



## **Explanatory information for an amendment to the *National Directory for Radiation Protection (NDRP)* to cover disposal of radioactive material by the user**

Disposal of radioactive material by the user is currently carried out in accordance with requirements specified in the NHMRC *Code of Practice for the Disposal of Radioactive Wastes by the User* (1985) (Radiation Health Series No. 13 (RHS 13)) or under specific jurisdictional regulatory requirements. RHS 13 states that a person wanting to dispose of radioactive material to landfill, the sewerage system or the atmosphere must seek the approval for each disposal. Clause 3.2 of RHS 13 states in particular:

The user is responsible for:

- (b) ensuring that, before disposing of any radioactive waste in a municipal tip, the tip has been approved by the statutory authority as being suitable for that purpose,
- (d) obtaining the approval of the statutory authority before disposing of any radioactive waste into a sewerage system and providing the statutory authority with those details of the proposed discharge system together with activities, volumes and types of radionuclides likely to be discharged and the expected frequency of discharge, as may be required
- (e) obtaining the approval of the statutory authority before disposing of any radioactive gaseous products into the atmosphere and providing the statutory authority with details of
  - the design of its proposed discharge system,
  - the activities, volumes and types of radionuclides likely to be discharged,
  - the expected frequency of discharge,
  - the meteorology of the area, especially with regard to usual wind direction and speed, and the occurrence of inversion conditions,
  - the distribution of members of the public in the area,
  - the proximity of inlet ducts for air conditioning systems, and
  - any other details that the statutory authority may require,

In developing an amendment to the NDRP to cover disposal of radioactive material by the user, ARPANSA's Radiation Health Committee considered that, ideally, a set of values should be generated that would allow the user to dispose of radioactive material to landfill, the sewerage system or the atmosphere without the need to seek approval of the relevant regulatory authority while at the same time, appropriately protecting all persons and the environment.

Many sources of data of both national and international origin were investigated covering each disposal pathway and a table of values generated. An Annex describing the methodology, the data sources and the preferred values was also prepared for inclusion in the NDRP to provide information on the process.

A preliminary assessment has been carried out on the proposed amendment. It is not expected that there would be any significant costs to businesses needing to dispose of radioactive material as they would already be complying with RHS 13 or other existing requirements of the regulatory authority in the particular jurisdiction. Further, as the values provided in the proposed Table S14.1 permit a person to dispose of radioactive material without seeking approval from the relevant regulatory authority, the regulatory burden is lessened while maintaining an appropriate level of protection of people and the environment.

It is acknowledged that for disposal of radioactive material above the levels given in Table S14.1, the intended disposer will need to seek approval of the relevant regulatory authority. However, as this is the current situation for all disposal, there is no increased burden by setting these levels.

One potential area for cost increase for stakeholders would be in familiarising themselves with the levels outlined in Table S14.1 and comparing those levels with the amount of radioactive material intended for disposal. For many industries, disposal is a 'routine' issue and stakeholders would already be aware of their disposal inventories. In such cases, the proposed values will reduce the need for the stakeholder to seek authorisation where they are below the level.

The proposed amendment would not limit the ability of businesses to compete in an open market nor would it alter stakeholders incentives to compete in the market place. In fact, by making it easier to dispose of very low level radioactive material without the need to obtain an authorisation to do so, it might allow more stakeholders into the market place although this cannot necessarily be confirmed.

In order to clarify the relationship between the proposed values in Table S14.1 and the exemption limits given in Schedule 4 of the NDRP, footnote 12 has been amended in line with the IAEA *Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards for protecting people and the environment No. GSR Part 3 (Interim)* to include the statement that '... Schedule 4 of the Directory, **other than for the control of discharges which are dealt with in clause 4.2.2**, are exempt ...'.

ARPANSA suggests that the proposed amendment, including Annex 4, undergo a period of public comment of at least one month. Potential stakeholders would be advised and a copy of the Preliminary Assessment and this explanatory document be made available for comment.

In view of the low, negligible or reduced costs of the planned NDRP amendment, ARPANSA proposes that no further regulatory impact analysis is required.