

# Notice

## ENVIRONMENT PROTECTION ACT 1970

### SECTION 22(1)

#### NOTICE TO SUPPLY FURTHER INFORMATION

**TO: AGL WHOLESALE GAS LIMITED**

**OF: LEVEL 24, 200 GEORGE STREET, SYDNEY, NSW 2000**

**WHEREAS** an application by you for a works approval number 1003907, in respect of a Floating Storage and Regasification Unit (FSRU) at the Crib Point Jetty (Berth 2), Victoria, was received by the Environment Protection Authority ("the Authority") on 25 June 2020.

**AND WHEREAS** the Authority considers the information specified herein is necessary and relevant to the consideration of the application.

**NOW TAKE NOTICE** that pursuant to section 22(1)(a) of the Environment Protection Act ("the Act") you are **HEREBY REQUIRED** to supply to the Authority by 1 February 2021 the information specified in the Attachment to this Notice.

**DATED: 19 November 2020**



.....  
QUENTIN COOKE  
DELEGATE OF THE  
ENVIRONMENT PROTECTION AUTHORITY



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# ATTACHMENT

## State Environment Protection Policy (Waters) (SEPP (Waters))

1. With respect to clause 25, provide detailed information as to whether wastewater discharges from the FSRU “provide water for the environment”, in the sense that the wastewater will be reused in some way to help protect, or provide a benefit to, the environment.
2. With respect to clause 25, provide detailed information as to whether wastewater discharges from the FSRU “provide water ... for uses”, other than for the environment, in the sense that the wastewater will be reused in some way rather than simply being disposed of.
3. With respect to clause 25, provide detailed information as to whether the wastewater can be treated and managed to a level to protect beneficial uses? In particular, can the wastewater be treated and managed to a level to protect beneficial uses of water from the point of discharge (without a mixing zone)?
4. With respect to clause 21(2)(b), provide detailed information to demonstrate how all reasonably practicable measures have been and will be taken in design, operation and management to minimise risks to beneficial uses of the receiving waters from the point of discharge, having regard to temperature variations and chlorine (or chlorine compounds) that are likely to result from such discharges.

## Optimising FSRU Operations

### Closed loop

5. Clause 20 of SEPP (Waters)) gives priority to avoidance. Please explain why your proposal has not made all reasonable efforts to avoid wastewater generation, for example by only operating in closed loop mode?
6. Please compare the wastewater discharge associated with closed loop operations with the wastewater discharge associated with the LNG carriers and with other vessels using the Western Port.
7. Please provide information on the feasibility of reusing the waste heat from the engines to vapourise the LNG and so avoid discharge of wastewater and reduce emissions to air.
8. Please provide information comparing the design of a closed loop only FSRU with the current proposal.

### Combined loops

9. Clause 21(2)(b)(i) of SEPP (Waters) requires an application to include all reasonably practicable measures to ensure the wastewater discharge does not exceed the environmental quality objectives set out in Schedule 3 to SEPP (Waters). Explain:
  - a) what is the area of water that will exceed the proposed guideline values for temperature and chlorine-produced oxidants?

- b) how the FSRU design, operation and management will minimise the area exceeding the proposed guideline values for temperature and chlorine-produced oxidants, with regards to the following:
    - i. the proposed operational measures outlined in Annexures A of TN015 would be implemented and how they have been considered?
    - ii. operational scenarios, as outlined in TN033.
10. Demonstrate that the selected operation, would lead to the best practice environmental outcome over the life of the project, including:
- a) providing comparative analysis of all segments of environmental impacts, risks and benefits of each option.
  - b) appropriate decision-making criteria to apply in assessing and weighing the various considerations affecting each option.
11. Explain whether the proposal would be consistent with the environmental protection principles under the Environment Protection Act 1970, with reference to EPA's publication 1565. They must include, but not be limited to, the following:
- a) integration of economic, social and environmental considerations (s.1B)
  - b) waste hierarchy (s.11).

### **Best practice**

12. Clarify how the near-field model tested a range of outfall configurations to demonstrate how outlet port number, spacing and configuration were tested.
13. Clarify what has been considered in selecting anti-fouling technologies and what could be other alternatives. Provide comparisons and feasibility analysis of alternative anti-fouling technologies.

### **Reviewed detailed environmental impact assessment**

14. Re-submit detailed environmental impact assessments based on the improved design, operation and management.

### **Marine impact assessment**

15. The revised marine impact assessment must include the following:
- a) specify that more conservative chlorine guidelines is 99% species protection value of 2 ug/L.
  - b) provide greater detail on near-field modelling. Clarify if INITDIL model was benchmarked against other established near-field modelling packages (e.g. CORMIX, VISJET)?
  - c) clarify how the near-field result is incorporated into the far-field model. Provide detail as to whether it is depth averaged or time averaged, and if the input cell location has considered sensitivity to tidal flow.

- d) provide information on chlorine, bromine and bromoform background levels in Western Port. What are the limits of reporting for these tests?
- e) provide assessment of electrolytic chlorination on seawater pH.
- f) provide clear justification for dates used to mitigate entrainment impacts on fish eggs and larvae. How do these dates correspond with risk to particular planktonic groups? Specifically, why the period of lower intake used to mitigate entrainment impacts to fish eggs and larvae does not extend to August when fish eggs are most abundant (Annexure A-G, Fig. 3).

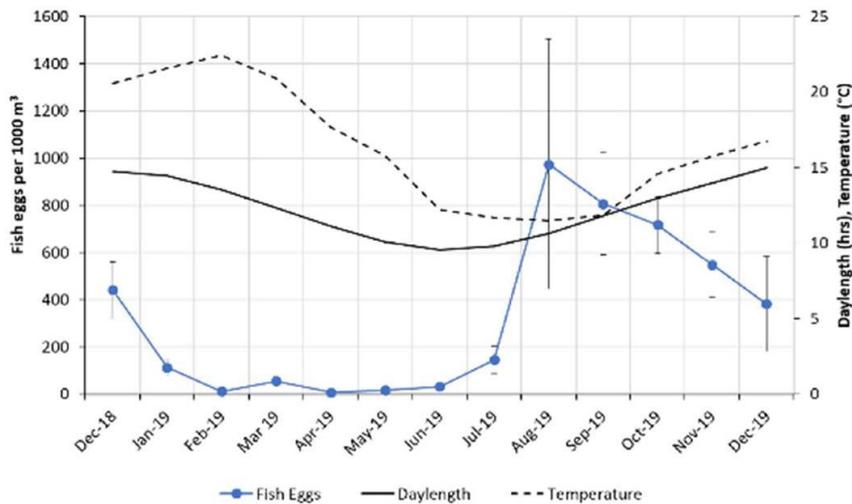


Figure 3. Average fish egg concentrations in lower north arm.  
(mean ± se)

- g) discussion of risks associated with chlorinated by-products, particularly bromoform.
- h) responses to SEPP (Waters) clauses 23(2) (d) – (g).
- i) detailed monitoring design and mitigation/management response triggers.

## Noise

16. The revised noise impact assessment must include the following:

- a) detail and justify the assumptions and considerations made regarding contributions from other premises that will also impact on noise sensitive areas.
- b) explain what process was in place for selecting equipment and mitigation measures to minimise emissions and demonstrate how all reasonable opportunities to reduce noise have been taken.
- c) clarify and justify the conservatism of the assumptions and considerations made regarding the noise emissions of the LNG carrier, and justify their adequacy for the range of vessels that is expected. Clarify what are the contingency plans / measures for vessels that may present higher noise emissions than expected.
- d) provide the risk of low frequency noise impacts to noise sensitive areas.
- e) provide the risk of adverse noise impacts, including, but not be limited to low frequency noise, on natural areas that are not protected by the recommended noise levels (refer NIRV section 2.1).

- f) clarify whether any source of noise has not been included in the noise assessment and justify why.
- g) confirm and justify that noise emissions from the FSRU will not present tonal, impulsive or intermittent character. (otherwise confirm and justify the values adopted for adjustments that may have been applied).