

Cruise ship emissions

What is the Eden Breakwater Wharf Extension Project?

The project will extend the existing Eden Breakwater Wharf, and dredge the approach channel and berth pocket with offshore disposal, to accommodate the berthing of cruise ships of up to 325m in length at the Port of Eden.

The project will benefit the local economy by enabling a range of cruise ships to access the region and raise the profile of Eden and surrounds.

Construction of stage one (dredging and scour protection) commenced on 4 September 2017 and was completed on 21 February 2018. Stage two (marine structures) commenced on 27 March 2018 and is forecast to be completed in the first quarter of 2019.

What are the operating conditions for the project?

The project's State Significant Infrastructure Approval SSI7734 outlines the legislative requirements to be adhered to during construction, and once the project is completed, for the operation of the Breakwater Wharf.

The State Significant Infrastructure Approval can be reviewed on the project website industry.nsw.gov.au/lands/major-projects/infrastructure/eden/approvals-and-documents

What are the planned modifications to the operating conditions?

The NSW Government has submitted a modification request for operating conditions concerning air quality (sulphur content in fuels, cruise ship equipment maintenance and complaint handling), as well as noise amenity (noise from cruise ships whilst in the Port of Eden and complaint handling).

The modification request also provides supporting information that includes an impact assessment relating to air quality and noise amenity, proposed monitoring and additional mitigation measures.

Where can I view the modification request?

You can view the request at majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9456. Copies are also available at the Bega Valley Shire Council libraries in Bega, Eden, Tura Beach and Bermagui.

What are the cruise ship sulphur emission restrictions in Sydney?

Sulphur emission restrictions within Sydney Harbour are monitored by the Australian Maritime Safety Authority (AMSA) in accordance with directions issued by AMSA under subsection 246(1)(b) of the *Navigation Act 2012*. The directions require cruise ships to limit sulphur emissions while at berth by using low-sulphur fuel (that has a sulphur content not exceeding 0.1% mass per cent concentration), or an alternative measure that achieves an equivalent outcome. These requirements only apply to cruise ships, and not to any other type of shipping.

What are the current sulphur emission restrictions allowed by the existing State Significant Infrastructure Approval?

Although the Port of Eden is excluded from the AMSA directions for Sydney Harbour, the project's existing State Significant Infrastructure Approval requires cruise ships to limit sulphur emissions while at berth at the new facility, and while in transit, by using low-sulphur fuel (that has a sulphur content not exceeding 0.1% mass per cent concentration) or an alternative measure that achieves an equivalent outcome. The existing approval only relates to cruise ships at the Eden Breakwater Wharf.

Why has the NSW Government proposed a modification to the existing conditions regarding sulphur emission restrictions?

The NSW Government believes that the condition should be revisited following further analysis and stakeholder engagement, which has been completed on behalf of the government since the time the State Significant Infrastructure Approval was received.

The NSW Government wants to ensure the State Significant Infrastructure Approval conditions are appropriate for the Port of Eden, and provide an opportunity for the cruise industry to maximise its utilisation of the completed facility, thereby maximising the potential for economic growth in the local and regional economy, whilst also ensuring the community is not adversely impacted by cruise ship emissions.

What are the proposed modifications to the existing State Significant Infrastructure Approval conditions regarding sulphur emission restrictions?

It is proposed that sulphur emission restrictions in the Port of Eden should be consistent with the MARPOL Convention.

What is the MARPOL Convention?

The International Maritime Organisation (IMO), under Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL Convention), has set a global limit for the sulphur content in fuel used on-board ships of 0.5%, which comes into effect from 1 January 2020.

The MARPOL Convention is a global requirement applicable to all ships. It is enforceable by the Australian Government. Further information is available from the *2020 global sulphur limit Frequently Asked Questions* document available from the IMO website: www.imo.org/en/MediaCentre/HotTopics/GHG

How many cruise ships can we expect in Eden during the interim period between completion of the construction phase and the MARPOL Convention coming into effect?

The construction phase of the project will be completed approximately nine months prior to 1 January 2020. There are currently eight cruise ships scheduled to arrive at the Port of Eden during this interim period.

Will there be any sulphur emission restrictions in place during the interim period?

It is proposed that during the interim period, emissions from cruise ships berthed in the Port of Eden must not exceed the predicted concentrations contained within the Environmental Impact Statement and the Modification Request.

Have any studies or modelling of emission levels been undertaken to understand the potential air quality impacts from cruise ship emissions at the Port of Eden?

The NSW Environment Protection Authority (EPA) has set sulfur dioxide (SO₂) impact assessment criteria, which must be used when assessing impacts from cruise ship emissions.

A refined air quality assessment (dispersion modelling) has been carried out since the SSI Approval. This work has been undertaken with a focus on operations that may occur in the period prior to 2020, after which the use

of 0.5 wt%¹ sulfur fuel is mandated under the MARPOL Convention. The refined analysis considers the assessment sensitivity to fuel grade and frequency of operations at the Port of Eden.

The outcomes of the refined assessment dispersion modelling confirm that the EPA's SO₂ assessment criteria won't be exceeded when cruise ships are using either residual oil (2.7% wt% sulfur), marine distillate (0.5% wt% sulfur) or low-sulfur fuel (0.1% wt% sulfur) during the period prior to 2020.

Details of the refined air quality assessment can be viewed at majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9456 and via hard copies at the Bega Valley Shire Council libraries.

How will the NSW Government ensure emissions from cruise ships berthed in the Port of Eden do not exceed predicted concentrations?

An air quality management plan and an associated air quality operation monitoring program will be developed and implemented in consultation with the Community Consultative Committee, Environment Protection Authority, Bega Valley Shire Council and Port Authority of NSW, and to the satisfaction of the NSW Government prior to the commencement of cruise ship operations.

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¹ Percentage by weight (wt%) is a way of expressing the composition of a mixture as a dimensionless size.