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Nuclear Directorate
HM Nuclear Installations Inspectorate

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4th August 2009

Dear *Ms Birrell*

HAZARD IDENTIFICATION AND RISK EVALUATION FOR HM NAVAL BASE CLYDE

Thank you for your letter of 26th March 2009. Please accept my apologies for the delay in responding to it.

As you correctly identify in your letter, HSE's Nuclear Installations Inspectorate is responsible under the Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPiR) for assessing the Hazard Identification and Risk Evaluation (HIRE) which covers operations at HM Naval Base Clyde. We are also responsible for ensuring that the relevant Local Authorities (Argyle and Bute Council in this case) put in place emergency plans that protect the public from reasonably foreseeable radiation accidents.

Unlike many nuclear sites in the UK, HM Naval Base Clyde is not a Licenced Site under the Nuclear Installations Act 1965 (as amended). The site is regulated by HSE under the Health and Safety at Work etc Act 1974 and regulations made under that legislation (principally Ionising Radiations Regulations (IRR) 1999, REPPiR 2001 and the Management of Health and Safety at Work Regulations 1999). Consequently, the regulation of submarine operations, including movement and berthing that you highlight in your letter, is not carried out by ourselves but by the Defence Nuclear Safety Regulator (DNSR), which is part of the Ministry of Defence. I would emphasise that HSE and DNSR have arrangements in place that ensure there is close co-operation in relation to our respective regulatory responsibilities.

In response to your specific questions:

Does the HIRE from HMNB Clyde take full account of the likelihood of a radiological release from a berth resulting from a submarine entering the base in a damaged condition following an incident at sea? The intent of the HIRE is to identify possible radiation accidents that, although unlikely, enable reasonable emergency plans to be developed which ensure that the public is protected. As such, a range of accidents are considered and a reference accident is defined (similar to the approach used by civil nuclear power stations) which bounds, in terms of consequences and necessary protection measures, a range of less severe accident scenarios. The HIRE did not therefore specifically identify a damaged submarine (or, more specifically, a submarine with a damaged reactor) entering the base, but the potential consequences are considered to be bounded by the reference accident and the necessary emergency plans are not affected. However, we would review the position in particular circumstances.

Questions 2 to 5 all refer to submarine accidents, including collisions, at sea. HSE does not regulate the operation of submarines at sea, so I am unable to answer your questions in the way you request. From the point of view of our determination of the necessary scope of off-site emergency plans, this encompasses the arrival of a submarine in a defective state so we do not need to assess the likelihood of such a defect state occurring. Hence, questions 2, 3 and 5 do not arise in our regulation of HM Naval Base Clyde.

With regard to question 4, we are confident that our liaison arrangements with DNSR provide us with the ability to undertake the limited independent assessment we will require. In the unlikely event of a situation arising at HM Naval Base Clyde from arrival of a submarine in a defect state where HSE may need to confirm the continuing robustness of arrangements put in place to satisfy REPPIR and IRR requirements, we would review our position. We would obtain any additional assurance from DNSR (who are the competent authority for the Naval Nuclear Reactor Plant) to enable HSE to independently confirm the adequacy of the emergency arrangements to protect workers and the public from hazards on the base.

Question 6 relates to the facility safety case for the Faslane Shiplift. Again, the facility operations are regulated by DNSR so HSE has not assessed the facility safety case. However, I note that HMS Vanguard's reactor systems were not damaged in the collision with Le Triomphant.

I hope that my response provides you with the answer you seek, and with confidence in the robustness of our regulatory processes for HM Naval Base Clyde and clarification as to the extent of our responsibilities and the interface with other regulatory authorities.

Yours sincerely

A handwritten signature in black ink, appearing to read "Mike Weightman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Mike Weightman
HM Chief Inspector of Nuclear Installations
and Director, Nuclear Directorate