

Polaris radiation miscalculated

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WORKERS who service Britain's nuclear deterrent have been exposed to dangerous neutron radiation because of a miscalculation by the Ministry of Defence.

The fact that radiation levels were underestimated has led to fears that the plutonium inside Polaris missile warheads may have been overheating, thus potentially lowering their effectiveness in a war.

The problem of workers being exposed to neutron bombardment was discovered during a radiation survey at the Royal Navy armament depot at Coulpport on the Firth of Clyde.

It was found that workers were being bombarded with more neutrons than were realised because the dose meters they had been issued with since 1983 did not register them accurately.

They only registered the less dangerous gamma radiation. The extent of the underestimation is believed to be about three millisieverts a year.

John McFall, the Dumbaraton MP, was informed of the mistake in a letter from Michael Neubert, the junior defence minister. Mr McFall is pressing for more information on how the neutron radiation arises and whether it has military as well as environmental implications.

Mr McFall, who is a member of the House of Commons Defence Committee, has been advised that excess activity inside the Polaris-Chevaline warhead would reduce the purity of the plutonium core and hence its explosive power.

However, the ministry said last night that "the understatement of neutron radiation at Coulpport has no implications for the operational effectiveness of the Polaris-Chevaline nuclear deterrent".

Workers who up to now were not thought to be subject to significant radiation, and therefore were not issued with dose meters, have now had to be classified as radiation workers.

The MOD may have been committing a criminal offence by exposing the workers to levels above the five millisievert legal limit, although the ministry stresses that it does not believe the total levels were more than double that.

Mr McFall said yesterday that the finding raised serious questions about the health of workers and the effectiveness of Britain's deterrent. He demanded an immediate check on the health of all workers connected with the maintenance of the warheads.

He said: "Having taken expert advice, it appears that these neutron emissions could be caused by lack of shielding for workers but more likely as a result of unexpectedly large activity in

side the warheads themselves. If it is excess activity, then our Polaris weapons might not be half as effective as we thought."

Mr McFall put down 26 parliamentary questions yesterday, and has been offered a meeting with Mr Neubert "for a fuller explanation".

Workers at Coulpport have been informed by the ministry of their exposure and many of them have been reclassified as radiation workers, allowing them to be exposed to much more radioactivity. Each worker will be given two dose meters to allow levels to be recorded accurately. Navy personnel on Polaris submarines may also have been exposed.

John Large, independent consultant to Mr McFall, said: "In effect, the workers are being bombarded with minute pieces of matter which pass right through them, reacting with atoms like oxygen, carbon and nitrogen. It is the worst sort of radiation."

Challenge on nuclear submarine fault

AN explanation of the fault in one of the Royal Navy's nuclear submarines which has led to an inspection of all five Valiant submarines was called for last night by John McFall, the Labour MP for Dumbaraton, writes JOANNE ROBERTSON.

Mr McFall, whose constituency includes Faslane, told the Commons during a debate on the navy that three Valiant and three Resolution class subs were in port. He demanded that the problem with each submarine be clarified and made public, arguing that the cooling system in the Rolls-Royce turbo meant that "if there's a crack in one of them there's a crack in all of them".

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We can be professionally certain that there are no buoyant weapons with a war charge that could be adrift in the Clyde. Munitions with a war charge would be on the bottom, inert and harmless, unless disturbed by trawling fishermen's nets, for example.

Ministry of Defence spokesman, Glasgow Herald, 15th August, 1986