

Storage, Sale and Disposal of Irradiating Apparatus

The Radiation Protection Act 1965 (the Act) and Radiation Protection Regulations 1982 (the Regulations) set out requirements relating to the storage, sale and disposal of irradiating apparatus. This document identifies and explains those requirements.

What is irradiating apparatus?

The definition in the *Act* includes x-ray equipment used for dental, medical, chiropractic, veterinary and podiatric diagnosis, x-ray equipment used for research, industrial radiography and security purposes, x-ray diffraction and analysis units, and some x-ray fluorescence units. It also includes accelerators producing electrons, x-rays or charged particles such as linear accelerators used in medicine, industry or research. Electron beam welders are also examples of irradiating apparatus. Such equipment is considered to be irradiating apparatus if it requires only minor adjustments and attachment to a power source to generate x-rays.

Owner's obligations

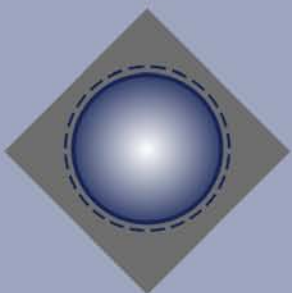
Regulation 9 of the *Regulations* requires owners of irradiating apparatus to ensure that a suitably licensed person is responsible for

the safe care of that apparatus. Otherwise, the owner must either store the apparatus to the satisfaction of the Director-General of Health or render it permanently inoperative.

What is meant by "storage to the satisfaction of the Director-General"?

There are two components to satisfying storage requirements. First, it must not be a simple matter to energise the apparatus, either inadvertently or deliberately. Second, the apparatus must be secure from tampering, theft or loss. Normally this requires:

- removal from the mains supply (by removal of the mains lead or supply fuses), and
- securing the unit for example by keeping it in a room that is either locked or has controlled access.



Other storage requirements

Owners must make the stored apparatus and any related records available for inspection by officers of the National Radiation Laboratory (NRL).

Disposal

Irradiating apparatus must be rendered inoperative before disposal. This means that it would not be practicable for a person to restore the unit to a condition where it was capable of producing x-rays. Puncturing the glass tube within the x-ray head and/or destroying vital components in the x-ray generator can achieve this. Radiation signs such as trefoils must be removed or obscured. When these requirements have been met the apparatus can be considered scrap and disposed of accordingly.

Please note that additional disposal conditions may apply if the x-ray tube contains hazardous material. Examples include x-ray tubes with beryllium windows, or some pre-1979 tubes with cooling oil containing PCBs.

Disposal of irradiating apparatus is regarded as a sale pursuant to Section 2 of the *Act*, and any disposals must therefore comply with the sale notification requirements set out below.

Failure to comply with these requirements is a breach of the legislation and may be subject to penalties as prescribed in Section 26(2) of the Act.

Reviewed December 2008

What constitutes selling?

The definition of “sell” in the *Act* covers a wide range of actions including sale (by means of a financial transaction), gift, hire, lease, loan, or disposal.

Legal obligations of the vendor

- Licence – the vendor must ensure that the prospective purchaser holds a current licence under the *Act* that authorises the use of the particular type of irradiating apparatus.
- Notification – a vendor who is in New Zealand at the date of sale must also notify the NRL of the sale.

Legal obligations of the purchaser

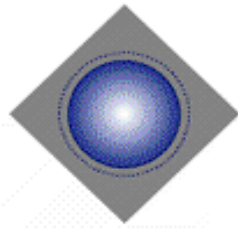
- Licence – the purchaser must appoint a safe care licensee (see above) and must also ensure that only suitably licensed persons (or persons acting under the supervision or instructions of such a person) are permitted to use the apparatus.
- Notification – if the vendor is outside New Zealand at the date of sale then the purchaser must notify the sale to NRL.

The notification process

Section 14 of the *Act* provides that sales must be notified forthwith. NRL has developed a standard form which is appended to this document or can be obtained from www.nrl.moh.govt.nz/regulatory/notification.asp#sale



New Zealand Government



NRL

National Radiation Laboratory

RADIATION PROTECTION ACT 1965 NOTIFICATION OF SALE OF IRRADIATING APPARATUS

Use one notification form per apparatus

Name and address of seller (trade name):

Seller's fax number:

Name and address of buyer (trade name):

Name of principal licensee who will be responsible for safe care of equipment:

NRL licence number:

Purpose for which apparatus is (or was) used:
(eg, medical diagnostic, chiropractic, medical therapy, dental, veterinary, industrial, analytical, etc)

Equipment make:

Equipment model:

Enter the control panel* serial number:

Maximum operating rating:

kV/MV:

mA:

State the physical location the apparatus is to be installed or if a portable unit, the base location:
(eg, facility, street address, department, room, etc)

If apparatus is *second-hand*, state the physical location from where the apparatus was removed:
(eg, facility, street address, department, room, etc)

If apparatus is being *disposed of*, enter the process for rendering it inoperable and means of disposal:
(eg, x-ray tube punctured, radiation warning signs removed and placed in bin, etc)

Name and signature:

Date:

* If control panel identification plate is missing, enter 'missing' and record any other ID tracking number and corresponding component.

Please send to: National Radiation Laboratory
Attn: Licensing
PO Box 25-099
CHRISTCHURCH

Fax: (03) 353-5667

NRL acknowledgement of notification

Name and date: