



REGULATORY GUIDE: Disposal of Controlled Apparatus and Controlled Material

Under subregulation 53(1), a licence holder must have **prior approval** from the CEO of ARPANSA to dispose of any controlled apparatus or controlled material. *Disposal* for the purpose of regulation 53(1) is regarded as (i) final disposal of controlled apparatus or controlled material, or (ii) where regulatory control of controlled apparatus or controlled material passes from the Commonwealth to another jurisdiction.

1. How to apply for approval to dispose of controlled apparatus or controlled material

Licence holders seeking approval from ARPANSA for the disposal of controlled apparatus or controlled material should use the standard [Disposal Request Form](#). Completed forms should be submitted via email to licenceadmin@arpansa.gov.au.

Under subregulation 48(3), licence holders must ensure that disposal of controlled material is in accordance with the *Code of Practice for the Disposal of Radioactive Waste by the User (RHS 13)*; the *Code of Practice for the Near-surface Disposal of Radioactive Waste in Australia (RHS 35)*; the *Code of Practice for the Safe Transport of Radioactive Material (RPS 2)* and the *Code of Practice for the Security of Radioactive Sources (RPS 11)*.

Once ARPANSA has approved disposal of a source and disposal has occurred, the source must be removed from the source inventory and the change reported in the licence holder's next quarterly report.

2. Final disposal of controlled apparatus (destruction) and controlled material

2.1 Controlled apparatus

Controlled apparatus means any of the following:

- (a) an apparatus that produces ionising radiation when energised or that would, if assembled or repaired, be capable of producing ionising radiation when energised;
- (b) an apparatus that produces ionising radiation because it contains radioactive material;
- (c) an apparatus prescribed by the regulations that produces harmful non-ionizing radiation when energised.

To satisfy ARPANSA of the 'destruction' of a controlled apparatus, it must be rendered inoperable in such a way that only expert knowledge and the use of specialised components could potentially restore its function.

In most cases, removal of a critical component(s) and severing of power cables will render the apparatus inoperable. For example:

- In the case of x-ray apparatus, eliminating the vacuum inside the x-ray tube by breaking the glass envelope and severing the high-tension cables will effectively destroy the apparatus.
- In the case of lasers removing the power supply, critical optical components or the amplifying medium will render the apparatus inoperable.

In all cases, the licence holder must take into account the presence of other hazardous materials, for example: beryllium, mercury, cadmium, etc. The licence holder should seek guidance from their local environmental agency on disposal requirements for such material or investigate possible recycling options.

Once destroyed, the apparatus ceases to meet the definition of a controlled apparatus and is therefore no longer subject to regulatory control. Individual dismantled parts are not deemed to be controlled apparatus.

If apparatus is to be disposed of because it has ceased to function, a critical component should still be removed so that repair is not possible.

In the case of apparatus containing radioactive material, removal of the material will result in the apparatus no longer being 'controlled apparatus'. However, depending on the activity of the material that is removed, this material may still be subject to regulatory control, in which case it would become controlled material and must be authorised by a licence.

Where disposal to landfill is proposed, the licence holder should ensure that the removed critical components are discarded separately to the rest of the apparatus unless they are to be retained as spare parts. This is to prevent any chance of them being recombined, repaired and operated. Recycling should be considered, where possible.

2.2 Controlled material

Controlled material means any natural or artificial material, whether in solid or liquid form, or in the form of a gas or vapour, which emits ionising radiation spontaneously.

Final disposal in this case means that there is no intention of retrieving the controlled material after disposal (e.g. it is being sent to a waste facility or other site for incineration or burial).

The method of disposal and disposal path should be described. How receipt of the controlled material at the final destination will be confirmed and recorded should be stated. If applicable, details should be provided of how the *Code of Practice for the Safe Transport of Radioactive Material (RPS 2)* and the *Code of Practice for the Disposal of Radioactive Waste by the User (RHS 13)* will be met. For sealed sources of category 1, 2 and 3, details should be provided of how the *Code of Practice for the Security of Radioactive Sources (RPS 11)* will be met.

If a contractor is used for the disposal the details of the contractor must be specified. In the case that the contractor is licensed under another jurisdiction, the licence number and name of jurisdiction in which the licence is held must be given.

3. Withdrawal of controlled apparatus or controlled material from Commonwealth control

This is a common type of disposal for which approval is sought. It covers a source that is sold, leased, hired, or given away to another organisation outside of the jurisdiction of ARPANSA. It also covers the return of controlled material to the original manufacturer or supplier outside of Commonwealth jurisdiction.

Full details of the source and the organisation receiving the source must be provided before ARPANSA will consider approval.