



PORT
OTAGO



Port Noise Mitigation Plan – Port Chalmers

Reviewed May 2024

Port Noise Mitigation Plan - Port Chalmers

1 Definitions

- 1.1 **“Acoustic Certificate”** means a certificate signed by an acoustic engineer approved for the purpose by the Port Noise Liaison Committee certifying Acoustic Treatment of a residential property and specifying a Certified Level of Port Noise.
- 1.2 **“Acoustic Treatment”** means acoustical treatment of a “Noise Sensitive Space” that achieves an indoor design noise level of 40 dB $L_{dn (5 \text{ day})}$. Indoor noise levels shall be based on port noise at or below the “Certified Level of port noise”, either with ventilating windows open or with mechanical ventilation. This shall include the cost of testing and obtaining an Acoustic Certificate within Noise Sensitive Space.
- 1.3 **“Certified Level of Port Noise”** is the maximum level of Port Noise that a residential property subject of an Acoustic Certificate can receive provided that the Certified Level of Port Noise for any property is set 3 decibels above the noise contour level for that property shown on the Port Noise Contour Map at the date the certificate was issued.
- 1.4 **“Fair Market Value”** is the value of a property assessed in accordance with section 8 of this plan.
- 1.5 **“House Value”** is the value of a house only excluding the value of land or chattels determined in accordance with section 8 of this plan.
- 1.6 **“Inflation Adjusted”** means the adjustment of monetary values from 7 November 2003 to the date of calculation by the percentage increase in CPI (or its equivalent).
- 1.7 **“ $L_{dn (5 \text{ day})}$ ”** means the 5 day “Day Night Average Sound Level” as defined in NZS6801:1999 which is the time averaged sound level obtained after the addition of 10 decibels in the night (10pm-7am).
- 1.8 **“Mechanical Ventilation”** means either:
- (i) *A mechanical system or mechanical ventilation systems capable of:*
 - a) providing at least 15 air changes of outdoor air per hour in the principal living room of each building and 5 air changes of outdoor air per hour in the other habitable rooms of each building, in each case with all external doors and windows of the building closed with the exception of such windows in non-habitable rooms that need to be ajar to provide air relief paths;
 - b) enabling the rate of airflow to be controlled across the range, from the maximum airflow capacity down to 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;

- c) limiting internal air pressure to not more than 30 Pascals above the ambient air pressure;
- d) being individually switched on and off by the building occupants, in the case of each system; and
- e) creating no more than 40 dB L_{Aeq} in the principal living room, no more than 30 dB L_{Aeq} in the other habitable rooms, and no more than 40 dB L_{Aeq} in any hallway, in each building. Noise levels from the mechanical system(s) shall be measured in accordance with AS/NZS 2107:2016 “Acoustics - Recommended design sound levels and reverberation times for building interiors”.

or:

(ii) *Air conditioning plus mechanical outdoor air ventilation capable of:*

- a) providing internal temperatures in habitable rooms not greater than 25 degrees Celsius at 5% ambient design conditions as published by the National Institute of Water & Atmosphere Research (“NIWA”) (NIWA, Design Temperatures for Air Conditioning (degrees Celsius), Data Period 1991-2000), with all external doors and windows of the habitable rooms closed;
- b) providing 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
- c) each of the air conditioning and mechanical ventilation systems shall be capable of being individually switched on and off by the building occupants;
- d) creating no more than 40 dB L_{Aeq} in the principal living room, no more than 30 dB L_{Aeq} in the other habitable rooms, and no more than 40 dB L_{Aeq} in any hallway, in each building. Noise levels from the mechanical system(s) shall be measured in accordance with AS/NZS 2107:2016 “Acoustics - Recommended design sound levels and reverberation times for building interiors” and
- e) a mechanical kitchen extractor fan ducted directly to the outside to serve any cooking hob if such extractor fan is not already installed and in sound working order.

1.9 “**Noise Affected Property**” (plural is “**Noise Affected Properties**”) Any property within the port noise control mapped area where the Port Noise Contour Map shows any point within the boundary receiving levels of port noise above 55 dB L_{dn} (5 day). This definition excludes properties:

- a) that have received acoustic treatment; and
- b) are receiving port noise at or below the certified level of port noise.

1.10 “**Noise Mitigation Budget**” is the sum of money allocated by Port Otago for noise mitigation in accordance with paragraph 3.1 of this Plan. **Schedule 1** details the budget for the next financial year.



- 1.11 **“Noise Officer”** is the noise officer appointed by Port Otago pursuant to the Port Noise Management Plan.
- 1.12 **“Noise Sensitive Space”** means a room used for a “Noise Sensitive Activity” as defined in the Dunedin City Council Second Generation District Plan.
- 1.13 **“Port Noise”** means noise generated within the Port Zone and the adjacent coastal marine area associated with
- a) port activities, excluding:
 - noise from ships not at berth;
 - noise from construction of permanent port facilities (see definition of construction noise); and
 - noise from an emergency situation.
- 1.14 **“Port Noise Contour Map”** means a noise contour map produced by Port Otago pursuant to its obligations under the Port Noise Management Plan showing Port Noise levels (L_{dn} (5 day)) based on a current busy 5-day operating scenario to provide for the identification of Noise Affected Properties.
- 1.15 **“Port Noise Management Plan”** means the Port Noise Management Plan prepared by Port Otago pursuant to Rule 30.5.4 Dunedin City Council Second Generation District Plan
- 1.16 **“Port Otago”** refers to Port Otago Limited.
- 1.17 **“Property Owner”** means the Registered Proprietor or Registered Proprietors of a property.
- 1.18 **“Specified Acoustic Payment”** is the greater of:
- a) \$33,027 inflation adjusted; or
 - b) Half of the House Value of the property in question.

2 Introduction

- 2.1 This plan implements the requirements in the Dunedin City Council Second Generation District Plan (“the 2G Plan”) and Port Noise Management Plan for Port Otago to have and implement a Port Noise Mitigation Plan.
- 2.2 The minimum criteria for this Plan are specified in the 2G Plan and, if any provisions of this Plan are in conflict with the provisions of the 2G Plan, then the provisions of the 2G Plan prevail.
- 2.3 Acoustic Treatment must be done in accordance with rules 9.3.1.2, 9.3.1.3 and 9.3.6 of the 2G Plan.



3 Port Noise Liaison Committee Expenditure

- 3.1 The Port Noise Liaison Committee shall recommend expenditure from the Noise Mitigation Budget for noise mitigation measures including (but not limited to):
- a) Payment of evaluation, inspection, acoustic treatment, and certification for Noise Affected Properties;
 - b) Research into noise mitigation issues; and
 - c) Modifications to plant and equipment.
- 3.2 The Port Noise Liaison Committee shall assign priorities to such expenditure to the extent such recommendations exceed the Noise Mitigation Budget in any year.
- 3.3 Port Otago shall take all practical steps to implement the recommendations of the Port Noise Liaison Committee that are for Acoustic Treatment for Noise Affected Properties and shall take all practical steps to implement other recommendations that are cost-effective and do not compromise the efficiency safety and effectiveness of its port operations provided that Port Otago's financial obligations in any financial year shall be limited to the amount specified in the Noise Mitigation Budget.
- 3.4 The Noise Officer shall report to the Port Noise Liaison Committee as to the implementation of recommendations made by the Committee identifying the manner and effects of implementation and (if not implemented) the reason for non-implementation.
- 3.5 The Noise Mitigation Budget money will be deemed to have been spent by the Noise Liaison Committee when the money has been committed for expenditure by Port Otago or, where the money is to be spent on Acoustic Treatment, when an agreement has been signed between the affected property owner and Port Otago for Acoustic treatment.
- 3.6 The Noise Mitigation Budget allocation will not be carried over to the next financial year and a new budget will be set for each financial year.
- 3.7 The Noise Mitigation Budget for this financial year is outlined in **Schedule 1**.

4 Education and Information

- 4.1 The Noise Officer shall contact the occupiers of all Noise Affected Properties to advise of Port Noise issues and keep them informed of Port Noise Liaison Committee documents, the latest version of the Noise Contour Map, the Port Noise Management Plan, and the Port Noise Mitigation Plan.
- 4.2 The Noise Officer shall send a copy of the Port Noise Contour Map to the Dunedin City Council and Port Noise Liaison Committee within 28 days of the Port Noise Contour Map being amended.

5 Acoustic Treatment for Properties on Port Noise Contour Map above 55 dBA

- 5.1 Where the predicted noise level in the Port Noise Contour Map is between 55 dB $L_{dn(5\text{ day})}$ and 59 dB $L_{dn(5\text{ day})}$ at any point within the boundary of a Noise Affected Property, the Port Noise Liaison Committee shall consider requests for assistance with Acoustic Treatment up to a maximum subsidy of 50% of the cost of Acoustic Treatment with a maximum payment of \$33,027 (inflation adjusted as at Q4 2023).



- 5.2 Where predicted noise levels in the Port Noise Contour Map exceed 59 dB L_{dn} (5 day) at any point within the boundary of a Noise Affected Property, but the property does not fall within the provisions of paragraph 7.1 hereof then the Port Noise Liaison Committee shall consider applications for Acoustic Treatment up to a maximum limit of \$33,027 (inflation adjusted as at Q4 2023) and with the Port Noise Liaison Committee having discretion to agree to payment of 100% the actual cost up to this figure.
- 5.3 The Port Noise Liaison Committee may recommend that Port Otago obtain an assessment of the property by an acoustic engineer prior to any recommendation being made as to Acoustic Treatment of the property.
- 5.4 The Port Noise Liaison Committee shall consider the following factors in consideration of all applications for Acoustic Treatment or assistance with Acoustic Treatment:
- a) The property's position on the Port Noise Contour Map.
 - b) The internal noise levels in noise sensitive spaces within the property.
 - c) The effect of Port Noise on the occupiers' enjoyment of the property.
 - d) The priority that the request should have to the money available in the Noise Mitigation Budget taking into account priorities set by the Committee and other actual or likely requests for assistance.
 - e) Any assessment carried out on the property by an acoustic engineer.
 - f) Any other factor that the committee considers to be relevant or of assistance.
- 5.5 When a property is recommended to receive Acoustic Treatment under clause 5.4 of this plan then:
- a) Port Otago may require the property to be assessed by an acoustic engineer prior to any decision being made so the cost and effectiveness of Acoustic Treatment can be determined with a copy of such assessment being given to the property owner and the Port Noise Liaison Committee.
 - b) The property owner will enter into a contract with Port Otago for the completion of the Acoustic Treatment which, inter alia, requires that the work be of sufficient standard to enable an Acoustic Certificate to be issued for the property.
 - c) Port Otago has the right to arrange the Acoustic Treatment where it is paying the total cost of Acoustic Treatment.

6 Voluntary Purchase of Properties on Port Noise Contour Map above 59 dBA

- 6.1 Port Otago shall consider the purchase of each property where the predicted noise level in the Port Noise Contour Map exceeds 59 dB L_{dn} (5 day) at any point within the boundary but does not fall within the provisions of paragraph 7.1 herein on a case-by-case basis on application by the property with the purchase being on the basis of a "willing buyer/willing seller" and without any additional payments being made by Port Otago.
- 6.2 Any property owner who wishes to make an application under this provision should contact the Noise Officer in the first instance.



7 Rights of Property Owners Receiving 65 dBA and above

- 7.1 A Noise Affected Property will qualify as receiving Port Noise at a level of 65 dBA or above if the sound level from Port Noise received at any point within the boundary is equal to or greater than an assessed:
- 65 dB L_{dn} (5 day), or
 - 65 dB L_{Aeq} (15 minute) during the night-time period (10 p.m. to 7 a.m.) on more than three occasions (more than 24 hours apart) during any rolling 12-month period.
- 7.2 Any property owner that has a Noise Affected Property receiving Port Noise at a level of 65 dBA and above is at any time able to accept an open offer from Port Otago to either:
- a) Purchase the property in accordance with the mechanism set out in paragraph 7.3 of this Plan; or
 - b) Provide Acoustic Treatment as provided for in paragraph 7.4 of this Plan.
- 7.3 The procedure agreed to by Port Otago to offer to purchase a Noise Affected Property for the purposes of paragraph 7.2 of this plan is:
- a) Port Otago shall purchase the property for the Fair Market Value together with an additional payment for all property owners who purchased the property before 31 December 2003;
 - b) The additional payment shall be \$2,000 for a property owner who purchased the property after 31 December 2001;
 - c) The additional payment shall be \$1,000 for each year or part year in which the property owner owned the property prior to 31 December 2003 up to a maximum sum of \$15,000 for all property owners who purchased the property before 31 December 2003.
- 7.4 The procedure agreed to by Port Otago to provide Acoustic Treatment for a Noise Affected Property for the purposes of paragraph 7.1 of this Plan is:
- a) Port Otago will arrange to have the property assessed by an acoustic engineer to determine the cost of Acoustic Treatment.
 - b) Port Otago may (at its option) determine the House Value in accordance with section 8 of this plan.
 - c) If Port Otago considers that the Acoustic Treatment can be carried out for a cost not exceeding the Specified Acoustic Payment, then Port Otago shall enter into a contract with the property owner whereby Port Otago carries out Acoustic Treatment on the house and provides an Acoustic Certificate to the property owner.
 - d) If the Acoustic Treatment cannot be carried out for the maximum Specified Acoustic Payment then Port Otago shall forthwith advise the property owner of the property of the cost of Acoustic Treatment and give the property owner the option of entering into a contract with Port Otago to ensure Acoustic Treatment is carried out to a sufficient standard to enable Port Otago to obtain an Acoustic Certificate for the property with Port Otago contributing the amount of the Specified Acoustic Payment towards the cost of such Acoustic Treatment.



7.5 If Port Noise received by any Noise Affected Property that has received Acoustic Treatment in accordance with paragraph 7.4 of this plan increases to the extent that it exceeds the Certified Level of Port Noise for that property, then the property owner may require Port Otago to purchase the property pursuant to clause 7.2 of this Plan, notwithstanding the previous election of Acoustic Treatment.

8 Procedure for Determining Value of Properties

8.1 The Fair Market Value and/or House Value for the purposes of this Plan shall be calculated as follows:

- a) Port Otago shall appoint a registered valuer to assess the Fair Market Value and the House Value and in carrying out that assessment the value shall be determined as if the property was situated in Port Chalmers excluding the effect of the use of land and buildings for the operation of Port Otago's port at Port Chalmers. This includes, but is not limited to:
 - i. mooring, berthing, departure, manoeuvring, refuelling, storage, maintenance, and repair of vessels
 - ii. embarking and disembarking of passengers
 - iii. loading, unloading and storage of cargo; and
 - iv. any ancillary activities associated with the operation of the facility, including offices, storage and staff facilities.
- b) Port Otago shall give to the property owner notice in writing of the registered valuer's assessment of the Fair Market Value and the House Value together with a copy of the registered valuation obtained by Port Otago.
- c) If the property owner wishes to dispute the Fair Market Value and/or the House Value, then the property owner shall specify what he or she believes to be the Fair Market Value and the House Value and support such assertion with a registered valuation within 21 days of receiving the valuation from Port Otago.
- d) If Port Otago does not agree with the property owner's assessment of the fair market value and/or the house value, then the valuers appointed by Port Otago and the property owner shall meet and endeavour to agree upon the value or values in dispute.
- e) If the valuers are unable to agree upon the value or values in dispute, then they shall appoint an umpire and the determination shall be referred to the umpire whose determination shall be binding on Port Otago and the property owner.
- f) In determining the Fair Market Value and/or the House Value all valuers shall act as experts and not arbitrators.
- g) Either Port Otago or the property owner may make submissions to the valuers or to the umpire, but in all respects the determination shall be conducted in the manner determined by the valuers or the umpire.
- h) The costs and expenses of the umpire shall be equally shared between Port Otago and the property owner.



9 Measurement of Noise

- 9.1 Port noise must be measured in accordance with NZS 6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with NZS 6809:1999 Acoustics – Port Noise Management and Land Use Planning, provided that:
1. measured $L_{Aeq (15 \text{ minute})}$ levels shall be adjusted for special audible characteristics in accordance with clause 7.3 and A6 of NZS6809:1999 except where the sound of interest arises from log handling or container handling activities; and
 2. adjustments for any special audible characteristics to any $L_{Aeq (15 \text{ minute})}$ made in accordance with clause 7.3 and A6 of NZS6809:1999 exclude audible warning devices.
- 9.2 In calculating any $L_{dn (5 \text{ day})}$ one ship visit of up to five days duration shall be deemed to be one occasion.
- 9.3 In assessing any $L_{Aeq (15 \text{ minutes})}$ sound level between 10 p.m. and 7 a.m. the following day, one ship visit of up to five days duration shall be deemed to be one occasion.

10 General

- 10.1 A property purchased by Port Otago pursuant to clause 7.2 of this plan may not be used for residential purposes unless an Acoustic Certificate has been obtained for the property and the Port Noise received by the property does not exceed the Certified Level of Port Noise for that property.
- 10.2 The Port Noise Liaison Committee will provide technical advice to Noise Affected properties.
- 10.3 The following shall be made available to property owners on request and shall be published on the Port Otago website:
- a) An annual update of noise modelling information; and
 - b) An annual summary of the activities of the Port Noise Liaison Committee taken from the minutes of the liaison committee meetings.

11 Alterations to this Plan

- 11.1 This Plan may be altered by resolution of the Board of Port Otago.
- 11.2 Any amendments to this Plan will not take effect unless and until consented to by both the Dunedin City Council and the Otago Regional Council.



Schedule 1

Budgeted Item	Forecast Budget
Upgrade to noise monitoring system	\$200,000
Acoustic treatment of property	Up to \$33,027
Update of Port Noise contours, maps and management plan	\$15,000

