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for protecting people and the environment

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for comment**

**Safe Decommissioning of Facilities**

**General Safety Requirements Part 6**  
**No. GSR Part 6**

**Draft Safety Requirements**  
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*(Front inside cover)*

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**FOREWORD**

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**[standard text to be inserted at publishing stage]**

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## CONTENTS

1. INTRODUCTION.....	1
Background.....	1
Objective.....	3
Scope.....	3
Structure.....	4
2. PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT .....	4
3. RESPONSIBILITIES ASSOCIATED WITH DECOMMISSIONING .....	2
4. DECOMMISSIONING MANAGEMENT .....	5
5. DECOMMISSIONING STRATEGY .....	6
6. FUNDING .....	7
7. DECOMMISSIONING PLANNING DURING FACILITY LIFECYCLE.....	8
8. CONDUCTING DECOMMISSIONING ACTIONS .....	11
9. COMPLETION OF DECOMMISSIONING ACTIONS AND TERMINATION OF AUTHORIZATION .....	12
REFERENCES.....	14
CONTRIBUTORS TO DRAFTING AND REVIEW .....	16
BODIES FOR THE ENDORSEMENT OF SAFETY STANDARDS .....	17

# 1. INTRODUCTION

## BACKGROUND

1.1. The terms, “siting”, “design”, “construction”, “commissioning”, “operation”, and “decommissioning” are normally used to delineate six major stages of the lifecycle of an authorized facility and of the associated licensing process. The term ‘decommissioning’ refers to the administrative and technical actions taken to allow the removal of some or all of the regulatory requirements from a facility (except for a disposal facility, for which the term ‘closed’ and not ‘decommissioned’ is used). Decommissioning, as well as aspects of decommissioning, must be considered throughout these six major stages.

1.2. Aspects of decommissioning typically include planning for decommissioning, conducting decommissioning actions and terminating the authorization. They may be a transition period between the permanent shutdown and authorization to begin decommissioning actions is granted.

1.3. Decommissioning actions are the procedures, processes and work described in the approved decommissioning plan.

1.4. A facility, as used in this Safety Requirements publication, means a building and its associated land and equipment in which radioactive material is produced, processed, used, handled or stored on such a degree of hazard and risk that consideration of safety is required. Land includes the surface, subsurface soil horizons and any surface or subsurface water or aquifers impacted by the use of the radioactive material.

1.5. Decommissioning is performed using an optimized approach to achieve a progressive and systematic reduction in radiological hazards. Decommissioning is undertaken on the basis of planning and assessment to ensure the safety of workers and the public and protection of the environment, both during and after decommissioning.

1.6. Decommissioning actions are considered completed when the approved end state has been reached. Subject to national legal and regulatory requirements, this end state may encompass decontamination and/or dismantlement, with or without restrictions on future use.

1.7. Termination involves the removal of authorization for the facility.

1.8. Planning for decommissioning does not begin at the permanent shutdown of the facility but begins at the facility’s design stage and is considered throughout the life of the facility. Planning includes the selection of a decommissioning strategy, radiological characterization of the facility,

preparation of a final decommissioning plan and submittal of the plan to the regulatory body for review and approval and any public outreach activities required by national requirements. Conducting decommissioning actions include managing the project, implementing the approved final decommissioning plan, managing the waste, conducting oversight activities by the regulatory body and demonstrating that the facility meets the end state criteria defined in the final decommissioning plan. Strategies being implemented or considered by Member States include immediate dismantling, deferred dismantling and entombment. Slight modifications or combinations of these strategies are possible. In principle, these strategies are applicable to all facilities. However, their application to some facilities may not be appropriate because of safety or environmental requirements, technical considerations, local conditions, e.g., future use of the site or financial considerations. The following is a short description of each of these decommissioning strategies:

- *Immediate dismantling* is the strategy in which the equipment, structures and components of a facility containing radioactive material are removed and/or decontaminated to a level that permits the facility to be released for unrestricted use, or with restrictions on future use. In this case, decommissioning actions begin shortly after the permanent cessation of operations. This strategy implies prompt completion of decommissioning actions and involves the removal of radioactive material from the facility and its processing for either storage or disposal.
- *Deferred dismantling* (sometimes called safe storage, safe store or safe enclosure) is the strategy in which all or part of a facility containing radioactive material are either processed or placed in such a condition that they can be safely stored and the facility maintained until it is subsequently decontaminated and/or dismantled.
- *Entombment* is the strategy in which all or part of the facility is encased in a structurally long lived material with no further decommissioning action.

1.9. Deferred dismantling and entombment strategies allow for the processing of some radioactive material and its removal from the facility.

1.10. Entombment is not considered to be a justifiable option for normal planned shutdown. It could only be considered under exceptional circumstances for existing facilities.

1.11. IAEA Safety Requirements publications establish international consensus requirements that apply the fundamental safety objective and fundamental safety principles established in the Safety Fundamentals [1].

1.12. The terms used in this publication have the meanings ascribed to them in the IAEA Safety Glossary, 2007 Edition [2], where applicable.

1.13. This publication supersedes Ref. [3].

## OBJECTIVE

1.14. The objective of this publication is to establish the general safety requirements that must be satisfied during planning for decommissioning, conduct of decommissioning actions and termination of authorization.

## SCOPE

1.15. This publication establishes the safety requirements for all aspects of decommissioning from the siting and design of a facility to the termination of the regulatory authorization. Most of the provisions contained in this safety standard can also be applied to decommissioning after an accident or event that has resulted in serious damage to or the contamination of a building, or simply after a premature shutdown.

1.16. This publication applies to all types of facilities, including nuclear power plants, research reactors, other fuel cycle facilities, non-fuel cycle waste processing and storage facilities, NORM facilities, medical facilities, industrial facilities and research facilities. It does not apply to radioactive waste disposal facilities and disposal facilities for NORM or mining. The closure of these facilities is discussed in other IAEA publications [4, 5].

1.17. The definition of decommissioning (para. 1.1) makes it clear that decommissioning is concerned with “facilities”, i.e., buildings, including their associated land and equipment. There may be areas of land that have become contaminated incidental to the normal operation of the facility, which would not constitute an accident and event. The cleanup of these areas would also be included as part of decommissioning. This publication does not address the remediation of areas that have become contaminated by residual radioactive material arising from past activities that (1) were never subject to regulatory control or (2) were subject to regulatory control but not in accordance with the requirements of the BSS; or by a nuclear or radiological emergency, after an emergency exposure situation has been declared over. The requirements for the remediation of these areas are established in another IAEA publication [5].

1.18. The management of new and spent nuclear fuel and waste generated during operations are not usually considered part of decommissioning, but are addressed as part of operations and is outside the scope of this document.

1.19. This publication addresses the radiological hazards resulting from decommissioning. Non-radiological hazards, such as industrial hazards or hazards due to chemical waste, can also be significant during decommissioning. These issues also require due consideration during the planning and implementation process, in the safety and environmental assessments and in the estimation of costs and the provision of financial resources for the decommissioning project. However, these issues are outside of the scope of this publication and are not explicitly addressed in this Safety Requirement.

## STRUCTURE

1.20. Section 2 establishes the requirements for the protection of workers, the public and the environment. The responsibilities of the major parties associated with decommissioning are discussed in Section 3. Section 4 establishes the requirements for the management of decommissioning and Section 5 establishes the requirements for selecting a decommissioning strategy. Section 6 establishes the requirements for the funding of decommissioning and Section 7 discusses the planning for decommissioning that is performed during the facility's lifecycle. Section 8 establishes the requirements to be followed when conducting decommissioning actions. Section 9 establishes the requirements for determining when decommissioning has been completed, including surveys to support the completion of decommissioning actions and the termination of the authorization.

## **2. PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT**

### **Requirement 1: Radiation Protection**

**Decommissioning shall be considered part of the original activity and the requirements of the Basic Safety Standards (BSS) [5] shall be enforced during decommissioning.**

2.1. The dose limits for the exposure of workers and members of the public are applied during decommissioning. Radiation protection of any persons that are exposed as a result of decommissioning are optimized with due regard to the relevant dose constraints.

2.2. In addition to provisions for protection against routine exposures, provision is made during decommissioning for protection against, and mitigation of, potential exposures that may result from an accident or event. However, if the event is of such a nature as to warrant remediation, other applicable IAEA Safety Standards shall be invoked [5].

2.3. A safety culture is fostered and maintained in both the decommissioning organization and the regulatory body in order to encourage a questioning and learning attitude towards safety and to discourage complacency [5].

2.4. Compliance with environmental radiation protection standards is maintained during decommissioning and beyond if a facility is released with restrictions on future use.

#### **Requirement 2: Graded Approach**

**A graded approach shall be used for all aspects of decommissioning in determining the scope and level of detail for any particular facility, consistent with the magnitude of the possible radiation risks arising from the decommissioning [5].**

2.5. The type of information and the level of detail in the decommissioning plan are commensurate with the type, scale, complexity, status and lifecycle stage of the facility and the hazards associated with the decommissioning of the facility.

#### **Requirement 3: Assessment of Safety**

**Safety shall be assessed for all facilities undergoing decommissioning.**

2.6. The final decommissioning plan is supported by a safety assessment addressing the planned decommissioning actions and events or accidents that may occur during decommissioning.

2.7. A safety assessment is prepared in accordance with reference [6].

### **3. RESPONSIBILITIES ASSOCIATED WITH DECOMMISSIONING**

3.1. Requirements for the general responsibilities in the governmental, legal and regulatory infrastructure with respect to all matters concerning nuclear activities are set out in Ref. [7]. These



requirements will not be repeated here, but they also apply in establishing the appropriate infrastructure.

#### **Requirement 4: Responsibilities of the Government**

**The government shall establish and maintain a governmental, legal and regulatory framework within which decommissioning, including management of resulting radioactive waste, can be planned and carried out safely. This shall include a clear allocation of responsibilities, provision of independent regulatory functions and requirements for funding mechanisms for decommissioning. All aspects of decommissioning shall be regulated from the siting and design of a facility to termination of authorization.**

3.2. The responsibilities of the Government include:

- establishing a national policy for decommissioning and for the management of resulting radioactive waste;
- establishing and maintaining the legal, technical and financial responsibilities for organizations involved in decommissioning;
- ensuring that the necessary scientific and technical expertise remain available for both the operator and for the support of independent regulatory and other national review functions; and
- establishing a mechanism to ensure adequate financial resources for safe and timely decommissioning.

#### **Requirement 5: Responsibilities of the Regulatory Body**

**The regulatory body is responsible for the regulation of all aspects of decommissioning, from siting and design of the facility to completion of decommissioning actions and termination of authorization. The regulatory body shall establish the safety standards and requirements for decommissioning, including management of resulting radioactive waste, and carry out activities to ensure that the regulatory requirements are met.**

3.3. The responsibilities of the regulatory body include:

- establishing criteria and timeframe for the commencement of decommissioning;

- establishing safety, physical protection, and environmental criteria for the decommissioning of facilities, including criteria for clearance of material during decommissioning in accordance with national policy and criteria for end states for decommissioning and termination of authorization;
- establishing requirements for decommissioning planning;
- establishing the review process for decommissioning plans and supporting documents (which are prescribed in national requirements);
- identifying the typical content of the decommissioning plan and supporting documents for review or approval;
- reviewing the initial decommissioning plan and updates, reviewing and approving of the final decommissioning plan and supporting documents and reviewing and approving updates after the final decommissioning plan has been approved;
- inspecting and reviewing decommissioning actions and taking enforcement actions in case of non-compliance with the authorization or licence conditions and safety requirements;
- establishing requirements and mechanism for the collection and retention of records and reports relevant to decommissioning;
- evaluating the end state of a decommissioned facility and deciding whether the conditions have been met to allow the termination of authorization;
- terminating the authorization when the operator has demonstrated that the approved end state has been met; and
- giving interested parties an opportunity to provide comments on the final decommissioning plan and supporting documents before approval based on national requirements.

#### **Requirement 6: Responsibilities of the Operator**

**The operator shall implement planning for decommissioning and carry out the decommissioning actions in compliance with the national safety standards and requirements. The operator is responsible for all aspects of safety and environmental protection during decommissioning. The**

**operator shall provide financial assurances and resources to cover the costs associated with safe decommissioning, including management of resulting radioactive waste.**

3.4. The responsibilities of the operator include:

- selecting a decommissioning strategy as the basis for preparing decommissioning plans (initial and final) throughout the lifecycle of the facility;
- establishing and implementing an integrated management system [8];
- notifying the regulatory body prior to permanently shutting down the facility or permanently ceasing operations;
- managing the decommissioning project and performing decommissioning actions;
- identifying a destination for all waste arising from decommissioning actions;
- performing safety and environmental impact assessments related to decommissioning actions;
- preparing and implementing appropriate safety and physical protection procedures, including emergency preparedness, and applying good engineering practices;
- ensuring that properly trained, qualified and competent staff are available for the decommissioning project;
- performing radiological surveys in support of decommissioning;
- assuring that end state criteria have been met by performing a final survey; and
- keeping records and submitting reports as required by the regulatory body.

#### **4. DECOMMISSIONING MANAGEMENT**

##### **Requirement 7: Integrated Management System**

**An integrated management system shall be applied to all aspects of decommissioning [8].**

4.1 An integrated management system provides a single framework for the arrangements and processes necessary to address all the goals of the operating organization. These goals include safety, health, environmental, security, quality and economic elements.

4.2. An integrated system for the management and implementation of decommissioning has to be established as part of the operator's organization with the prime responsibility of ensuring that decommissioning will be conducted safely. The decommissioning management's reporting hierarchy and lines of authority are not to create conflicts between organizations and activities that could compromise safety during decommissioning.

4.3. The ultimate responsibility for safety remains with the operator, although it is permissible to delegate the performance of specific tasks to contractors. The decommissioning management ensures that the work of contractors is appropriately controlled so that it is conducted safely. If the operator changes during the lifetime of the facility, procedures need to be put into place to ensure the transfer of decommissioning responsibility to the new operator.

4.4. Individuals responsible for performing decommissioning are required to have the necessary skills, expertise and training to perform decommissioning safely. Provisions are made, as far as possible, to ensure that key staff are retained and that institutional knowledge about the facility is maintained and is accessible.

4.5. All individuals have the responsibility and authority to bring any safety concerns to the decommissioning management. The decommissioning management also ensures that appropriate authority for stopping work is provided.

4.6. Decommissioning is controlled through the use of written procedures. These procedures are subject to review and approval by the operator's organizations responsible for ensuring safety and practicability. A methodology for issuing, modifying and terminating work procedures is established.

## **5. DECOMMISSIONING STRATEGY**

### **Requirement 8: Selecting a Decommissioning Strategy**

**The operator shall select a decommissioning strategy, on which the planning for decommissioning will be based. The strategy shall be consistent with national decommissioning and waste management policy.**

- 5.1. The selection of a decommissioning strategy is justified by the operator.
- 5.2. The preferred decommissioning strategy is immediate dismantling.
- 5.3. The operator demonstrates that, for the selected strategy, the facility will be maintained in a safe configuration at all times, will be decommissioned and that no undue burdens are imposed on future generations.
- 5.4. If the shutdown of a facility is sudden (e.g., as a consequence of a severe accident), the decommissioning strategy is reviewed on the basis of the situation that caused the sudden shutdown to determine whether revision of the strategy is required. The facility is brought to a safe configuration before an approved final decommissioning plan is implemented.
- 5.5. For sites that house more than one facility, a site strategy for decommissioning is developed to ensure that interdependencies are taken into account during the planning for individual facilities which will lead to final decommissioning plans for each facility.

## 6. FUNDING

### **Requirement 9: Decommissioning Funding**

**National legislation shall set out the responsibilities with respect to financial provisions for decommissioning. These provisions shall include establishing a mechanism to provide and ensure adequate financial resources for safe and timely decommissioning.**

- 6.1. Adequate financial resources to cover the costs associated with safe decommissioning, including the management of the resulting waste, needs to be available when needed, even in the event of premature shutdown of the facility.
- 6.2. The cost estimate is updated based on the periodic update of the initial decommissioning plan. The financial assurance instrument is maintained consistent with the facility's specific cost estimate and is changed if the cost estimate increases or decreases.
- 6.3. If financial assurance for the decommissioning of an existing facility has not yet been obtained, suitable funding provision is put into place as soon as possible. Provisions for financial assurance are required prior to licence renewal or extension.

6.4. If the decommissioned facility is released with restrictions on its future use, financial assurance ensures that funding covers the facility and its monitoring, surveillance and control through the necessary time period for long term stewardship.

## 7. DECOMMISSIONING PLANNING DURING FACILITY LIFECYCLE

### **Requirement 10: Decommissioning Planning**

**The operator shall prepare and maintain a decommissioning plan throughout the lifecycle of the facility, unless otherwise defined by the regulatory body, in order to show that the decommissioning can be accomplished safely to meet the defined end state.**

7.1. For new facilities, consideration of decommissioning begins early in the design stage and continues through to the termination of authorization. The regulatory body ensures that operators take into account decommissioning in the design, construction, commissioning and operation of the facility, including features to facilitate decommissioning, the maintenance of records of the facility, and consideration of physical and procedural methods to prevent the spread of contamination.

7.2. For existing facilities where there is no initial decommissioning plan, a suitable plan for decommissioning is prepared as soon as possible, once the regulatory body has provided requirements and guidance, and the plan is periodically updated.

7.3. If final shutdown occurs before a final decommissioning plan is prepared, adequate arrangements are provided to ensure the safety of the facility until an approved final decommissioning plan can be prepared and implemented.

7.4. A baseline survey of the site, including obtaining information on radiological conditions, is performed prior to construction and updated prior to commissioning of a new facility. This information will be used to determine radiological background conditions. For those activities where such a baseline survey has not been done in the past, data from analogous and undisturbed areas with similar characteristics are used instead of pre-operational baseline data.

7.5. The operator prepares and submits an initial decommissioning plan together with the application for authorization to operate the facility. This initial decommissioning plan is necessary to assure that sufficient funds will be available for decommissioning, to facilitate early planning for minimization of decontamination, to identify categories and estimate quantities of waste.

7.6. The initial decommissioning plan is updated by operator and reviewed by regulatory body periodically, at least every five years or as prescribed by the regulatory body, or when specific circumstances warrant, such as if changes in an operational process lead to significant changes to the plan. Updates are made as necessary in the light of operational experience gained, lessons learned from decommissioning of similar facilities, new or revised safety requirements or technological developments and selected decommissioning strategy. If an accident or event occurs, the initial decommissioning plan is updated as soon as possible and reviewed.

7.7. Appropriate records and reports that are relevant to decommissioning (e.g., events) are retained during the life of the facility. In this way, the design and modifications of the facility and its operating history will be identified and considered in preparing the decommissioning plans.

7.8. Between final shutdown of operations and approval of the final decommissioning plan, there may be a transition period. During this period, some preparatory decommissioning actions can be performed if they are allowed by the operational authorization.

7.9. During the transition period, the facility is subject to the operating license. All applicable requirements for the facility remain in place, unless the regulatory body has agreed to reductions of the requirements on the basis of a reduction of the hazards (e.g., the removal of nuclear material from the facility).

#### **Requirement 11: Final Decommissioning Plan**

**Prior to conducting of decommissioning actions, a final decommissioning plan shall be prepared and submitted to the regulatory body for approval.**

7.10. The operator informs the regulatory body prior to permanently shutting down the facility. If a facility is shut down and/or no longer used for its intended purpose, a final decommissioning plan is submitted for approval within two years of the cessation of authorized activities, unless an alternative schedule is prescribed by the regulatory body. The operator ensures that the facility is maintained in a safe configuration during transition and until the approval of the final decommissioning plan.

7.11. The final decommissioning plan and supporting documents includes the decommissioning strategy; the decommissioning actions; the proposed end state and how the operator will demonstrate that the end state has been achieved; the timeframe for decommissioning and the funding for completion of the decommissioning.

7.12. Often large and complex decommissioning projects can benefit from dividing decommissioning actions into several phases. Nevertheless, all phases to reach the end state are described in the final decommissioning plan and supporting documents. Updates of the final decommissioning plan include additional information for subsequent phases.

7.13. The final decommissioning plan or updates can include new technologies for decommissioning actions. Prior to using them, it is demonstrated that the use of such methods are safe and can effectively achieve the desired end result.

7.14. Updates of the final decommissioning plan are made as necessary in the light of decommissioning experience gained, new or revised safety requirements, new or revised national regulations, or technological developments. Updates of the final decommissioning plan by the operator are reviewed and approved by the regulatory body.

7.15. During the preparation and update of the final decommissioning plan, the extent and type of radioactive material (irradiated and contaminated structures and components) at the facility is determined by means of a detailed characterization survey and on the basis of records collected during the operational period. If nuclear material or operational waste remains at the facility (including subsurface soils and groundwater), this radioactive material is included in the characterization survey. Additional characterization of the site to evaluate potential migration is to be considered.

7.16. If the deferred dismantling strategy has been selected, it will be demonstrated in the final decommissioning plan and/or supporting documents that such an option will be implemented safely. The availability of adequate funding necessary for maintaining the facility during the deferral period and for subsequent decontamination and/or dismantlement is demonstrated.

7.17. If entombment has been selected, it will be demonstrated in the final decommissioning plan and/or supporting documents that such an option will be implemented safely. The availability of adequate funding necessary for maintaining the facility during entombment is demonstrated. The adequacy of the controls is periodically reviewed and ensures the entombment structure maintains its original purposes.

7.18. Interested parties are provided with an opportunity to review the final decommissioning plan and supporting documents, and to provide comments to the regulatory body prior to its approval.



## 8. CONDUCTING DECOMMISSIONING ACTIONS

### **Requirement 12: Conducting Decommissioning Actions**

**The operator shall implement the final decommissioning plan and related waste management activities in compliance with the national safety standards and requirements. The operator shall be responsible for all aspects of safety and environmental protection during the decommissioning.**

8.1. The operator will not implement the final decommissioning plan until the regulatory body has approved it. Updates to this plan are submitted to and approved by the regulatory body.

8.2. In the case of deferred dismantling, the operator ensures that the facility has been placed, and will be maintained, in a safe configuration and subsequent decontamination and/or dismantlement will be performed in the future. An adequate maintenance and surveillance programme, which is subject to the approval of the regulatory body, is developed to ensure safety during the period of deferment.

8.3. In the case of entombment, the operator ensures that the facility has been placed, and will be maintained, in a safe configuration. An adequate maintenance and surveillance programme, which is subject to the approval of the regulatory body, is developed to ensure safety during the period of entombment.

8.4. Based on the final decommissioning plan, decontamination and dismantling techniques are used such that the protection of workers, the public and the environment is optimized and the generation of waste is minimized. Decommissioning actions such as decontamination, cutting and handling of large equipment, and the progressive dismantling or removal of safety systems have the potential for creating new hazards. The impacts on safety of these actions are assessed and managed so that these hazards are mitigated and radiation exposures are kept within acceptable limits and constraints.

8.5. The regulatory body makes arrangements for and implements the inspection and review of the decommissioning actions to ensure that they are being carried out in accordance with the final decommissioning plan and with other requirements for which the regulatory body has oversight responsibility. Whenever safety requirements and conditions for authorization are not met, the regulatory body takes appropriate enforcement actions.

### **Requirement 13: Emergency Planning**

**Emergency planning arrangements, commensurate with the hazards, shall be established and maintained and events significant to safety shall be reported to the regulatory body in a timely manner.**

8.6. Additional requirements for preparedness and response to emergencies are established in a separate IAEA publication [9].

#### **Requirement 14: Waste Management**

**A waste management strategy shall be established for all waste streams arising from decommissioning.**

8.7. Disposal is the preferred option for waste that is generated during decommissioning, but if disposal capacity is not available, waste is stored safely in accordance with applicable requirements [4, 10].

8.8. Prior to starting decommissioning, the operator ensures the availability of, to the extent possible, adequate waste processing, storage and disposal capacity for the wastes resulting from the decommissioning.

8.9. If a final decision on disposal has not been made for particular waste types, the operator arranges for the safe storage of the waste until its disposition.

8.10. If operational waste or nuclear fuel remains at the site after permanent shutdown of a facility, then such material is removed and transported to an authorized facility in compliance with applicable regulations, or the approved final decommissioning plan addresses the management of these materials.

### **9. COMPLETION OF DECOMMISSIONING ACTIONS AND TERMINATION OF AUTHORIZATION**

#### **Requirement 15: Completion of Decommissioning actions and Termination of Authorization**

**On completion of decommissioning actions, it shall be demonstrated that the end state criteria as defined in the final decommissioning plan and any additional regulatory requirements have been met. When the operator has demonstrated that the end state has been met, the regulatory body shall decide on termination of the authorization.**

- 9.1. A final decommissioning report is prepared that demonstrates the end state of the facility has been met and this report is submitted to the regulatory body for review.
- 9.2. The facility is released from regulatory control once the operator has demonstrated that the end state in the approved final decommissioning plan has been reached and that any additional regulatory requirements have been met. The regulatory body evaluates the end state to ensure that the criteria have been met and the authorization is terminated.
- 9.3. A system is established to ensure that all records are maintained in accordance with the records retention requirements of the integrated management system and the regulatory requirements.
- 9.4. If waste is stored on the site after decommissioning is completed, a revised or new, separate authorization, including requirements for decommissioning, is issued for the storage facility.
- 9.5. If the approved end state is to release the facility with restrictions on future use, appropriate controls are maintained to ensure the protection of human health and the environment. These controls are specified and are subject to approval by the regulatory body. Clear responsibility is assigned for implementing and maintaining these controls. The regulatory body ensures that a mechanism is in place to comply with the release restrictions.

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<sup>2</sup> Present at the Consultant Meeting, 15-19 August 2011.

<sup>3</sup> Present at the Technical Meeting, 30 January – 1 February 2012.

**BODIES FOR THE ENDORSEMENT  
OF SAFETY STANDARDS**

Commission on Safety Standards

Nuclear Safety Standards Committee

Radiation Safety Standards Committee

Transport Safety Standards Committee

Waste Safety Standards Committee

**CONSULTANTS MEETINGS**

Vienna 27 June – 1 July 2011;  
Vienna 15-19 August 2011.

**TECHNICAL MEETING**

Vienna 30 January – 1 February 2012.