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Mr N Laurie
A/The Clerk of the Parliament
Parliament House
Alice and George Streets
BRISBANE Q 4000

Dear Mr Laurie

Thank you for your letter dated 13 November 2002 and 6 December 2002, enclosing a petition which was received by the Queensland Legislative Assembly, regarding irradiation of food and the proposal to construct a gamma irradiation plant at Narangba as well as an electron beam facility proposed for North Queensland. I apologise for the delay in responding.

At the outset it should be noted that the consensus among scientists worldwide, after more than 40 years of research into the safety of irradiated foods, is that irradiation when it is carried out in accordance with specified standards, produces food that is safe to eat. This research has included multigenerational animal studies and studies using volunteers who ate only irradiated food.

Three international agencies: the World Health Organization, the Food and Agricultural Organization of the United Nations and the International Atomic Energy Agency accept that food irradiation is a safe and a useful processing tool.

It is also important to note that cobalt 60 is not a waste product from nuclear reactors and is not related to the nuclear weapons industry in any way.

During irradiation, cobalt 60 sources do not make contact with the goods being sterilized. The gamma radiation passes through the goods being irradiated and the energy from the cobalt 60 sources will not make the goods being irradiated, radioactive.

All food preservation methods change the composition of the food in some way. Some change the taste, appearance, texture, composition and nutritional value of the food more than others do.

Research has shown that the irradiation process in general, produces very little chemical change in food. None of the changes known to occur have been found to be harmful or dangerous and many of the resulting compounds are the same as those formed when food is cooked or preserved in more traditional ways.

Standard 1.5.3 of the *Food Standards Code* requires irradiated foods, including such foods when used as ingredients or components in other foods, to indicate in a statement that such foods have been treated with ionising radiation in accordance with the following requirements:

- (a) in the label on a package of food intended for retail sale, catering purposes or commercial purposes; and
- (b) in connection with the display of food (eg unpackaged food) where such foods are exempt under the *Food Standards Code* from certain labelling requirements.

This standard was introduced into all Australian States and Territories on 2 September 1999 by amendment to the *Food Standards Code*. The Queensland *Food Act 1981* prescribes substantial penalties where provisions of the *Food Standards Code* have been contravened.

In Australia and New Zealand, the *Food Standards Code* prohibits the irradiation of food and food ingredients unless specifically approved by the Australia New Zealand Food Regulation Ministerial Council (ANZFRMC), on a case-by-case basis, in response to applications to irradiate individual foods.

At this point in time, approval has only been given for the irradiation of herbs, spices and herbal infusions. This decision followed a stringent safety assessment by the Australia New Zealand Food Authority, now Food Standards Australia New Zealand (FSANZ) over a ten-month period, which was subject to scientific peer review by local and international experts.

In all instances, an application to irradiate foods can only be considered by ANZFRMC members after FSANZ has undertaken detailed analysis of the technological need to irradiate a particular food or has established the necessity to irradiate for a purpose associated with food safety. In addition, there is detailed analysis carried out on the public risk associated with the consumption of the food once it is irradiated.

Before making a recommendation, FSANZ must undertake two rounds of public consultation, which allows members of the public to provide information they believe is relevant to a particular application. Following this consultation, the FSANZ Board approves the standard, if appropriate, before forwarding it to ANZFRMC for consideration.

Queensland cannot ban the import of irradiated food into the country, as this is a matter for the Commonwealth.

It might be noted that Steritech Pty Ltd, the proponents of the Narangba irradiation facility, have been granted approval by Caboolture Shire Council for a Material Change of Use (Consent) of property at Narangba (under the *Integrated Planning Act 1997*). Furthermore, there has been approval by the Commonwealth Government, through Environment Australia, for the development to proceed (under the *Environment Protection and Biodiversity Conservation Act 1999*).

Steritech Pty Ltd is also required to obtain a licence to possess radioactive substances from Queensland Health under the *Radiation Safety Act 1999*. On 16 October 2002, Steritech Pty Ltd lodged an application under this Act. Attached to the application were:

- a radiation safety and protection plan for the proposed radiation practice;
- supporting information to the application for a licence to possess radioactive substances; and
- detailed engineering drawings of the design of the plant.

Under the *Radiation Safety Act 1999*, any person seeking to possess prescribed quantities of

radioactive substances for irradiation purpose must hold an appropriate licence.

A thorough radiation safety assessment of the engineered safeguards and administrative procedures is undertaken as part of the assessment of the licence application to ensure that the health and safety of persons and the environment are adequately protected from radiation related harm. In particular, Steritech Pty Ltd's proposed radiation safety and protection plan will be assessed to ensure that the plan:

- identifies all radiation hazards specific to the storage and use of the radioactive substances, including protective measures to adequately deal with the identified hazards;
- identifies security measures for the radioactive substances including mechanisms for implementing the measures; and
- illustrates how the facility can maintain its radiation safety integrity during probable incidents or abnormal activities.

The plan is required to be approved by Queensland Health.

With regard to the monitoring of the irradiation plant, Queensland Health has implemented a risk based radiation safety audit program, which is undertaken by persons appointed as inspectors under the Act. The role of these persons is to enforce the requirements of the Act to ensure the health and safety of the public, persons involved in undertaking radiation practices and the environment.

The inspectorial powers provided by the Act for use during emergencies or unsafe conditions are significant, and most dangerous situations should be able to be dealt with using powers provided by the Act to ensure the health and safety of persons and the environment.

Ongoing discussions in relation to the design of the plant are continuing between Queensland Health and Steritech Pty Ltd. Provided all relevant technical and safety requirements of the *Radiation Safety Act 1999* are met by the Steritech Pty Ltd application, there are no grounds to refuse it.

I can assure you that the concerns of the community have been clearly communicated to the Department, and that these concerns will be carefully considered before any licences are granted.

Should you require more detailed information on food irradiation, this can be obtained from publications available on the FSANZ web site at www.foodstandards.gov.au or from the Information Officer, FSANZ, PO Box 7186, Canberra MC ACT 2610, telephone (02) 6271 2222, fax (02) 6271 2278.

I have also attached for your information, a copy of three Public Health fact sheets, namely "The facts about food irradiation", "The facts about Cobalt 60" and "Possession of Radioactive Substances in Queensland" which appear on the Queensland Health website at www.health.qld.gov.au.

Thank you for bringing this matter to my attention and I trust this information is of assistance.

Yours sincerely

SIGNED

Wendy Edmond MP
**Minister for Health and
Minister Assisting the Premier on Women's Policy**