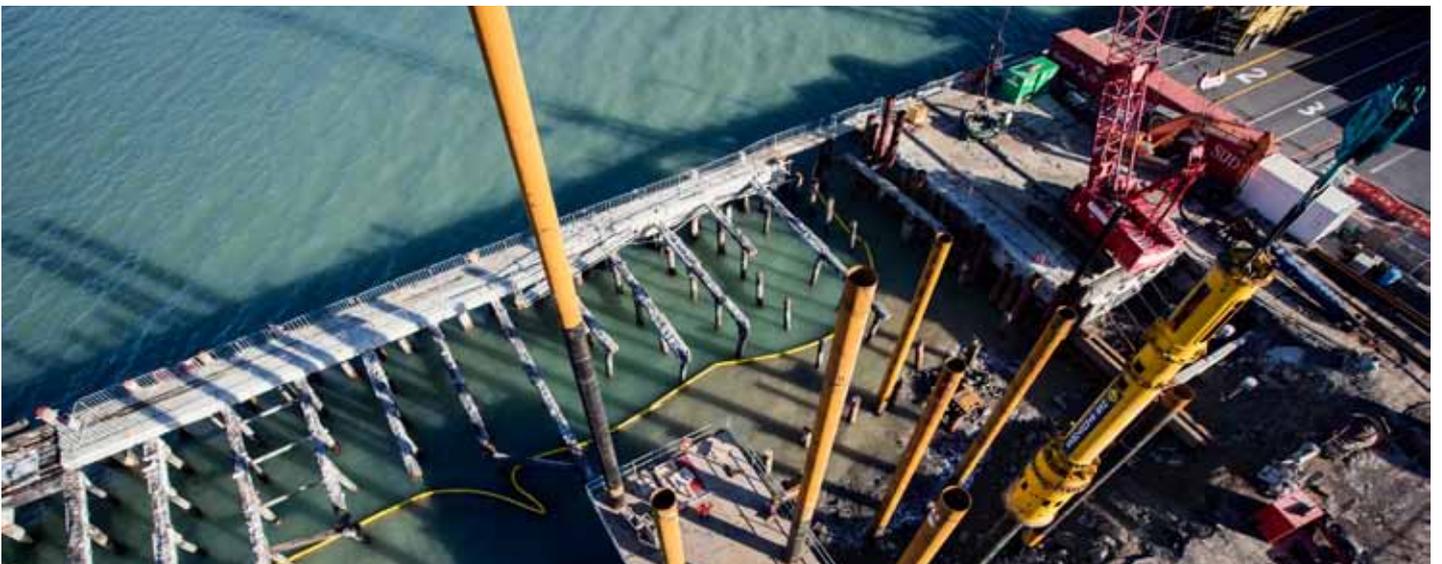
CONSTRUCTION & ENVIRONMENTAL MANAGEMENT MANUAL OUR RULES



Lyttelton Port of Christchurch (LPC) has prepared an industry-leading, comprehensive environmental management manual for ALL construction jobs undertaken at the Port.

The Manual is our rule-book for ensuring highest standard environmental performance and protection during construction on Port land. It sets mandatory controls that contractors **MUST** put in place to protect the wider Whakaraupō/Lyttelton Harbour area. Every construction job on Port land will have an individual Construction Environmental Management Plan prepared in accordance with The Manual.

The Manual was prepared with input from Environment Canterbury, Te Hapū o Ngāti Wheke, and a wide range of technical experts. This brochure outlines key aspects of The Manual.





THE MANUAL

The Construction Environmental Management Manual includes three key components:

1. Guidance on the local environmental setting, including the environmental and cultural values of Whakaraupō/Lyttelton Harbour.
2. Detailed technical guidance on: environmental risk assessment, role and responsibilities, the relevant performance standards,
3. Project specific templates for the contractors to develop Construction Environmental Management Plans and populate with information specific to their location and construction methods.

appropriate mitigation measures and controls, monitoring and reporting requirements and contingency measures.



WHAT IS A CEMP?

Prior to any construction-related activities being undertaken on LPC land, a Construction & Environmental Management Plan (CEMP) must be produced by the contractor. This plan is to outline the type of work being undertaken, the environmental effects of the works and the ways these effects will be controlled or mitigated. LPC's role is to provide guidance to contractors preparing CEMPs, sign off CEMPs, and oversee their implementation.

From managing dust and hazardous substances through to sediment control and archaeological issues, the CEMP will ensure that any adverse environmental effects are minimised.

Designed to ensure contractors and LPC apply a consistently high standard in environmental management practices, a CEMP will define:

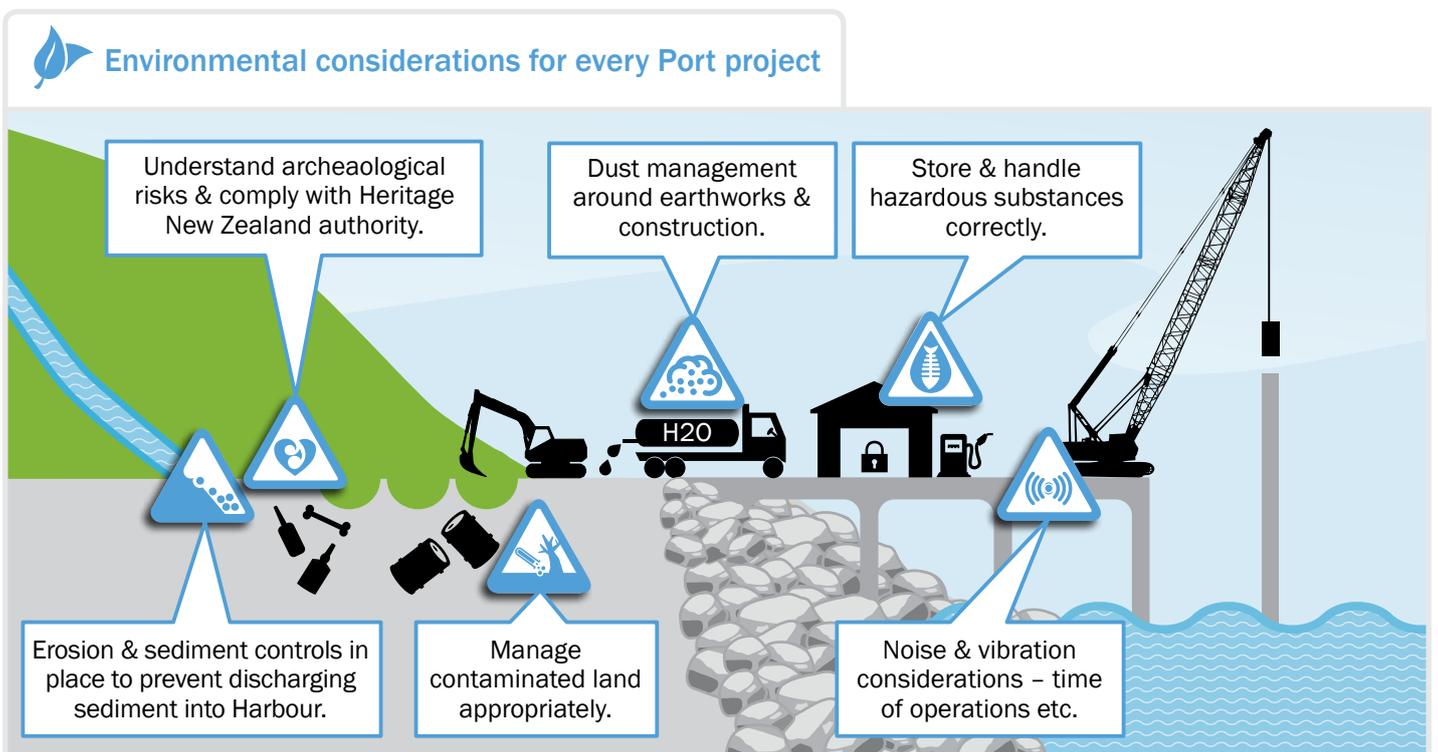
- WHAT environmental management or mitigation measures are to be applied

- WHO will be responsible for the implementation of these measures
- WHERE these measures will be implemented
- WHEN these measures will be required.

Minimum acceptable standards, methods to assess risks and procedures to monitor effects both during and after the construction project are also included in a CEMP.

Any contractor working on Port land will be required to produce a CEMP for each specific project.

After receiving approval from LPC, construction work can commence. Regular site audits/inspections combined with reviews of monitoring data will give LPC assurance that the contractor is implementing appropriate practices to minimise environmental effects.





ENVIRONMENTAL ISSUES COVERED



Noise & vibration

- Manage noise by limiting hours and days of operation.
- Construction noise for simple cases is to be calculated using procedures from New Zealand Standard 6803 Acoustics – Construction Noise.
- Engage an acoustics specialist if complex noise calculations are required.
- Monitor noise at project commencement and if methodology & equipment change during the project.
- Apply mitigation methods or methodology changes provided by LPC or acoustics specialist.
- For marine based piling, contractors must adopt the LPC Marine Piling Management plan to protect noise-sensitive marine species.
- Undertake investigations and report on any complaints received.

For further information regarding the management of construction noise, see the Sights & Sounds brochure and Chapter 11 of Appendix 28. For information specifically relating to the impact of noise on marine mammals, see the Marine Life brochure.



Dust management

- Erect effective barriers around dusty activities.
- Locate dust-causing activities away from sensitive neighbours.
- Use surface watering & high pressure watering during windy conditions.
- Securely cover debris and minimise drop heights.

- Limit extent of earthworks during dry, windy conditions.
- Use real-time dust monitoring (i.e. hand held monitor) at the site boundary during dry weather to assess compliance with dust trigger levels.

For more information about the management of dust, see Chapter 7 of Appendix 28.



Erosion & sediment control

- The use of sediment curtains during construction-related dredging and reclamation.
- Prompt sealing of any road or pavement works and prompt removal of all excavated materials.
- The use of silt fences, straw bale barriers or filter socks to prevent run-off.
- Placement of “armour” rock on face of reclamation area to protect reclamation from erosion.
- Use of biodegradable batter blankets, grassing and mulching to protect disturbed land from erosion.
- Stage the works to ensure only the land where works will occur immediately is disturbed.

For more information on mitigations to control erosion and sediment, see Chapter 10 of Appendix 28.



Archaeology

- Use Port-wide archaeological assessment to understand risk.
- Work with the project archaeologist 3 weeks in advance of work commencing to assess the risk of any construction work on the site.

- Notify Te Hapū o Ngāti Wheke at least one month prior to works commencing if they are in an area with a high likelihood of disturbing a Maori archaeological site.
- Cultural monitor in place if requested by Te Hapū o Ngāti Wheke.
- Document all archaeological mitigation requirements.
- Adhere to the legal obligation to stop work and inform the project archaeologist of the discovery of any suspected archaeological sites.
- Undertake all works in a manner ensuring compliance with all authority requirements under the Heritage New Zealand Pouhere Taonga Act 2014.

For more information about controls measures to protect archaeological sites, see Chapter 9 of Appendix 28.



Contaminated land

- Adopt and implement a Contaminated Soil Management Plan.
- Work closely with the Contaminated Land Specialist throughout the works process.
- Manage and contain any contaminated soil encountered during excavation or rebuild works.
- Manage potential effects during works such as odour, dispersal of contaminated dust and contaminated stormwater run-off.
- Follow appropriate procedures to arrange disposal of the contaminated material.

For more information about processes & mitigations for managing contamination, see Chapter 8 of Appendix 28.



Hazardous substances

- Storage, use & disposal of hazardous substances must comply with the Resource Management Act and the Hazardous Substances & New Organisms Act.
- Transport to and from site of any hazardous substances will comply with the Land Transport Management Act.
- Any stored hazardous substances will be appropriately and clearly labelled.
- Storage facilities that hold large substances of hazardous materials will be designed & operated to prevent or reduce the potential for spills or leaks.
- Emergency Response Plans will be used to minimise environmental effects from any incident or event.

For more detailed information on the management of hazardous substances during construction work, see Chapter 12 of Appendix 28.



MORE DETAIL

The content of this document has been summarised from a number of comprehensive studies commissioned by LPC. For detailed data you are encouraged to access the complete reports at www.portlytteltonplan.co.nz.

The following report relates to the CEMP:
APPENDIX 28 – CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN, Tonkin & Taylor Ltd



Port Talk

If you want to have a chat with us, we are at Port Talk on the corner of Oxford and London Streets every Friday, 11am–1pm, or you can email us at communications@lpc.co.nz.



Website www.portlytteltonplan.co.nz

We have established a website that has lots of information and answers to common questions about our plans, and their effects on the local community and environment.



Other communication

Updates will be available in our quarterly newsletter in hardcopy or digital form. Pick up a hardcopy at Port Talk, or go to www.lpc.co.nz to download a pdf.