

11 February 2019

Ministry of Transport
MARPOL Annex VI Submissions
PO Box 3175
Wellington 6140

Dear Sir/Madam,

Re. Submission on MARPOL Annex VI Consultation

Tasman District Council (Council) thanks the Ministry of Transport/Te Manatu Waka for the opportunity to make this submission on 'MARPOL Annex VI: treaty to reduce air pollution in ports and harbours' (the discussion document). This submission is made on behalf of Council and the community of Tasman District that it represents.

General Comments

Council welcomes the Ministry of Transport's consideration of whether New Zealand should accede to Annex VI of the International Maritime Organisation (IMO) Treaty's International Convention for the Prevention of Pollution from Ships (MARPOL).

Council supports and recommends New Zealand accedes to Annex VI, because in doing so Annex VI responds to and regulates two global problems related to shipping emissions:

- Impacts on human health and environment in port communities from maritime pollution, and
- Contributions to climate change and ozone layer depletion.

Council generally supports the submission of Nelson Marlborough Health (NBDHB Public Health Service) which focuses on the public health benefits of acceding to Annex VI.

Specific Comments

Question 5: What are the public health benefits of acceding to Annex VI?

The discussion document states that implementation of Annex VI would make a contribution to improving air quality in and around New Zealand ports. This would involve introducing domestic regulations to control harmful air pollutants (sulphur oxides, nitrogen oxides, soot) through measures such as requiring ships to switch to using low-sulphur fuels.

Secondary sulphate has been identified as an ambient air quality pollutant in Richmond, Tasman District. The results of a source apportionment study¹ undertaken by GNS Science Consultancy (November 2017) identified that secondary sulphate accounted for 14% of PM₁₀ and 8% of PM_{2.5} from filters collected at the Richmond ambient air quality monitoring station (over a monitoring period to October 2016). Secondary sulphate was the third largest source of PM_{2.5} after biomass combustion (75%) and marine aerosol (12%) over a monitoring period from October 2015 to October 2016.

¹ Davy, P.K.; and Trompetter, W.J. 2007. Apportionment of PM_{2.5} and PM₁₀ sources in the Richmond Airshed, Tasman District, GNS Consultancy Report 2017/86

The GNS report identified that secondary sulphate contributions originated from north of the monitoring site and that it is possible that shipping emissions from Port Nelson contributed to the concentrations (along with natural longer range sources such as marine phytoplankton activity and SO₂ from the Central Plateau volcanic zone). Temporal variations in secondary sulphate concentrations normally demonstrate higher concentrations during summer, however the Richmond data did not show strong seasonality which further indicates a localised emission source, such as shipping emissions. Port Nelson is located approximately 11km to the north-east of the Richmond monitoring site and between these two locations lie a number of residential suburbs of Nelson City in addition to Richmond (within Tasman District). In circumstances like Nelson and Richmond, the health and environmental effects of burning heavy fuel oils (HFO) in port are much more widespread than the immediate port area.

Tasman District's Richmond airshed is currently classified as 'polluted' under the National Environmental Standards for Air Quality (NESAQ) as the airshed has historically exceeded the ambient air quality standard for particulate matter (PM₁₀). As noted above, secondary sulphate contributes to the overall source of particulate matter in the airshed. Any reduction in this air contaminant, such as through regulations to require the use of low-sulphur fuels at Port Nelson, will help to improve the overall air quality in the airshed and assist Council in achieving compliance with the NESAQ.

Council therefore recommends that New Zealand accedes to Annex VI and regulate air pollutants in order to improve air quality in Richmond and Nelson (as well as nationally) and thus reduce the risk of harmful health effects from shipping emissions. The negative health effects of particulate matter (including secondary sulphate) is well documented internationally including irritation of eyes, throat and lungs; respiratory conditions and increased premature deaths².

Conclusion

Council thanks the Ministry of Transport for considering this submission in support of New Zealand acceding to Annex VI of the International Maritime Organisation (IMO) Treaty's International Convention for the Prevention of Pollution from Ships (MARPOL).

Yours sincerely



Dennis Bush-King
Environment and Planning Manager

² <http://www.mfe.govt.nz/air/specific-air-pollutants/particles>