

International Standard

ISO 8939

Decommissioning of medical cyclotron

Démantèlement des cyclotrons médicaux

First edition 2025-10

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 8939:2025

https://standards.iteh.ai/catalog/standards/iso/73131a78-2b5c-43f8-b699-fce5d7eb0085/iso-8939-2025

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 8939:2025

https://standards.iteh.ai/catalog/standards/iso/73131a78-2b5c-43f8-b699-fce5d7eb0085/iso-8939-2025



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

ISO 8939:2025(en)

| Con | ents | Page |
|---------------|--|----------|
| Forew | rd | iv |
| Intro | ıction | v |
| 1 | Scope | |
| | Normative references | |
| 2 | | |
| 3 | Terms and definitions | 1 |
| 4 | Decommissioning planning for a medical cyclotron facility | |
| | 4.1 General | |
| | 4.2 Responsibilities | |
| | 1.3 Decommissioning strategy | |
| | 4.4 Decommissioning plan | |
| | 4.5 Project management | |
| | 4.6 Decommissioning activities | |
| | 4.7 Safety assessment | |
| | 4.7.1 Identification of relevant safety criteria | |
| | 4.7.2 Risk assessment 4.7.2 Quality assurance programme. | |
| | 4.9 Radiation protection programme | |
| | 4.10 Financial resources | |
| | 4.11 Final radiological survey | |
| | 4.12 Final decommissioning report | |
| 5 | Activation evaluation i Tah Standards | |
| | 5.1 General | |
| | 5.2 Activation level estimation method | 0 9 |
| | 5.2.1 Monte Carlo computer simulation | 10 |
| | 5.2.2 Measurement of activation | 11 |
| | 5.3 Nuclides of concern Concer | 11 |
| | Management of radioactive waste | |
| 6 | 6.1 General | 12 12 |
| | 5.2 and Minimization of waste and a superior of the superior o | |
| | 5.3 Categorization and characterization of waste | |
| | 5.4 Discharge control of liquid or airborne radioactive effluents | |
| | 5.5 Onsite handling and processing of waste | |
| | 5.6 Onsite storage of waste | |
| | 5.7 Shipment of waste | |
| Annos | A (informative) Measurement method for determining thermal neutron fluence rate on | |
| Annez | concrete surface | 15 |
| Δ | | |
| Annex | B (informative) Measurement method for determining specific activity using a | 16 |
| | scintillation survey meter | |
| Biblio | raphy | 17 |

ISO 8939:2025(en)

Foreword

This document was prepared by Technical Committee ISO/TC 85, Nuclear energy, nuclear technologies, and radiological protection, Subcommittee SC 5, Nuclear installations, processes and technologies.

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 85, *Nuclear energy, nuclear technologies, and radiological protection*, Subcommittee SC 5, *Nuclear installations, processes and technologies*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html. www.iso.org/members.html</