

MARPOL Annex VI Roundtable Scrubbers

DATE/TIME Monday 16 November 2020, 1.30pm – 2.30pm

LOCATION Ministry of Transport, 3 Queens Wharf, Wellington – or remotely via MS Teams

Welcome, introductions, expectations for today

- Following on from earlier roundtables for Annex VI, today's meeting is about exploring the issue of exhaust gas cleaning systems (scrubbers) in greater detail.
- Today's meeting is led by the Ministry for the Environment, who are assessing the impact of scrubbers and what NZ's policy should be on the use of scrubbers in the coastal environment.

Discussion

International context

- IMO work on scrubbers is ongoing. The Marine Environment Protection Committee is looking at harmonising the rules and guidelines for scrubbers, and is due to consider a number of papers at its March 2021 meeting.
- MfE is happy to share IMO information and reports that are in the public domain.

New Zealand context

- Fuel availability and the impact of COVID on shipping are important contextual factors.

NZ shipping industry

- Commented that we don't know what the availability of compliant fuels will be and government should be taking some interest in this very important point.

Cruise industry

- An issue for NZ in coming years will be fuel availability and also being able to get compliant fuel to vessels in major ports.

Fishing industry

- Commented that the monster in the room is COVID and how it's impacting all of our supply chains. Ships from and to NZ are suffering. We should not burden the industry unduly as 95% of our goods come and go on the water.
- Advocated science based approach because if we burden shipping with any more regulatory requirements we might cease to get visits, which will impact our economy.

Scrubber numbers and trends

- There are about 4500 scrubbers worldwide. MfE estimates that about 7% of ships visiting NZ have scrubbers, which is slightly higher than the worldwide figure of 5%. This

estimate is based on data provided by the top 10 flag states visiting NZ – of 300 ships, 21 had scrubbers.

Cruise industry

- An industry survey of 272 cruise ships found that 136 have scrubbers, 37 on order. 51 have hybrid EGCS. The remainder are open loop.
- Each cruise line will do its own research and make independent decisions on technology - don't expect a trend.
- One company has a vessel in NZ with hybrid EGCS and all new ships are being installed with hybrid. Another has hybrid scrubbers on all ships operating in NZ.

MfE work on risk of hazardous substances in discharges

- MfE has commissioned a marine risk assessment which is expected early 2021.
- The MfE team has looked at a number of scientific reports on washwater assessment including the GESAMP report for PPR7 (IMO Pollution Prevention and Response Committee). A wide number of reports have been considered in the initial literature review performed for the NZ risk assessment.

Cruise industry

- Advocated a truthful, balanced, objective and science-based approach to NZ's risk assessment.
- Questioned the use of terms such as "contaminants"/"pollution" – asked if it can be classed as contamination in such minute concentrations.
- Said that level of contaminant in washwater is lower than the required standard for drinking water.
- In their view scrubbers have an unfair reputation; parties are misled to think that EGCS are extremely harmful.
- CV Delft study – emissions from scrubbers are negligible.
- MfE commented that some studies only measure the content of substances in the washwater, while others concentrate on environmental impacts, including dilution and accumulation of substances over time. MfE are keeping an open mind in their assessment of risks.

Current regulation in NZ

Ports

- Concerned that ports currently have no way of controlling discharge.

Cruise industry

- The way it's currently being managed in NZ makes it quite complex. The port agent acts on cruise company's behalf and relays information from port authorities to clients. Ships may have an opportunity to speak to harbourmasters but generally they are passing on information rather than making decisions. It's hard to engage with directly with regional councils.
- MfE expressed interest in connecting with a special interest group on the scrubber issue which has been set up by regional councils.

Public perceptions

Ports

- Discussed public concern about visual discolouration of washwater discharge. There is no requirement in rules or legislation for a treatment system to be installed. This is not a good image for ports, and to some people looks like an oil spill. It also risks non-compliance with current regional rules re discharges to water.

- One port has had three discoloured washwater incidents since January 2020. The harbourmaster has gone out to tell them washwater must be treated before discharge but it still happens. Ports can't easily get info from ships about whether it's "normal operation" - get told it's compliant. The port feels that all they can do is wait for public complaint to result in a news item.
- Other visible discharge such as non-polluting steam is also an issue for the public.

Cruise industry

- Pointed out that there is a difference between cruise and cargo ship scrubbers. Cruise scrubbers are very sophisticated, while cargo ships have some quite basic scrubbers.
- Said that as a standard cruise ships would never discharge anything in port. The ships discharging in ports are likely to be cargo ships.
- Cruise ships have continuous monitoring so should be able to produce reports on discharges.
- People see steam from the funnel and mistake it for harmful emissions - so having solved one issue we are faced with another. There needs to be education of the general public on benefits of low sulphur fuel.
- MfE commented that IMO guidelines cover turbidity and particulate matter in washwater and different treatment methods. They are working to clarify whether regional councils have power to regulate discolouration.

Thoughts on/experiences with variation in international approaches

Cruise industry

- Advocated national consistency in scrubber policy. Commented that it is difficult to operate when a regional rather than national approach is taken.
- Most countries don't have requirements to report on EGCS.
- Australia has a reporting requirement but only on the first call – ships have to advise about EGCS prior to arrival - don't follow up.
- In NZ different regions currently have different requirements which is problematic for ship operators.

Expectations for use of scrubbers in future

NZ shipping industry

- Said scrubbers are very expensive to install and run because of running repairs needed – there is no enthusiasm domestically to install scrubbers and operators are expecting to have to use diesel.
- Questioned whether there was ongoing demand for scrubbers by those currently using them.

Cruise industry

- The main driver of decisions on whether to purchase scrubbers is fuel price, rather than scrubber quality or operational cost.
- Many ships are switching to LNG.
- Cruise is committed to scrubbers as a key technology. Commented that compliant fuel availability also a reason for continued investment in scrubbers.

Fishing industry

- Unlikely to be using scrubbers.
- MfE commented that the price differential between LSFO and HSFO less than originally thought. There has been a slow-down in scrubber orders as a result. The dynamic in NZ is different due to questions about the availability of LSFO and HSFO.

Port reception facilities

Cruise industry

- Port reception facilities worldwide are extremely limited - there is no management, no discussion with operators.
- There is increasing use of hybrid scrubbers and there will be a demand for PRFs to take this waste. Ports need to be equipped to do this – they get confused and think it's an Annex I waste stream when it's Annex VI.
- A cruise ship running 24/7 will need to offload scrubber residues at least once a week.

NZ shipping industry

- There have been many complaints about insufficient PRFs in NZ (to deal with current waste streams)

Options for future management of scrubbers in NZ

Cruise industry

- Itineraries are set years ahead. If scrubbers (or open loop scrubbers) are disallowed, the only thing the industry can do is change to a compliant fuel. When a scrubber is deployed a return on investment is expected due to not having to use LSFO. A very prohibitive management context might cause some cruise lines to move operation elsewhere.
- All cruise ships run 4-6 engines with are all classed as auxiliaries to optimise efficiency. The only alternative is using shore power and ships need ability to take it with different voltages - about 40-50% of cruise ships have that.
- Management in NZ is complex (clients communicate with a dedicated port agent, who speak to Harbourmasters, and is difficult to engage with or find the right person to talk to.

Ports

- The issue of shore power is often brought up. This is a significant investment and capacity issue - to power a cruise ship would be a huge draw on regional power supply at least in Wellington. Would like a nationwide rather than regional approach.

Sensitive environments

Cruise industry

- The Deed of Agreement with Environment Southland is about internal waters and therefore not subject to IMO requirements. In the absence of a national level position they are doing what they think they need to do to avoid criticism as Fiordland is a world heritage area, but in the cruise industry's view there is no scientific basis for the position. The Deed of Agreement focuses on discharges to air, not water.
- Commented there was a need for public education on use of LSFO, many complaints from people who don't realise white plumes are mostly steam.
- MfE is considering whether a national approach is suitable but variations might be allowed for some extremely sensitive areas eg Poor Knights Islands.

Impacts and risks related to scrubber management options

Cruise industry

- Reiterated that national approach preferred, and that the IMO work will help with solutions. Risk that operators will need to go elsewhere in future if a prohibitive position taken on scrubbers.

Fishing industry

- Noted COVID challenges – getting goods into ships and overseas is important and we need to be mindful of this. Care needed not to further burden shipping, causing more impact on the economy.
- Supportive of a science and evidence based approach.