



## Transport of radioactive material

### Package design approval checklist

An applicant seeking a package design approval certificate from ARPANSA must ensure that the information, as described in paragraph 838 of RPS C-2 (Rev. 1) (2019) is included as part of the application. A summary of the information which must be included is described below. Please include this checklist with your application.

Information required	Tick if included
1. Detailed description of the radioactive contents, their physical and chemical states and the nature of the radiation emitted.	<input type="checkbox"/>
2. Detailed statement of the design, including complete engineering drawings and schedules of materials and methods of manufacture.	<input type="checkbox"/>
3. Details of the mode(s) of transport which will be used e.g. road, rail, air, inland water way or sea.	<input type="checkbox"/>
4. Details of applicable national and international regulations under which approved is sought e.g. IAEA.	<input type="checkbox"/>
5. Details of other certificates for alternative radioactive contents, other competent authority validation, or additional technical data or information, which can substantiate your request for approval.	<input type="checkbox"/>
6. Description of whether multilateral approval is being sought. If yes, include the required information which is described in para 825.	<input type="checkbox"/>
7. Description of the packaging identification.	<input type="checkbox"/>
8. Description of the packaging by a reference to the drawings or a specification of the design. In addition, a reproducible illustration (ideally not larger than 21 cm by 30 cm), showing the make-up of the package, should also be provided, accompanied by a brief description of the packaging, including materials of manufacture, gross mass, general outside dimensions and appearance.	<input type="checkbox"/>
9. Specification of the design by reference to the drawings.	<input type="checkbox"/>
10. Description of the specific authorised radioactive contents contained within the packaging including any restrictions on the radioactive contents which might not be obvious from the nature of the packaging. This shall include the physical and chemical forms, the activities involved (including those of the various isotopes), mass in grams (for fissile material), and whether special form radioactive material, low dispersible radioactive material or fissile material excepted under para. 417(f), if applicable.	<input type="checkbox"/>
11. A description of the containment system. If the package is designed to have a maximum normal operating pressure in excess of 100 kPa gauge, a specification of the materials manufacture of the containment system, the samples to be taken, and the tests to be made.	<input type="checkbox"/>

12.	For package designs containing fissile material requiring multilateral approval in accordance with para. 814:	<input type="checkbox"/>
	<ul style="list-style-type: none"> <li>i. a detailed description of the authorised radioactive contents</li> <li>ii. a description of the confinement system</li> <li>iii. the value of CSI (criticality safety index)</li> <li>iv. reference to the documentation that demonstrates the criticality safety of the contents</li> <li>v. any special features on the basis of which the absence of water from certain void spaces has been assumed in the criticality assessment</li> <li>vi. any allowance (based on para. 677(b)) for a change in neutron multiplication assumed in the criticality assessment as a result of actual irradiation experience</li> <li>vii. the ambient temperature range considered in the design.</li> </ul>	
13.	For Type B(M) package, a statement specifying those prescriptions of paras 639, 655-657 and 660-666.	<input type="checkbox"/>
14.	For package designs subject to para 820, a statement specifying those requirements of the current regulations with which the package does not conform.	<input type="checkbox"/>
15.	For packages containing more than 0.1 kg of uranium hexafluoride, a statement specifying those prescriptions of para 634 that apply, if any, and any amplifying information which may be useful to other competent authorities.	<input type="checkbox"/>
16.	A detailed listing of any supplementary operational controls required for preparation, loading, carriage, unloading and handling of the consignment, including any special stowage provisions for the safe dissipation of heat.	<input type="checkbox"/>
17.	Description of the use of the packaging or specific actions to be taken prior to shipment e.g. how the package is properly secured etc.	<input type="checkbox"/>
18.	A statement regarding the ambient conditions assumed for purposes of design if these are not in accordance with those specified in para 656, 657 and 666, as applicable.	<input type="checkbox"/>
19.	A specification of the applicable management system as required in para. 306.	<input type="checkbox"/>
20.	Operating and maintenance instructions for the use of packaging.	<input type="checkbox"/>
21.	Any applicable emergency procedures.	<input type="checkbox"/>
22.	A copy of the Safety Analysis Report (SAR).	<input type="checkbox"/>
23.	Applicant identity.	<input type="checkbox"/>