

HMNB Clyde Variation Application

Consultation Response Digest



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1. Background

The [Scottish Environment Protection Agency](#) (SEPA) are Scotland's principal environmental regulator, protecting and improving Scotland's environment. SEPA regulates the disposal of radioactive waste in Scotland under the Environmental Authorisations (Scotland) Regulations 2018 (EASR).

Regulation 78 of EASR excludes certain Ministry of Defence (MoD) premises from regulation. It is, however, MoD policy to apply similar standards where such derogations exist. In Scotland, arrangements are in place so that SEPA applies equivalent standards for the management of radioactive substances to MoD as it does to civilian operators. This is achieved through a Memorandum of Understanding and site level agreements known as LOAs (letters of agreement or approval).

In May 2019, SEPA received an application from MoD to update the LOAs for HMNB Clyde Faslane and Coulport. This application covered changing activities on site, including the construction of a new radioactive waste handling facility known as the Nuclear Support Hub (NSH). It was also reflective of changes to SEPA's regulatory practice.

SEPA determined the application following a similar procedure to that used for civil nuclear sites. This included a [consultation](#) with identified stakeholders and the public that took place in 2020. This consultation response digest summarises the key issues raised during this consultation process and how SEPA have taken them into account in the application determination.

The consultation responses are addressed in the application determination document, however due to the high number of responses to this consultation we are publishing this consultation response digest. This digest and the application determination document should therefore be read together.

2. The consultation

The consultation ran from 13th January 2020 to 13th March 2020 and targeted those organisations considered to have an interest in the application, as well as being open to the public. Consultees, including the online consultation, were provided with a [pack](#) comprising of

the application, a [consultation document](#) prepared by SEPA giving further explanation for the application and copies of responses received from Office of Nuclear Regulation, Defence Nuclear Safety Regulator, Food Standards Scotland and Scottish Government regarding their initial comments on the application.

The consultation document asked six questions:

1. Do you have any comments on the proposed changes to the Letter of Agreement for liquid and gaseous wastes from Faslane and in particular the annual limits proposed by MoD?
2. Do you have any comments on the proposed changes to the Letter of Agreement for solid wastes from Faslane?
3. Do you have any comments on the proposed changes to the Letter of Agreement for gaseous wastes from Coulport?
4. Do you have any comment on the proposed change to the Letter of Agreement for solid wastes from Coulport?
5. Do you have any comments on the proposed change of adding the disposal of liquid waste from Coulport to Faslane to an updated Letter of Agreement?
6. Do you have any comments on the proposed changes to SEPA updates to the Letters of Agreement?

3. Key issues raised

Over 7000 responses were received. For comparison, previous consultations on EASR applications for nuclear sites typically receive less than 12 responses. The style of responses varied greatly, with some responders answering the consultation questions, others providing a single response to all questions, and some responding without reference to the questions. Over 5000 largely identical responses were received from individuals using a common template.

Taken together, the following key issues were raised:

1. Impact on the environment

You said: Concern regarding the impacts of radioactive discharges on fish, the local area, food and contamination.

We did: SEPA are content that the proposed limits combined with the additional conditions of the approval will provide a good level of protection for the environment. A dose assessment was conducted by SEPA¹. This showed that there is no significant impact on the environment or public health. SEPA also have an environmental monitoring programme in place around all of the Scottish nuclear sites including HMNB Clyde. Samples are taken from the marine and terrestrial environments around both Coulport and Faslane. Marine samples include mussels, winkles, seaweed, sediment and seawater from various locations around Faslane. Terrestrial samples include beef, honey, grass, soil and freshwater samples from the area around the two sites. The samples are analysed for a range of radionuclides including H-3 and Co-60 and Cs-137. The analysis shows very low levels that are normally undetectable. The results from SEPA's environmental monitoring programme and annual dose assessment are published annually in the [Radioactivity in Food and the Environment \(RIFE\) Report](#) and this provides quantitative data to support this conclusion.

In addition, Food Standards Scotland carried out their own dose assessment which concluded that they did not believe that the applied for limits of radioactive discharges represent a significant risk to human health.

2. Emission limits

You said: There were concerns regarding the perceived increases in disposals limits and the justification of new limits. There were also calls for zero discharges and whether MoD could do more to reduce disposals further.

We did: The limits currently agreed for HMNB Clyde discharges to the Gare Loch are significantly higher than the actual discharges. Therefore, it was appropriate to review these limits with a view to reducing them and SEPA requested the MoD to undertake a review taking into account future operational need. The outcome was a set of proposed limits significantly lower than current limits, but higher than actual discharges. Typically, SEPA sets limits in

¹ see section 4.6 and Appendix 3 of the decision document

permits and LOA's that are higher than expected discharges to allow headroom for foreseeable fluctuations in operations provided that these limits are supported by an acceptable dose assessment.

The limits proposed by the MoD include an allowance for operational headroom and were therefore above actual discharges. Discharges to the environment are not controlled by the limits alone. There are overarching Best Practical Means conditions which ensure no unnecessary waste is generated and that all radioactive substances activities, including discharges, are made in a manner that achieves and maintains an optimal level of protection of the environment and the public. These conditions ensure that discharges are kept as low as reasonably achievable. Therefore, discharges will not increase to meet the new limits but are expected to continue as previously with normal fluctuations representing operational needs².

However, given the concerns raised, SEPA have strengthened the BPM requirements by including a notification level on the discharges which is set much closer to actual discharge levels. Should a notification be received then SEPA would investigate and can ask for a review of BPM.

In setting limits, SEPA ensures that public health and the environment are protected. We demonstrate this by carrying out detailed dose assessments in advance of setting any limits. The dose assessment for this application shows that the doses are not significant³.

SEPA also carries out routine environmental monitoring programme where samples collected from the local marine and terrestrial environment are analysed for radioactivity. This provides confidence in the conclusions of the calculated dose assessment. The monitoring results are reported annually in RIFE and indicate that levels of radioactivity in the Gare Loch area are less than 1% of the public dose limit and consistent with expected background levels.

Giving due consideration to these factors, SEPA are content that reducing the limits in the current letter of agreement and implementing conditions requiring optimisation and best practical means will ensure protection of the environment.

² See section 4 of the decision document for further details.

³ See section 4.6 and appendix 3 of the decision document

3. Health and wellbeing

You said: Concern was expressed regarding the impact on human health both for the local population and for the larger populations particularly around the Glasgow area.

We did: SEPA are content that the proposed limits combined with the additional conditions of the approval will provide a good level of protection of public health. A dose assessment was conducted by SEPA⁴. This showed that there is no significant impact on the environment or public health. SEPA also conducts a wide environmental monitoring programme including both marine and terrestrial samples. The results from these samples are combined with information on habits to estimate a total dose to the representative person who is the person who is most likely to receive the highest dose. The total dose from all pathways in the Faslane area is very low (typically <1% of the public dose limit). The calculations also have a degree of pessimism as they assume maximum consumption rates and the highest levels of radionuclides found. This information is published annually in RIFE.

4. Waste transfer - named sites

You said: Concern was raised at the removal from the permits of specified sites for waste disposal and allowing transfer of waste from Coulport to Faslane for management and disposal.

We did: The current practice for all nuclear licensed sites is to have alternative controls on disposal routes through permit conditions and notification requirements. This allows prompt disposal of wastes via the most appropriate disposal route and avoids issues if a specific named route becomes unavailable.

The MoD sought the movement of waste from Coulport to Faslane in order to manage the waste safely and to make best use of available facilities. The LOA conditions allow for this provided that it is BPM. It should be noted that the transport of waste or material between the two sites is not within the scope of SEPA's remit.

5. Other UK ports / Foreign ports

⁴ See section 4.6 and appendix 3 of the decision document

You said: Concern was raised about the transfer of waste from submarines berthed at other ports for management at Faslane.

We did: Waste generated aboard UK submarines is the same regardless of where in the world it is generated and it is considered to be UK waste. Therefore, this is not considered to be an issue. The act of transporting the effluent to Faslane is not within SEPA's remit.

6. MoD regulation

You said: Concerns were raised that the MoD are not held to the same standard, or should be held to a higher standard, as civil nuclear facilities.

We did: The MoD exempt from EASR, and legislative change is not within the remit of this application. Under the terms of an MoU SEPA and MoD agree to apply similar standards that applied in the civil nuclear industry.

7. Specific radionuclides

You said: Concerns were raised about modelling methods used for tritium.

We did: No 'new' radionuclides will be disposed of as a result of the LOA review. SEPA may choose to limit disposals by radionuclide group (e.g., 'all beta and gamma emitters') or by specific radionuclide, to ensure that the limits both protect the environment and compliance can be demonstrated. This is standard practice and was adopted for the LOA⁵.

SEPA's modelling is based on peer-reviewed and internationally accepted principles. It also follows the precautionary principle. SEPA participates in national and international committees on radiation in the environment and modelling is kept continuously under review.

8. Out of scope representations

You said: A large number of representations covered concerns that were out of scope of the consultation. This included representations regarding the UK nuclear deterrent, UK defence strategy, whether MoD should be part of EASR, transport and tourism.

⁵ See section 4 of the decision document.

We did: These matters are outwith the scope of the consultation and beyond the scope of SEPA's legal vires.

4. The next steps

SEPA has completed its determination of the application and decided to agree the Letter of Approval subject to a number of limitations and conditions. SEPA has sought the views of Office of Nuclear Regulation, Defence Nuclear Safety Regulator, Food Standards Scotland and Scottish Government on this decision . The rationale for the decision and the limitations and conditions set will be published on SEPA's website along with the LOA.

If you would like this document in an accessible format, such as large print, audio recording or braille, please contact SEPA by emailing

equalities@sepa.org.uk