

04. Do not use the telephone unless you need urgent assistance	In any emergency situation the telephone system may become overloaded. If you must make a call, please be brief.
05. Food and Drink	Food and drink in your house and tap water from public water supplies are unlikely to be affected. Government agencies will provide advice to users of private water supplies and on the consumption of other foodstuffs such as freshly grown vegetables. This advice will be broadcast on local radio and television. Advice will also be given to farmers, fishermen and other food producers.
06. Evacuation	There would not usually be the need for an evacuation, but if there is an emergency, pack the following items and be ready to go just in case: clothing and bedding, medicines or special foods you might need, private documents and special valuables. If you have children - baby food, clothing, toys and books. If you have pets - leads, baskets/ carriers, cages and food.
07. Re-entry to evacuated sectors	Re-entry to any evacuated area during the emergency will be restricted by the police. Arrangements will be made, for example, for any essential care or feeding of farm livestock.
08. End of the emergency	As the emergency eases there will be adjustments to the restrictions in place until a point when the emergency is declared over and recovery actions have begun. Members of the public will then be advised on what special precautions are either in force or no longer required.
09. Further Information	<p>For advice on the Loch Ewe Operational Berth Off Site Plan please contact: Highland Council Emergency Planning Unit Council Headquarters Glenurquhart Road Inverness IV3 5NX A copy of the Loch Ewe Operational Berth Off Site Plan can be read on the following website for Highland Council: www.highland.gov.uk This leaflet is available on request in larger print or Braille, and can be translated in other languages upon request.</p> <p>For advice on the Loch Ewe MOD Operators Emergency Plan please contact: Emergency Planning Team Clyde Off-Site Centre HM Naval Base Clyde Faslane Argyll and Bute G84 8HL</p>

WHAT IS RADIATION?

Radiation refers to the transfer of energy from one place to another. Radiation is capable of causing harm to people's health, depending on the type and amount of radiation dose received. The information contained here is related to ionising radiation, which would be the type released, in the unlikely event of a radiation emergency from a nuclear submarine. Ionising radiation typically has more energy than non-ionising radiation.

There are three main types of ionising radiation and each have different properties:

Alpha: Alpha particles are relatively big particles and cannot penetrate very far through materials, including the layer of skin on our bodies. They do not present an external hazard, but they can be harmful if inside the body (e.g. inhaled).

Beta: Beta particles are relatively light particles that can penetrate through exposed skin. They can present a hazard from inside or outside the body.

Gamma: Gamma rays are not particles and are like x-rays. They can penetrate through the whole body, depositing some energy on their way. They can be stopped (or the exposure reduced) by the use of thick, heavy shielding.

HOW RADIATION AFFECTS PEOPLE

The term 'radiation dose' is used to describe the amount of energy absorbed from ionising radiation. The most common measure of radiation dose to people is measured in units called sieverts. A sievert is a large dose of radiation and in most cases the radiation dose will be given in microsieverts (μSv , one-millionth of a sievert) or millisieverts (mSv, one-thousandth of a sievert).

At low levels radiation causes no immediate perceptible damage to people. However, any exposure to radiation is considered to be capable of increasing the lifetime risk of cancer.

People have always been exposed to low levels of radiation from natural sources. On average, people in the UK receive an annual dose of 2.7 mSv. Natural sources make up 84% of this dose, with the remainder coming from a variety of artificial sources (e.g flying, medical procedures).

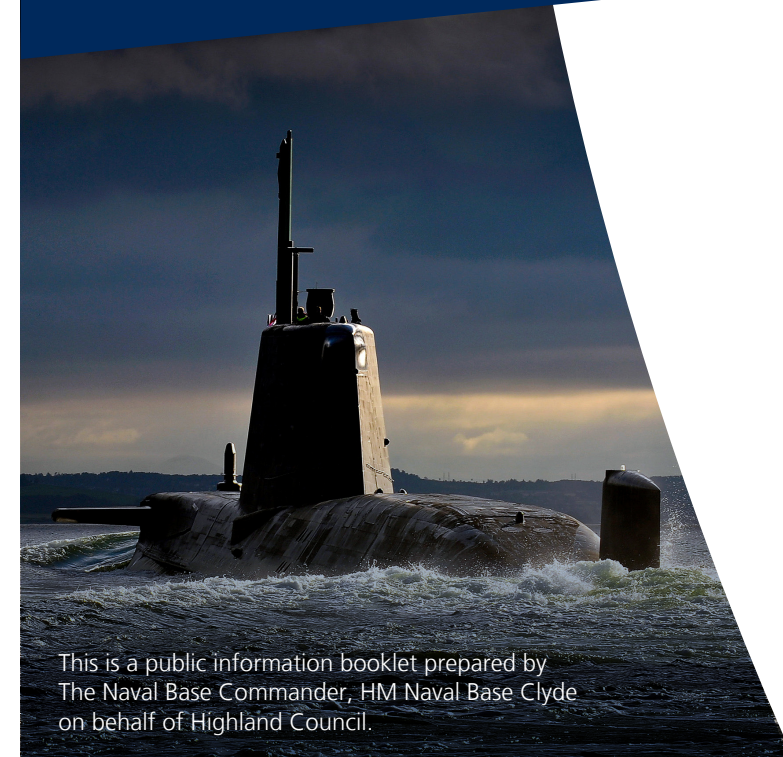


202100819 - ISSUE 08 - SEPTEMBER 2023



WHAT TO DO IN A RADIATION EMERGENCY

For residents in the locality of the **OPERATIONAL BERTH** at the **OPA Loch Ewe Jetty**



This is a public information booklet prepared by The Naval Base Commander, HM Naval Base Clyde on behalf of Highland Council.

This booklet has been prepared by the Naval Base Commander, HM Naval Base (HMNB) Clyde, on behalf of Highland Council, for residents and businesses in the locality of the Operational Berth at Loch Ewe which is used by Nuclear Powered Warships.

INTRODUCTION

The Government has Regulations requiring the local authority, where a nuclear facility is based, to inform members of the public in the close vicinity of the nuclear site of the public protection measures that could be put into place in the extremely unlikely event of a radiation emergency. These Regulations are called 'Radiation (Emergency Preparedness and Public Information) Regulations 2019' (REPPiR).

The operational berth near you is part of the Oil Fuel Depot on Loch Ewe near Aultbea.

The required measures are very simple, but it is recognised that prior knowledge and an understanding of these measures by members of the public will enhance their effectiveness. It is emphasised that this guide is produced purely in the interests of greater public information and not because of any increased risk from submarine operations.

The nuclear-powered submarines of the Royal Navy are designed and operated to stringent safety standards and have been operated without any form of nuclear accident for 60 years. Whilst an accident with a submarine nuclear reactor is by design, operation and maintenance an extremely unlikely event, it is nevertheless Ministry of Defence (MOD) policy that emergency procedures for the protection of the public must be in place.

Were such an event to occur, there would be a localised gamma radiation hazard requiring urgent protective measures out to 400 metres from a submarine; however, no members of the public are expected to be in this area. The event could also lead to the release of gaseous and particulate radioactive material into the atmosphere, which has the potential to effect members of the public downwind of the submarine, out to a distance of approximately 1.5 km.

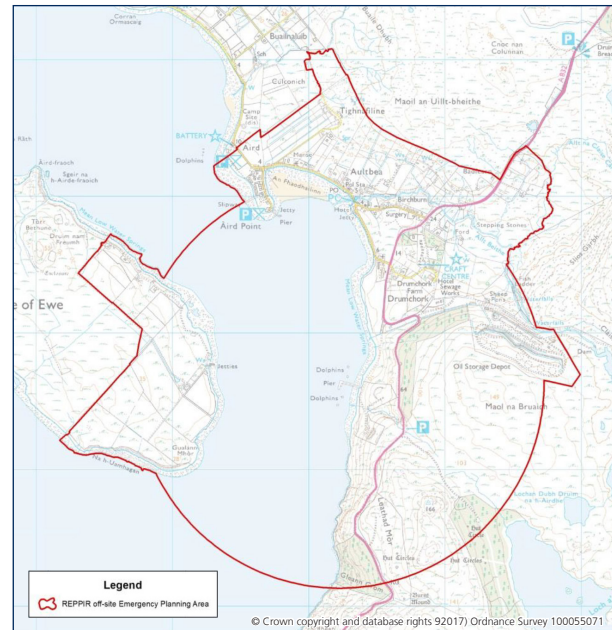
Once the airborne release settles on the ground it would continue to present a hazard within the downwind areas.

The contingency plan for your area is called the Loch Ewe Operational Berth Off Site Plan, produced by the Highland Council. This provides the measures and actions which will be led by Police Scotland and undertaken by the emergency services, local authority, health board and the Royal Navy, in the extremely unlikely event of a radiation emergency occurring. This is available on the Highland Council's website.

In compliance with REPPiR, this booklet is being supplied to members of the public whose residence or normal place of work is within the Detailed Emergency Planning Zone (DEPZ). This area extends no less than 1.5 km from the submarine berth and is outlined on the map in this booklet.

In accordance with REPPiR 2019, a 5 km Outline Planning Zone (OPZ) has been set around the berth. Further information on outline planning can be found in the Off Site Plan located at: www.highland.gov.uk

The factors which would cause outline planning to be triggered include technical or monitoring assessments indicating urgent protective actions were required to a distance greater than the DEPZ.



Map showing the Detailed Emergency Planning Zones around the Loch Ewe operational berth.

WHAT YOU MAY BE ADVISED TO DO

If you are advised of a radiation emergency, you should remain calm and follow this advice promptly but without rushing. This is in accordance with the Government advice on preparing for emergencies.

01. Go Indoors/ Shelter. Stay in and do not leave the area

Close all doors and windows to minimise the risk of any possible contamination entering the building.

Switch off fans, close ventilators and extinguish any fires to prevent any possible contamination being drawn into the house e.g. via a chimney.

Keep domestic pets indoors to prevent them from bringing possible contamination into the house.

Do not attempt to collect children from school. Their teachers and the police will ensure they are looked after.

You will be much safer indoors. Please do not be tempted to evacuate the area unless advised to do so. If you try to leave before being instructed to evacuate you risk blocking the road for the incoming emergency services.

02. Tune in – listen to your local radio or television

If a genuine emergency has occurred information and advice will be broadcast on your local radio and TV by official announcement. If possible you should tune your radio to:

- Radio Scotland (92.4 - 94.7 FM or 810 MW)
- Radio NAN GalDHEAL (103.5 - 105.00 FM)
- Two LochsRadio (106 & 106.6 FM)

OR

- Tune your television to STV or BBC Scotland
- Check Police Scotland Facebook and Twitter pages

03. Stable Iodine Tablets (SITs)

If it is considered that there is a risk of you being exposed to radioactive contamination, The NHS Health Board may advise the taking of Stable Iodine Tablets (SITs). The tablets have been distributed by a team from HMNB Clyde to residences / businesses within the DEPZ, for use if the need arises.

The tablets have the beneficial effect of helping the body reject radioactive iodine, one of the contaminants that would be released during a reactor incident. The tablets are small and are easy to take with a drink of water. They are unlikely to cause any side effects and will not usually interfere with any other medication.

Further detailed information, including instructions about dose rates for infants and babies are given on a leaflet accompanying the tablets. Do not take the tablets if you are allergic to iodine or suffer from the very rare conditions of hypocomplementaemic vasculitis or dermatitis herpetiformis. Your doctor will have told you if you suffer from one of those conditions.