

SURVEY OF LEGAL ASPECTS, REGULATIONS, STANDARDS AND GUIDELINES APPLICABLE TO RADIOACTIVE WASTE MANAGEMENT OF THE BRAZILIAN MULTIPURPOSE REACTOR – RMB

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ABSTRACT

In Brazil, the Brazilian Nuclear Energy Commission (CNEN) and Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) are the agencies responsible for the execution, regulation and control of nuclear and environmental policies, respectively. Such regulatory activities are very comprehensive (IBAMA) or too specific (CNEN), revealing other aspects that would, also, need to be observed so that the management could be carried out efficiently (quality) and effectively (safety), including the three governmental administrative levels: Federal, State and Municipal. In addition to laws, regulations, decrees and resolutions, there are also national and international standards and guides that provide guidelines for structuring the current management and the use of best regulatory practices. The Brazilian Multipurpose Reactor Enterprise (RMB) is a CNEN project, complying with a Multi-Year Plan of the Brazilian Ministry of Planning, Development and Management (MPDG). The Enterprise is being developed under the responsibility of the Directorate of Research and Development - DPD of CNEN and will have a facility for treatment and initial temporary storage of the radioactive waste generated by the operation of the research reactor and the activities carried out in the associated laboratories. The RMB will be built in the city of IPERÓ, located in the state of São Paulo, near ARAMAR Experimental Center of the Brazilian Navy.

This work aims to present the research results regarding the various aspects that regulate, legislate and standardize the practices proposed to the Radioactive Waste Management of the RMB project.

1. INTRODUCTION

Legal and regulatory requirements should be complied by any installation or company that operating license, whatever its field of activity. One of the first aspects to be observed is the identification of the legal, regulatory and statutory requirements specific to the type of activity to be developed without risk of fine and/or penalty. The objective of this work is to identify all requirements necessary to license the radioactive waste management facility of the Brazilian Multipurpose Reactor, considering legal aspects, regulations, standards and guidelines.

2. THE RMB

The Brazilian Multipurpose Reactor (RMB) is an Enterprise of the Research and Development (DPD) Directorate of the Brazilian Nuclear Energy Commission (CNEN) and is being developed by Research Institutes, as well as by partners, namely: Technological Center of the Navy in São Paulo (CTMSP) and Amazônia Azul Tecnologias de Defesa S.A (AMAZUL), a Federal Institution.

The enterprise, which will be built in the municipality of Iperó, about 150 km from the city of São Paulo and according to its nature and configuration of its facilities, will be classified as a nuclear facility. There are several legal and regulatory details that need to be met, depending on the activity of the facility. For instance, radioactive waste management should comply with specific requirements related to pre disposal and disposal operations among others. Requirements for site selection, project (conceptual, basic and detailed), construction, commissioning, operation and decommissioning should also be met. [1]

During the operation of the facilities, the radioactive waste will be generated and it will be treated, conditioned and stored in a suitable facility. According to CNEN, radioactive waste is any material resulting from human activities, containing radionuclides in quantities exceeding the exemption limits which reuse is improper or unplanned [3]. In the case of RMB, radwastes Class 2 and Class 2.1 [2] will be generated. Documentation dedicated to the licensing process of this facility will be prepared. However, the lack of a guideline for structuring and elaborating these specific documents make difficult this work.

In this way, it was necessary to carry out a survey of laws, regulations and standards related to this type of business and that will be adopted as a reference in the structuring of such documents.

3. HIERARCHY OF BRAZILIAN LAWS

Due to the scope of this work, for better understanding of the legal structure, it is necessary to observe the hierarchy existing in the Brazilian legislation. According to BITENCOURT and CLEMENTINO [4], the constitutional norms are at a level of superiority in relation to the other laws, serving as a basis for their validity. These authors divide them into three groups: constitutional norms, infra-constitutional norms and infra-legal norms, with hierarchy between the groups, but not between the norms within the same group. The norms of higher hierarchy are those which are constitutional and the minor ones are the infralegal.

3.1 Constitutional Norms

Federal Constitution (CF) – It stands for a set of rules governing a State, which may or may not be codified as a written document, which lists and limits the powers and functions of a political entity. It defines the fundamental policy, political principles and establishes the structure, procedures, powers and rights of a government.

Transitional Constitutional Provisions Act (ADCT) - Its purpose is to regulate the transition period from the legal regime established by the previous constitution to the legal regime established by the new one.

Constitutional Amendments - This type of amendment is intended to amend some or a few articles of a State Constitution, resulting in specific changes to the constitutional text, which are restricted to certain matters and should not have as their object only the abolition of the so-called "stony clauses".

International Treaties and Conventions on Human Rights - The international treaties and conventions on human rights, once signed, approved and ratified, enter our legal system with constitutional status, acquiring a normative hierarchy variable according to the different doctrinal currents on the International law order, that is, they become a norm of constitutional nature.

3.2 Infra-constitutional Norms

It is the legal norm, inferior to the constitution, which should respect the constitutional forecasts and cannot predict anything beyond what the constitutional text dictates.

Complementary law – It is the law that has, as purpose or complement, to explain and add something to the constitution. The complementary law (absolute majority) differs from the ordinary law (simple majority) as to the quorum for its creation. Ordinary law requires only a simple majority of votes to be accepted; while the complementary law requires an absolute majority. There is no hierarchy between ordinary law and complementary law; there are several fields of action.

Ordinary law – It is the primary normative act containing, as a rule, general and abstract norms. Although laws are usually defined by generality and abstraction ("material law"), they contain, not infrequently, singular norms ("formal law" or "normative act of concrete effects") which can deal with almost all matters. The field occupied by them is residual, i.e., anything that is not regulated by complementary law, legislative decree or resolutions will be regulated by ordinary law.

Law delegated -Normative act of the president of the republic that requires authorization of the national congress for its elaboration. It is the normative species used in the hypotheses of transferring the competence of the legislative power to the executive power, delimiting the subject on which it intends to legislate. The delegated law is also present at state and municipal levels.

Provisional measure - In case of relevance and urgency, the president of the republic may adopt provisional measures, with force of law, and should, immediately, submit them to the National Congress which will have to convert it into law within a period of up to sixty days, extendable equally period, so as not to lose its effectiveness.

Legislative Decree - A normative species used in the hypotheses of exclusive competence of the national congress. It, also, serves as an instrument for regulating legal relations arising from the period of validity of the provisional measures, before their conversion into law.

Resolution - Normative administrative act issued by a higher authority, for the purpose of disciplining matters within the specific jurisdiction. Resolutions cannot produce external effects, nor can they contradict regulations and regiments, but, solely, explain them.

3.3 Infra-legal Norms

They are lower standards than infra-constitutional / legal norms. These norms are for internal regulation of the public administration, serving to seek the faithful execution of the law, i.e., infra-legal norms detailing what the infra-constitutional norm says.

Decrees - They are issued by the president of the republic to give faithful execution to an, already, existing law, and dispose about the organization of the public administration.

Ordinance - This is the instrument by which Ministers or other high-level authorities issue instructions on procedures related to the organization and operation of services and it may, also, guide the application of legal texts.

Normative Instruction - It explains the fulfillment of what is established in the ordinance, the process of accomplishing what is established in the ordinance.

4. SURVEY OF APPLICABLE LEGISLATION

Based on the hierarchy presented, a study was carried out to identify the legislation applicable to a facility that treats and stores Class 2 and Class 2.1 radioactive waste [2],

object of this work. For a better understanding of the development of the laws for this matter, the issue is presented in chronological order in table 1, below:

Table 1 - Legislation Applicable to Management of Radioactive Rejects

Legislation Applicable	
	Constitution of the Federative Republic of Brazil of 1988 - See Note 1. [5]
Law N° 4.118, of August 27, 1962	It deals with the national policy of nuclear energy, creating the National Nuclear Energy Commission, and gives other measures. [6]
Law N° 6.189, of December 16, 1974	It changes Law No. 4.188, of August 27, 1962, and Law No. 5.740, of December 1, 1971, which created, respectively, the National Nuclear Energy Commission – CNEN and the Brazilian Nuclear Technology Company - CBTN, which is called "Empresas Nucleares Brasileiras Sociedade Anônima - NUCLEBRÁS", and it makes other provisions. [7]
Law N° 6.453, of October 17, 1977	It provides civil liability for nuclear damages and criminal liability for acts related to nuclear activities and it covers other measures. [8]
Law N° 6.938, of August 31, 1981	It establishes the National Environmental Policy, its purposes and mechanisms of formulation and application, constituting the National System of Environment (SISNAMA), establishing the Register of Environmental Defense. [9]
Law N° 7.735, of February 22, 1989	It provides the extinction of an organ and an autarchic entity and it creates the "Brazilian Institute of Environment and Renewable Natural Resources" and it provides other measures. (IBAMA) [10]
Law N° 7.781, on June 27, 1989	It re-draws articles 2 °, 10 ° and 19 ° of Law N° 6.189 , of December 16, 1974, and it makes other provisions. See Note 2. [11]
CONAMA Resolution N° 001, of January 23, 1986	It establishes the definitions, responsibilities, basic criteria and general guidelines for use and implementation of the Environmental Impact Assessment as one of the instruments of the National Environmental Policy. See Note 3. [12]
Decree N° 99.274, of June 6, 1990	It regulates Law N° 6.902, of April 27, 1981, and Law N° 6.938, of August 31, 1981, establishing, respectively, the creation of Ecological Stations and Environmental Protection Areas and the National Environment Policy, and it makes other arrangements. See Note 4. [13]
CONAMA Resolution N° 237, of December 19, 1997	It provides the review and complementation of procedures and criteria used for environmental licensing. See Note 5. [14]
Law N° 10.308, of November 20, 2001	It provides the selection of sites, construction, licensing, operation, inspection, costs, indemnification, civil liability and guarantees related to deposits of radioactive waste, and other measures. [15] (CNEN is made accountable for this whole process.)
Decree N°5.935, of October 19, 2006	It promulgates the "Joint Convention for the Safe Management of Used Nuclear Fuel and Radioactive Waste". See Note 6. [16]
Complementary Law N° 038, of October 23, 2008 (Municipal - Iperó)	It establishes the Code of Works and Buildings of the Municipality of Iperó and it makes other provisions. See Note 7. [17]
Law N° 12.305, of August 2, 2010	It institutes the National Solid Waste Policy; it changes Law N° 9.605, of February 12, 1998; it makes other arrangements. (PNRS) [18]
Complementary Law N° 140, of	It sets standards, in terms of items III, VI and VII of the caput and the sole paragraph of art. 23 of the Federal Constitution, for cooperation between the

December 8, 2011	Union, the States, the Federal District and the Municipalities in the administrative actions arising from the exercise of common competence, regarding the protection of outstanding natural landscapes, the protection of the environment, the fight against pollution in any of their forms and the preservation of forests, fauna and flora; and it changes Law N° 6.938 of August 31, 1981. See Note 8. [19]
State Decree N° 56.819, of March 10, 2011	It establishes the Fire Safety Regulations for buildings and risky areas in the State of São Paulo and it establishes other measures. (Auto Inspection of the Fire Department - AVCB) – See Note 9. [20]

Note 1: Highlight of the Constitution of the Federative Republic of Brazil of 1988: [5]

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Article 21 - It is the responsibility of the Union:

XXIII - To exploit nuclear services and facilities of any nature and to exercise state monopoly over research, mining, enrichment and reprocessing, industrialization and trade of nuclear ores and their derivatives, subject to the following principles and conditions:

A) any nuclear activity in the national territory will only be admitted for peaceful purposes and with the approval of the National Congress;

B) under the permit system, the commercialization and use of radioisotopes for medical, agricultural and industrial research and uses are authorized;...

C) under the permit system, the production, commercialization and use of radioisotopes with a half-life of less than or equal to two hours are authorized;...

D) civil liability for nuclear damage does not depend on the existence of fault;

Article 22 - It is the exclusive responsibility of the Union to legislate on: ...

XXVI - nuclear activities of any nature;

Article 177 - Monopoly of the Union:

V - the exploration, mining, enrichment, reprocessing, industrialization and trade of nuclear ores and minerals and their derivatives, with the exception of radioisotopes whose production, commercialization and use may be authorized under the permit system, according to points b and c of item XXIII, of the Federal Constitution, caput of art. 21.

Note 2: Highlight of Law N° 7.781, of June 27, 1989: [11]

Article 1° - Articles 2°, 10° and 19° of Law N° 6.189, of December 16, 1974, shall be in force with the following wording:

"Article 2°: CNEN shall be responsible for:

I - collaborating in the formulation of the National Nuclear Energy Policy;

VI - receiving and depositing radioactive waste;

X - issuing regulations and safety and protection standards relating to:

(D) treatment and disposal of radioactive waste.

Note 3: Highlight of CONAMA Resolution No. 001, of January 23, 1986: [12] ...

Article 3° - The licensing of activities that, by law, is of federal competence, will depend on the elaboration of an environmental impact study and its RIMA, to be submitted to the approval of IBAMA.

Note 4: Highlight of Decree N° 99.274, of June 6, 1990: [13] ...

CHAPTER IV - Licensing of Activities:

Article 19 – The Public Power, in the exercise of its controlling competence, shall issue the following licenses:

I - Preliminary License (LP), in the preliminary phase of the activity planning, containing basic requirements to be met in the phases of location, installation and operation, observing the municipal, state or federal plans for land use;

II - Installation License (LI), authorizing the start of implementation, according to the specifications of the approved Executive Project; and

III - Operation License (LO) authorizes, after the necessary checkout, the start of the licensed activity and the operation of its pollution control equipment, according to the provisions of the Previous and the Installation Licenses.

1° - The deadlines for granting the licenses will be set by Conama, observing the technical nature of the activity.

2° - In the cases provided for in Conama's resolution, the licensing dealt with in this article will depend on the homologation of IBAMA.

3° - Once the implementation and operation activities have begun, before the issue of the respective licenses, the directors of IBAMA Sector Offices shall, under penalty of functional responsibility, notify the entities financing these activities, without loss to the imposition of penalties, administrative measures of Interdiction, judicial, seizure, and other precautionary measures.

4° - The licensing of establishments destined to produce nuclear material or to use nuclear energy and its applications, shall be the responsibility of the National Nuclear Energy Commission (CNEN), after consultation with IBAMA and with the state or municipal environmental control agencies.

5° - Excluding the competence referred to in the previous paragraph, in other cases of federal jurisdiction, IBAMA will issue the respective licenses, after considering the technical examination carried out by the state and municipal pollution control agencies.

Note 5: Highlights of CONAMA Resolution N° 237 of December 19, 1997: [14]

Article 3° - The environmental license for undertakings and activities considered effective or potentially causing significant environmental degradation will depend on a previous environmental impact study and its impact report on the environment (EIA / RIMA), which will be publicized, guaranteed the holding of public hearings, when applicable, in accordance with the regulations.

Article 4° - The environmental licensing referred to in Article 10° of Law 6.938, of August 31, 1981, is entrusted to the Brazilian Institute for the Environment and Renewable Natural Resources - IBAMA, SISNAMA executing agency, of undertakings and activities with significant environmental impact on national or regional level, namely:

IV - for the purpose of researching, plowing, producing, benefiting, transporting, storing and disposing of radioactive material, at any stage, or using nuclear energy in any of its forms and applications, under the opinion of the National Nuclear Energy Commission - CNEN;

§1° - IBAMA will make the licensing dealt with in this article after considering the technical examination carried out by the environmental agencies of the States and Municipalities in which the activity or enterprise is located, as well as, when applicable, the opinion of the other competent organs of the Union, States, Federal District and Municipalities involved in the licensing procedure.

Article 7° - The enterprises and activities will be licensed in a single level of competence, as established in the previous articles.

Article 8° - The Public Power, in the exercise of its controlling competence, shall issue the following licenses:

I - Preliminary License (LP) - granted in the preliminary phase of the planning of the enterprise or activity, approving its location and design, certifying the environmental

feasibility and establishing the basic requirements and conditions to be met in the following phases of its implementation;

II - Installation License (LI) – it authorizes the installation of the enterprise or activity according to the specifications contained in the approved plans, programs and projects, including environmental control measures and other constraints, of which they are a determining factor;

III - Operation License (LO) – it authorizes the operation of the activity or undertaking, after verification of the effective compliance with what is contained in the previous licenses, with the environmental control measures and conditioners determined for the operation.

Single paragraph: Environmental licenses may be issued separately or successively.

Note 6: Highlight of Decree N°5.935, of October 19, 2006 [16]

Article 19. Legislative and Regulatory Framework

1. Each Contracting Party shall establish and maintain a legal and regulatory framework to govern the safe management of spent nuclear fuel and radioactive waste.

2. This legal and regulatory framework shall provide for:

i) the establishment of national safety requirements and applicable radiation safety regulations;

ii) a licensing system for the management of spent nuclear fuel and radioactive waste;

iii) a system prohibiting the operation of a spent nuclear fuel management facility or radioactive waste without a permit;

iv) a system of institutional control, inspection and regulatory documentation and appropriate reporting;

v) the requirement to comply with the applicable regulations and the terms of the licenses;

vi) clear allocation of responsibilities of the agencies involved in the different stages of the management of spent nuclear fuel and radioactive waste;

3. In considering whether radioactive materials are to be treated as radioactive waste, the Contracting Parties shall take due account of the objectives of this Convention.

Article 23. Quality Assurance

Each Contracting Party shall take appropriate measures to ensure that appropriate quality assurance programs relating to the safe management of spent nuclear fuel and radioactive waste are established and implemented.

Note 7: Live [17]

Technically called self completion or in the popular language: "habite-se" / "inhabit", is nothing more than a certificate issued by the City Hall attesting that the property (home or residential building or commercial) is ready to be inhabited and was built or renovated according to the legal requirements established by the municipality, especially the Code of Works.

Note 8: Supplementary Law N° 140, of December 8, 2011 [19]

Article 7° - Administrative actions of the Union:

XIV – To promote the environmental licensing of undertakings and activities:

G) In order to research, draw, produce, benefit, transport, store and dispose of radioactive material, at any stage, or use nuclear energy in any of its forms and applications, upon the opinion of the National Nuclear Energy Commission.

Note 9: Fire Department Inspection Certificate- AVCB [20]

This document certifies that the construction has the fire safety conditions foreseen by the legislation and it establishes a renewal period.

According to CONAMA Resolution 237 [14] and the Federal Law 10.308 [15], the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), as well as the National Nuclear Energy Commission (CNEN) are responsible for licensing this type of Enterprise. Licensing is environmental and nuclear, respectively.

In these licensing agencies there are guidelines for preparing the necessary documentation for the licensing of Nuclear Power and Research Reactors and Radiation Facilities, but it was not possible to clearly identify the guidelines for facilities dedicated to the treatment and storage of Radioactive Waste.

No other specific guidelines to be met for this type of installation were identified in IBAMA. However, at CNEN, there are a number of Resolutions related to Radioactive Waste, which are presented in Table 2 (below):

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Table 2 - CNEN Resolutions applicable to Radioactive Waste Management

Resolutions CNEN (Standards)	
Ordinance CNEN 017/00 Standard CNEN NN 1.16 April / 2000	Quality Assurance for the Safety of Nuclear Power Plants and Other Facilities – It determines: - the requirements to be adopted in the establishment and implementation of Quality Assurance Systems for nuclear power plants, nuclear installations and, where applicable, also for radioactive installations; - the manner in which the Quality Assurance Programs should be prepared and submitted to the National Nuclear Energy Commission (CNEN). [1]
Resolution CNEN 110/11 Standard CNEN NN 2.01 September / 2011	Physical Protection of Nuclear Area Operating Units – It establishes the general principles and basic requirements demanded for the physical protection of nuclear area operational units. [21]
Resolution CNEN 164/14 Standard CNEN NN 3.01 March / 2014	Basic Guidelines for Radiological Protection – It establishes the basic requirements for radiation protection of persons in relation to exposure to ionizing radiation. [22]
Resolution CNEN 010/88 Standard CNEN NN 3.02 August / 1988	Radioprotection Services – It establishes the requirements regarding the implementation and operation of Radioprotection Services. [23]
Resolution CNEN 013/88 Standard CNEN NN 5.01 August / 1988	Transport of Radioactive Materials - It establishes the general criteria and basic requirements for safety and radiation protection related to the Transport of Radioactive Material, in order to ensure an adequate level of control of exposure by persons, properties and the environment to ionizing radiation. [24]
Resolution CNEN 014/89 Standard CNEN NN 6.06 January / 1990	Selection and Choice of Sites for Radioactive Waste Deposits – It establishes the minimum requirements applicable to the process of selection and selection of sites for radioactive waste deposits, with a view to ensuring the safe containment of such materials for as long

	as it is necessary for the protection and safety of men and the environment. [25]
Resolution CNEN 012/02 Standard CNEN NN 6.09 September / 2002	Acceptance Criteria for Deposition of Low and Medium Radiation Levels – It establishes the criteria for the acceptance of low and medium levels of radioactive waste for safe deposition in a repository in order to ensure the protection of workers and the population, in face of the harmful effects of ionizing radiation. [26]
Resolution CNEN 167/14 Standard CNEN NN 8.01 April / 2014	Management of Radioactive Waste of Low and Medium Levels of Radiation – It establishes the general criteria and basic requirements of safety and radiation protection related to the management of radioactive waste of low and medium levels of radiation as well as radioactive waste of very short half-life. It classifies them according to the level and nature of the radiation. PGRR. Focusing on safety requirements, it gives direction to segregation; Packages and volume; transport; initial or intermediate storage; treatment; exemption from tailings; release of effluents; transfer; records and inventories. [27]
Resolution CNEN 168/14 Standard CNEN NN 8.02 April / 2014	Licensing of Radioactive Waste Disposal Deposits of Low and Medium Level of Radiation – It establishes the general criteria and basic requirements for safety and radiation protection related to the licensing of initial, intermediate and final deposits of radioactive waste at low and medium levels of radiation, in compliance with Law 10308/2001. Focusing on safety requirements: it classifies the deposits according to the level, nature of radiation and half life; giving guidance on the method of dispensing or depositing the waste; classification of radioactive waste deposits; (Site Approval, Construction Authorization, Operation Authorization, Authorization for Decommissioning, Authorization to close the warehouse, Audits and Regulatory Inspections and Technical Amendments). [2]

5. LICENSING DOCUMENTATION

According to CNEN, the purpose of radioactive storage is to collect and store radioactive waste safely from various nuclear energy applications throughout Brazil. The collection and storage of radioactive waste is, according to Law 10.308 / 2001 [15], an exclusive legal responsibility activity of CNEN, which serves the installations that generate radioactive waste that need appropriate disposal. Since there is no final repository for radioactive waste in the country yet, the radioactive waste is collected and stored in existing intermediate deposits in technical and scientific units of CNEN. [27]

As a complement to the structuring of the documentation for the mentioned licensing, it was not possible to identify, in CNEN Resolutions, a more specific orientation or guideline. Aiming at structuring this documentation and taking into account the specificity of the installation and the fact that Brazil is a member of the International Atomic Energy Agency (IAEA), it is suggested to comply with the guidelines offered by the Agency, as well as the specific guidelines of the Department of Energy (DOE) and that of the American Society of Mechanical Engineers, which are listed in Table 3, below.

Table 3 – IAEA, DOE and ASME Guidelines

IAEA, DOE and ASME Guidelines	
	IAEA Safety Glossary, Terminology used in Nuclear Safety and Radiation Protection – 2007 Edition, June 2007 [28]
No. 111-F IAEA Safety Series	Principles of Radioactive Waste Management - Safety Fundamentals [29]
NW-G-1.1	Policies and Strategies for Radioactive Waste Management (June 2009 STI/PUB/1396) [30]
GSG-1 General Safety Guide	Classification of Radioactive Waste (November 2009 STI/PUB/1419) [31]
GS-G-3.3 Safety Guide	The Management System for the Processing, Handling and Storage of Radioactive Waste (June 2008 STI/PUB/1329) [32]
GS-G-3.4 Safety Guide	The Management System for the Disposal of Radioactive Waste (June 2008 STI/PUB/1330) [33]
GSR Part 2 General Safety Requirements	Leadership and Management for Safety (Jun 2006 STI/PUB/1750)V [34]
GSR Part 5 General Safety Requirements	Predisposal Management of Radioactive Waste (May 2009 STI/PUB/1368) [35]
SSG-40 Specific Safety Guide	Predisposal Management of Radioactive Waste from Nuclear Power Plants and Research Reactors. (June 2016, STI/PUB/1719)
SSR-5 Specific Safety Requirements	Disposal of Radioactive Waste (April 2011 STI/PUB/1449) [37]
NQA-1, February 10, 2014	Certification Program - Requirements for ASME NQA-1 Certification [38]
DOE O 414.1d 25-04-2011	Quality Assurance [39]
DOE/RW-033-P Revision 21	Quality Assurance Requirements and Description; Office of Civilian Radioactive Waste Management – OCRWM [40]

6. CONCLUSION

This work was not intended to be exhaustive in identifying all legal and regulatory guidelines, but to identify those which are more relevant in the activity of "managing radioactive waste", and to assist in meeting the legal and regulatory requirements that need to be accomplished, with a complementary approach on how to meet some of them.

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