



HM Government
of Gibraltar

RESPONSIBLE AND SAFE MANAGEMENT OF SPENT FUEL AND RADIOACTIVE WASTE REGULATIONS

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1. Policy Document

Responsible and Safe Management of Spent Fuel and Radioactive Waste

1.1 Purpose and Scope

This document provides a structured approach to compliance with the requirement for the HM Government of Gibraltar to implement a Nuclear Waste Management Framework.

Production of the Framework is a regulatory requirement under Regulation 5(1) of the Responsible and Safe Management of Spent Fuel and Radioactive Waste Management Regulations 2013, Ref [1].

In addition, there is a further requirement under the regulations, Regulation, 6, to establish a Competent Authority, CA. The CA will act in its capacity as the regulatory body and establish a system of licensing and inspection.

There remains a clear emphasis that the primary responsibility lies with the waste generator for compliance purposes, Regulation 7. The waste generator is the licence holder for the waste, as granted by the CA, for the safe and compliant management of the wastes. For the purposes of regulatory compliance, the Environmental Agency will act as the CA under these Regulations.

1.2 Procedure

1.3 Roles and Responsibilities

Member States must ensure that the prime responsibility for the safety of spent fuel and radioactive waste management lies with the licence holder. In addition, Member States shall ensure that the National Framework includes the establishment of a CA who will undertake a programme of regulatory compliance inspections, on behalf of the Member State. These duties are identified in the Wood Report, Ref [2].

Operators of spent fuel and radioactive waste management facilities must hold a licence to operate, as granted by the CA.

In summary the CA to ensure the following:

- Propose, define or participate in the definition of national spent fuel and radioactive waste management safety requirements;
- Ensure that licence holders comply with the requirements of the National Framework, and the terms of the licence;
- Verify such compliance through regulatory assessments and inspections; and
- Propose or carry out effective and proportionate enforcement actions.

1.4 Licensing

Member States must ensure that the responsibility for the safety of spent fuel and radioactive waste lies with the licence holder, Regulation 6, of the Regulations. That responsibility cannot be delegated and includes the activities of contractors and sub-contractors, whose activities may affect safety.

When applying for a licence, the applicant is required to submit a demonstration of nuclear safety. The scope and level of detail is to be commensurate with the identified level of hazard, (magnitude and severity). This is another example of the graded approach to compliance. Licence holders must continuously assess, verify and improve, so far as is reasonably practicable, the nuclear safety of their installations, in a systematic and verifiable way. This shall include measures to ensure that accidents are prevented and the severity of any such accidents is minimised.

Licence holders must establish and implement management systems and provide for appropriate on-site emergency procedures so as to minimise the consequences of an accident.

Licence holders must ensure sufficient financial and human resources to fulfil the requirements of the licence. This must be extended to contractors and sub-contractors, who likewise must be able to meet the financial and human resources to meet the requirements of the licence.

1.5 Inspections

Member States must ensure that a programme of regulatory compliance inspection visits is in place. This programme and the scope of the inspections are a requirement of the National Framework and are consistent the general duties placed on the CA.

Inspections can be either planned or reactive to the concerns of the CA or members of the public. Inspections will seek to determine compliance with both the conditions of the site operators licence and the general requirements of the regulations. Improvement actions will be given in situations where a higher level of compliance can be identified and enforcement actions taken where the level of compliance is found to be unacceptable. A timescale and deadlines for action will be included in the notice of enforcement action. One of the inspection criteria will also be the level of Quality Assurance, QA, adopted by the site operator.

1.6 Quality Assurance

The Her Majesty's Government of Gibraltar, via the National Framework, will establish and implement an integrated management system, with the requisite quality assurance elements to effectively regulate the safe management of spent fuel and radioactive waste. This programme will be regularly reviewed and updated to recognise the latest scientific and technical advances,

2. Duties on the Competent Authority

Responsible and Safe Management of Spent Fuel and Radioactive Waste Regulations, 2013

2.1 Executive summary

This document has been produced for the Environmental Agency, Gibraltar. This document identifies the duties held by the Competent Authority as stated in the Responsible and Safe Management of Spent Fuel and Radioactive Waste Regulations, 2013, Ref, [1].

Gibraltar as a British overseas territory, is considered a Member State and therefore is required to implement EU Directives. This is accomplished by introduction of its own Statutory Instruments, such as the above regulations.

It is stated in the Regulation 3(d), that a “graded approach” should be implemented. These regulatory principles across the whole of the EU where there are Member States that actively transport spent fuel on a regular basis. The HM Government of Gibraltar neither generates radioactive waste nor transports spent fuel, therefore a “light touch” regulatory framework in this area is therefore appropriate.

This document constitutes the output of Task 1 of the wider support contract provided by Wood to the Environmental Agency.

2.2 Introduction

These Regulations, the Responsible and Safe Management of Spent Fuel and Radioactive Waste Regulations 2013, came into operation on the 23rd of August 2013. These Regulations outline the requirements for EU Member States to implement a legal framework to enable the safe and compliant management of radioactive wastes whilst also ensuring the protection of human health and the environment.

These Regulations are in place as a result of the need to implement the requirements of Council Directive, 2011/70/EURATOM, Ref [2], of the same name as the Regulations. Directives are legally binding EU laws which apply in specified policy areas. They set out a legal framework that Member States have to follow, but leave it up to the Member States to implement in their own way.

Gibraltar applies EU law under the relevant Act under Gibraltar law, such as The Interpretation and General Clauses Act, Ref [3] or the Health Protection (Ionising Radiation) Act, 1995, Ref [4]. Secondary legislation such as these Regulations, are therefore implemented to transpose the relevant Directive into law in Gibraltar.

It is the purpose of this document to identify the duties laid out by these Regulations which place specific duties on the Competent Authority.

2.3 Definitions and Interpretation

Within the Regulations there are a number of terms which are defined which hold specific relevance when identifying the duties under these Regulations. The most salient terms are defined below:

- “Competent regulatory authority”, a body designated under Regulation 6, to be an authority in the field of regulation of the safety of spent fuel or radioactive waste management.
- “Nuclear Waste Management Framework”, is the legislative, regulatory and organisational framework established under Regulation 5;
- “Radioactive waste”, means radioactive material in gaseous, liquid or solid form for which no further use is foreseen or considered by the HM Government of Gibraltar, or by a person whose decision is accepted by the HM Government of Gibraltar and which is regulated as radioactive waste by a competent regulatory authority under the Nuclear Waste Management Framework; and
- “Spent fuel”, means nuclear fuel that has been irradiated in and permanently removed from a reactor core; spent fuel may be either considered as a usable resource that can be reprocessed or be destined for disposal if regarded as waste.

2.4 Overview of the Regulations

Regulation 3 requires that the HM Government of Gibraltar;

- a) Contributes to the establishment of a European Union framework for ensuring responsible and safe management of spent fuel and radioactive waste to avoid imposing undue burdens on future generations;
- b) Ensures the provision of appropriate arrangements in Gibraltar for a high level of safety in spent fuel and radioactive waste management to protect workers and the general public against the dangers arising from ionising radiation; and
- c) Ensures the provision of necessary public information and participation in relation to spent fuel and radioactive waste management while having due regard to security and proprietary information issues.

There is a general principle that waste generation should be minimised and appropriate design measures put in place. This is consistent also with the requirements of the Basis Safety Standard, BSSD, 59/13/EURATOM, Ref [5].

Regulation 3 outlines the general duties placed on the HM Government of Gibraltar. In the next section we outline the duties placed on the Competent Authority.

2.5 Duties on the Competent Authority

The Competent Regulatory Authority is defined in the Regulations as the designated body having specified duties placed upon them. It can for the purposes of compliance, in respect of both these regulations and the EU Directive they are based on, be assumed that the Competent Authority is the duty holder assuming responsibility for those duties laid upon the HM Government of Gibraltar for ensuring compliance with the regulations. The Competent Authority, as nominated by the HM Government of Gibraltar, is the Environmental Agency. In the Table below the duties of the Environmental Agency are summarised:

Table 1 Summary of Duties placed on the Competent Authority, (CA)

	Regulation	Requirement
Duty 1	4(1)	Responsibility for spent fuel and radioactive waste
Duty 2	4(3)	Produce policies for the safe management of spent fuel and radioactive waste
Duty 3	5(1)	Establish a Nuclear Waste Management Framework
Duty 4	6(1)	Establishment of the Competent Regulatory Authority
Duty 5	8(1)a	Regularly assess and inspect waste stores
Duty 6	8(1)b	Inspect management and QA systems
Duty 7	11(2)	Public participation and information sharing
Duty 8	12	Implement a Nuclear Management Programme
Duty 9	15	Reporting to the Commission

2.6 Summary

Outlined within this document are the regulatory duties placed upon the Environmental Agency, in its capacity as the Competent Authority, under the Responsible and Safe Management of Spent Fuel and Radioactive Waste Regulations, 2013. This document represents the output for Task 1 of the wider Wood contract with the Environmental Agency. In future Tasks 2 and 3, Wood will firstly propose a document management structure to help meet compliance and finally provide draft procedures to ensure compliance.

In summary, each Member State shall establish and maintain a Competent Regulatory Authority, CA, in the field of spent fuel and radioactive waste management. Member States shall ensure that the CA is functionally separate from any other body or organisation concerned with the management of radioactive materials.

Finally, Member States shall ensure that the CA is given legal powers and sufficient human and financial resources necessary to fulfil its obligations in connection with the National Framework.

It is inherent within the definition and scope of work of the CA that it effectively assumes the role of the Regulator assessing compliance against the requirements of these regulations. Wood also notes that there is a high likelihood that there will be a potential overlap in regard to the regulatory duties between these regulations and other regulations. Namely, Regulation 11 of these regulations and the general requirements of the REPPIR Regulations, Ref, [6], in the domain of public information sharing and consultation.

3. Competent Authority Compliance

Strategy Document

3.1 Executive summary

This document has been produced for the Environmental Agency, Gibraltar. This document outlines a proposed strategy to ensure compliance with the requirements of the Responsible and Safe Management of Spent Fuel and Radioactive Waste Regulations, 2013. Contained within this document is a list of documents, their title and intended purpose. It is our intention to minimise and simplify where possible and cross-reference to existing documents to reduce the number of documents and procedures which need to be written.

The Task 1 output was a report detailing Competent Authority Duties.

This document constitutes the output of Task 2 of the wider support contract provided by Wood to the Environmental Agency.

Task 3 will be to produce draft versions of the identified documents

3.2 Introduction

This document provides a structured approach to compliance and is intended to outline how compliance with the Responsible and Safe Management of Spent Fuel and Radioactive Waste Regulations, 2013, Ref [1], and the EU Directive behind it, Ref [2], can be achieved from the perspective of the Environmental Agency, acting in their capacity as the Competent Authority.

It is stated within the Regulations, Regulation 4(3), (d), Implementation of Measures shall follow a graded approach. This is stated within the General Principles of the Regulations and acknowledges that the regulatory burden should be commensurate with the radiological hazard. Gibraltar generates no radioactive waste through its own operations. In addition, any radiological waste generated by the Ministry of Defence, MOD, through its operation of the nuclear licensed base in Gibraltar, remains the responsibility of the MOD, for management and disposal. Therefore, the likelihood of any action needing to be taken by the Competent Authority in Gibraltar is extremely low.

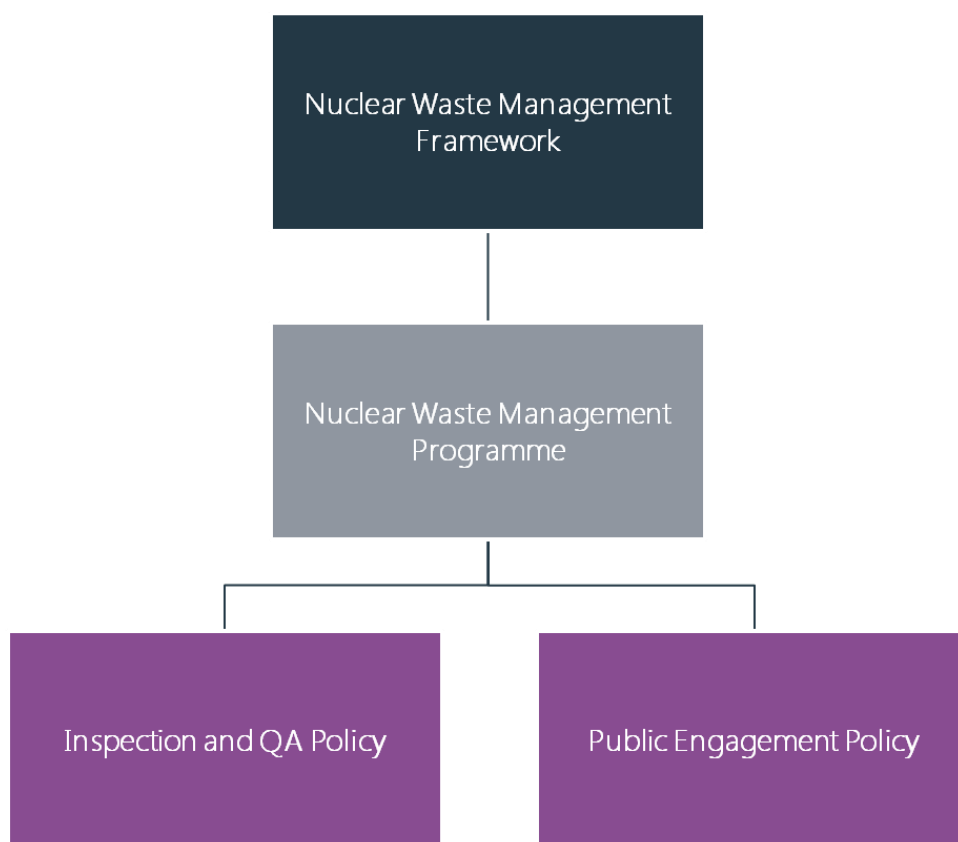
However, there remains a duty on the HM Government of Gibraltar to comply with these Regulations and therefore a stated strategy and policy documents must be produced. It is the purpose of this document to describe this strategy and outline the contents of these policy

documents. As previously stated it is reasonable to take a “light touch”, graded approach to regulatory compliance and the strategy and policy documents reflect this.

3.3 Strategy to Achieve Compliance

Duties held by the Environmental Agency, acting as the Competent Authority, are outlined in the Task 1 Report, Ref, [3]. These duties can be ranked and then simplified to produce an over-arching compliance strategy. Our proposed strategy structure is presented below and in the following Sections we describe the contents of the individual strategy and policy documents.

Figure 1 Strategy Structure



3.4 Nuclear Waste Management Framework

In our proposed structure the top level document is the document describing the Nuclear Waste Management Framework. This is the main controlling policy document which identifies and states the various arrangements, roles and responsibilities necessary for compliance.

Member States must establish and maintain a national legislative, regulatory and organisational framework, for spent fuel and radioactive waste. This framework must allocate responsibility and provides for coordination between relevant competent bodies. These requirements can be summarised as:

- A national programme for the implementation of spent fuel and radioactive waste management;
- National arrangements for the safety of spent fuel and radioactive waste management;
- A system of licensing of spent fuel and radioactive waste management activities;
- A system of appropriate controls, a management system, regulatory inspections, documentation and reporting obligations;
- Allocation of responsibility to the bodies involved in the different steps of spent fuel and radioactive waste management. Primary responsibility going to the waste generators; and
- Arrangements for public information and participation.

In the National Framework document it is necessary to further describe the wider, existing, HM Government of Gibraltar legal and regulatory framework for health safety and environment.

3.5 Nuclear Management Programme

Production of the Nuclear Management Programme is an identified action included in the Nuclear Waste Management Framework document. This is an important aspect in ensuring compliance with the over-all aims of the Regulations and the EU Directive that the Regulations help transpose into Gibraltar law. The national programme will set out the requirements required by Regulation 12 and detailed in Regulation 13. Essentially these actions and aims set out how the HM Government of Gibraltar will meet the wider aims of the Regulations as stated in Regulation 4.

The suggested contents of this document are:

- Identify milestones and establish a timeframe for the implementation of the overarching objectives of the national programme;
- Establish an inventory of all spent fuel and radioactive waste and make estimates of future arisings;
- Policy on planning and operating waste facilities;
- Policy on decommissioning waste facilities;
- Establish a programme for research and development in the area of waste management;
- Establish a mechanism for monitoring of the national programme and identify the key performance indicators; and
- Establish the responsibility and timeframe to carry out these inspections.

Clearly in the case of Gibraltar many of these arrangements will never be required but they must be identified and a suggested, light touch solution, proposed.

3.6 Supporting Policy Documents

Wood have identified that the two key documents which need to be produced are the Nuclear Waste Management Framework and the Nuclear Management Programme. We have suggested the structure and contents for these two documents. In addition to these two main documents a number of supporting policy documents will also need to be produced. We aim to keep the number of additional documents to a minimum by a process of removing unnecessary and irrelevant material from the frameworks, programmes and policies and cross-referencing to existing documents where possible.

3.7 Inspection and QA Policy

As part of requirement to ensure that there is regulatory over-sight of the framework and programme it is necessary to undertake regular inspections. These inspections can be multipurpose but the two main requirements are to ensure that compliance with the Regulations is met and to also ensure that there is a robust inspection regime in place where adequate records are kept and learning from experience is implemented. There is also a requirement to provide adequate training of staff and ensure they receive appropriate support in continued development of the necessary skills and experience.

The requirements of this policy are stated in the Regulations as Regulation 8(1), (a) to (c), inclusive.

3.8 Public Engagement Policy

There is an emphasis within the Regulations to ensure that the HM Government of Gibraltar must ensure that the necessary information on the management of spent fuel and radioactive waste is made available to members of the public.

In addition there is a duty on the HM Government of Gibraltar to ensure that members of the public are given opportunities to participate effectively in the decision making process in regard to the management of spent fuel and radioactive waste, in accordance with the laws of Gibraltar.

How this will be achieved will be the subject of a policy document essentially focussed on ensuring the regulatory process is transparent.

Regulatory status for these requirements is presented in Regulation 11(1), (a) and (b) and in Regulation 11(2).

3.9 Further Actions

In addition to the policies outlined above a further policy describing the licensing system could be produced but it is hoped that this could be included in the framework document and referenced in the programme document so a standalone policy document will not be required. The list above is not exhaustive and other stand-alone policy documents may be identified during the production of the two main top level documents, the National Framework and the National Programme.