



Speech by

DESLEY BOYLE

MEMBER FOR CAIRNS

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RADIATION SAFETY BILL

Ms BOYLE (Cairns—ALP) (4.45 p.m.): This afternoon I am pleased to speak in support of the Radiation Safety Bill 1999. Firstly, I will address the need for regulations and the need for those regulations to be upgraded. Of course, in the first instance, this goes to public expectations. While perhaps not aware of the details of the processes whereby they can be put at risk, nonetheless the public quite properly expects the Government to guard against the health risks that are associated with the use of radiation. The public expects the Government to ensure that it holds seriously to its responsibility to prevent the use of radiation for purposes or in circumstances that would expose the public to an unacceptable risk of harm. This Bill has been drafted to ensure that the risks arising from exposure to radiation remain a minor component of the spectrum of risks to which people are exposed in our modern times.

Examples of the radioactive substances that will be regulated under the new Act include iodine 123, which is used to diagnose thyroid disorders, strontium 89, which is used to treat bone cancer, and caesium 137, which is used in the manufacture of alumina to determine the density of the slurry flowing through a pipe. Examples of radiation apparatus that emit ionising radiation and that will be regulated under the new Act include: X-ray equipment that is used in medical settings to assist in the diagnosis of medical conditions and the treatment of cancer through the destruction of malignant cells; X-ray equipment that is used in veterinary practices for diagnostic purposes; cabinet X-ray equipment that is used for the examination of letters, packages and baggage and other items of freight for security purposes; and X-ray equipment that is used as fat analysers in the production of processed meats to ensure that the contents of these goods are consistent. Sources of non-ionising radiation that will be regulated under the Act include radiation apparatus such as Class IV lasers used to perform medical and cosmetic procedures.

The impetus for the Radiation Safety Bill 1999 arises because the Radioactive Substances Act 1958 has not kept pace with accepted national and international recommendations for radiation safety and protection. This has resulted in a situation whereby the radiation safety and protection requirements specified under the existing legislation have had to be supplemented through the attachment of conditions to licences issued under the Radioactive Substances Act 1958. This is clearly not acceptable.

Legislative requirements designed to promote radiation safety and protection need to be transparent, that is, they must not only be in the interests of those persons who are required to abide by the legislation but must also reassure members of the public that they are being protected from the dangers associated with the use of radiation. The Bill provides for the introduction of a contemporary system of radiation safety and protection that incorporates accepted national and international recommendations for radiation safety and protection. However, it should be stressed that the Bill does not merely adopt some features of the national and international recommendations on radiation protection. Instead, it incorporates the whole philosophy of radiation protection known as the system of radiation protection, developed by the International Commission on Radiological Protection.

The ICRP system of radiation protection is defined as a process of radiation risk management designed to limit the health risks arising from exposure to radiation to acceptable levels in a manner which takes both economic and social considerations into account. The Bill will introduce a new process

to ensure that radiation sources, premises at which radioactive substances are stored and premises at which radiation sources are used meet specified radiation safety standards. Radiation safety standards will be technical in nature. For example, a standard made about a type of X-ray machine used for medical diagnostic purposes will specify matters in relation to the performance of the machine under normal operating conditions as would be found in a hospital. Another standard made about premises where this type of X-ray machine would be used will specify matters in relation to the amount of shielding material that needs to be incorporated into the walls of a room to minimise the amount of radiation which may pass into adjacent rooms when the machine is being used.

The Bill places an obligation on possession licensees to ensure that, before a radiation source is used, the source and the premises at which the source is to be used comply with the relevant radiation safety standard; and before a radioactive substance is stored at a premises, the premises must comply with the relevant radiation safety standard. The Bill also requires possession licensees to ensure that a periodic assessment of a radiation source or premises is undertaken by an accredited person to ensure that the source or premises continues to comply with the relevant radiation safety standard set by the Minister. Accredited persons may be drawn from either the private or public sectors.

It must be said that there is already a high level of compliance with the requirements of the existing legislation. Nonetheless, there is a need to ensure that the legislation continues to be complied with. As such, this Bill makes provision for the appointment of inspectors to undertake compliance monitoring, investigative and enforcement activities. This replicates what occurs at present, although the powers available to inspectors have been revised in accordance with modern drafting practices. Inspectors who are currently employed within the line area of Queensland Health responsible for the day-to-day administration of the Radioactive Substances Act 1958 will be responsible for auditing compliance with this Radiation Safety Bill.

In spite of the widespread use of radiation sources throughout the State, the majority of radiation sources are located, not surprisingly, in the major population centres, that is, the region from Maryborough to the New South Wales border and 200 kilometres inland of this area. However, in order to ensure effective use of resources when working outside of these major centres, audits will be conducted on a regional basis. For example, two inspectors will arrive in a general location, such as Cairns, Mackay, Longreach, Mount Isa or Weipa. Interestingly, radiation sources are spread throughout the State and are found even at isolated sites, such as Mornington Island, Birdsville, Palm Island and in other towns and cities across the State.

The inspectors will conduct an audit of many or all businesses possessing or using radiation sources in that location. The types of businesses that will be monitored on such trips will include, for example, community health centres, public hospitals, private health practitioners, such as dentists and general practitioners, medical specialists, veterinary surgeons, city councils, Department of Transport offices, university faculties, industrial radiography businesses and borehole loggers. Interestingly, practices considered to pose a significant risk include industrial radiation practices, borehole logging practices, medical fluoroscopy practices and therapy treatment practices.

Occasionally, specific audits of use licensees are conducted where specific concerns have been raised or where audits have been requested by the Radiological Advisory Council or others. Licensees within the public sector are treated in exactly the same way as licensees in the private sector. The standards that public sector licensees are required to meet are the same as those that private sector licensees are required to meet. The frequency with which these audits are undertaken is based on an assessment of the risk that a radiation practice actually poses. A practice which poses a significant risk will be audited more frequently than one which poses a lesser risk.

Although the primary objective of an audit is to ensure compliance with the legislation, such audits have an important educative function. As such, audits are used to explain to licensees how they may improve their practices to achieve better radiation safety, particularly where such improvements can be achieved at no cost. The Bill permits a graded approach to be taken where it is found that a person is not complying with the requirements of the legislation. Where an inspector reasonably believes that a person is contravening or has contravened a provision of the Act, the inspector may issue an improvement notice, which will set out the steps that a person must take to remedy a contravention or likely contravention and the time period within which these steps must be taken.

However, if there is found to be a deficiency which is likely to constitute an immediate risk to a person, an inspector may issue a prohibition notice. This notice will prevent any further use of the radiation source until such time as the situation endangering the health and safety of a person or persons is rectified. Under other circumstances, for example, if an industrial radiographer continues to use equipment known to be faulty, an inspector may seize the source, thereby stopping the radiation practice by the licensee.

Other actions which may be taken include the suspension or cancellation of a person's licence or court action in the form of prosecution of an offence. The extent of these checks and balances, educative responsibilities and penalties will provide some assurance to the public that a source meets

current standards. In relation to a radiation source used to treat patients, under this Bill the owner of the equipment must have some verification that the equipment met the standards on the day it was assessed as being satisfactory. This will mean that patients can be assured that the equipment used on them has been checked by an accredited person and declared to be satisfactory. As stated previously, the certification of premises will ensure that premises are assessed as complying with safety standards at regular intervals. However, it should be noted that for many years now licensees have been ensuring that the shielding design of their premises meets appropriate standards.

In summarising the intent of this Bill, I point out that it is not as though we have a problem in Queensland at present in terms of the current safety standards. However, it is the intention of the Bill that we will, through all of its technical elements, ensure that the most modern standards are used to protect public safety. That is what this Bill is about. Notwithstanding the dryness of the technical clauses, it is about both public safety and the psychology of public safety. It includes education, compliance and auditing. It is about ensuring that in our modern and relatively safe Queensland we do not take for granted the safety standards of the past, and that they are upgraded as modern uses for radiation continue to be found.

It is about ensuring that the public can have confidence that we are mindful of the technical requirements. I join with the member for Kurwongbah in giving recognition to the Government's initiative in this regard. Members will notice that the speaking list to this Bill consists of Government members only. Therefore, it is surely a testament to the thoroughness of the work of those in Queensland Health, on councils and advisory bodies and the stakeholders that we are today debating a Bill that has not met with extensive opposition. The Beattie Government is demonstrating to the public that their safety even in respect of technical matters, which may not be as exciting as some others, is the business of this Chamber. I commend the Bill to the House.
