



Kuwait Country Report

For the

**7th Review Meeting of the Contracting Parties to the
Convention on Nuclear Safety CNS
27 March – 7th April 2017**

Radiation Protection Department

Ministry of Health

State of Kuwait

9 August 2016

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I. Introduction

The State of Kuwait has no nuclear power plants in its territory and there are no plans to implement any nuclear power program in the foreseeable future. However, there are significant developments of nuclear power programs in the region and in neighbouring countries which make it necessary to accord the highest attention to the implementation of the Convention with respect to all aspects related to the safety of nuclear installations and to the environmental and health consequences of nuclear accidents in nuclear power plants of neighboring countries.

As highlighted in previous years, the focus of the present report is on reporting obligations related to Article 7 “Legislative and Regulatory Framework”, Article 8 “Regulatory Body”, and Article 16 “Emergency Preparedness”.

II. Legislative and Regulatory Framework

In 1977, the Government felt the need for promulgating a national law to organize the use of radioactive sources and to protect people of the country from the hazard of ionizing radiation.

As a result, the Radiation Protection Division was established at the Ministry of Health by the Amiri Decree No.131/1977 (“The Control of the Use of Ionizing Radiation and Protection from the Hazards Thereof”), with the aim of implement radiation protection practices in the fields of medicine, industry and research. This law is currently in the process of being updated according to the current situation, taking into consideration the latest developments in the field and present security concerns.

The Amiri Decree states that no radiation device or radioactive substance may be imported, exported, manufactured, possessed, bought, sold, transported or disposed of, without obtaining a licence for the purpose from the Ministry of Health. The conditions, procedures, and the periods of validity of the licence are laid down by an executive decree of the Minister of Health.

Ministerial Decrees regulating ionizing radiation practices include:

- Ministerial Decree 552/2003 – Organizing the use of ionizing radiation and setting the emergency procedures and safety aspects from the hazards thereof.
- Ministerial Decree 552/2003 is based on the “International Basic Safety Standards for Protection Against Ionizing Radiation and for the Safety of Radiation Sources”, IAEA Safety Series, No. 115,1996
- Ministerial Decree 553/2003 – Setting conditions and safety procedures to be followed for radioactive waste disposal and storage. It is based on “Regulatory control of radioactive discharges to the environment”, No. WS-G-2.3
- Ministerial Decree 225/2005, that regulates and controls the transportation of radioactive materials at the borders of the country and on its territory.

- Ministerial Decree 194/2011 regarding limitations of concentration of radioactive isotopes in food stuff, drinking water and animals foods during emergency.
- Ministerial Decree 144/2014 on the security of radioactive sources

All ministerial decrees are based on International Basic Safety Standards (BSS).

Kuwait adhered to the international conventions related to radiological emergencies and nuclear accidents under the umbrella of IAEA. Kuwait accessed the Convention on Nuclear Safety (CNS) on 9 August 2006. Other relevant international conventions to which Kuwait is party are:

- Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM): Kuwait ratified the Amendment to the CPPNM on 4 April 2016
- The Convention on the Physical Protection of Nuclear Material: Accession on 23 May 2004
- The Convention on Early Notification of a Nuclear Accident: Accession on 13 June 2003
- The Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency: Accession on 13 June 2003

III. Regulatory Body

The Amiri Decree No.131/1977 assigns the Ministry of Health as the National Regulatory Authority, which in turn authorized the Radiation Protection Committee and the Radiation Protection Department to carry out various tasks. The legal part of the Ministry's authority is delegated to the Radiation Protection Committee for issuing licences and the technical part of the authority is delegated to the Radiation Protection Department (RPD).

The same decree establishes the Radiation Protection Committee (RPC) which consists of members from all the governmental bodies with concern of radiation protection such as Ministry of health, Ministry of electricity and water, Kuwait university, Kuwait institute of scientific research, Public environmental protection authority, and Civil defense. The Radiation Protection Committee issues various licences, including personal licences, licences to import radioactive sources & equipment, export licences, licences for users and storage licences.

With respect to Authorization, the following measures are in place:

- All Radioactive Sources “materials and equipment” entering Kuwait need to get a customs clearance from Radiation Protection Department. By law, no radioactive material or equipment can enter the country without the authorization of the Department.
- All Radioactive Sources “materials and equipment” imported to Kuwait require licences from the Ministry of Health.
- All Radioactive materials must be sent back to the manufacturers, if not needed after use.

The increasing use of radiation in various fields required a re-arrangement of the Radiation Protection Department and accordingly the Ministerial Decree 598/2003 was issued. As a result, the Radiation Protection Department (RPD), consists at present of the following four divisions:

- Environmental Radiation Protection Division
- Radiation Techniques Division
- Inspection Division
- Non-ionizing Radiation Protection Division.
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The main activities of the Radiation Protection Department are as follows:

- inspection of medical, industrial and research facilities that use radiation,
- licensing of personal, place and equipment,
- monitoring of personnel working in the radiation field, and
- environmental monitoring including air, water and consumer products.
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RPD cooperates with all relevant national bodies, including the Customs Department, Kuwait Institute for Scientific Research (KISR), the Environment Public Authority (EPA), Kuwait Municipality, the Chamber of Commerce, etc.

Further, there is an active cooperation between the Gulf countries under the umbrella of Gulf Cooperation Council (GCC) regarding the exchange of information and experience in the radiation safety field.

IV. Emergency Preparedness

Effective management of nuclear and radiological emergencies requires that appropriate plans and arrangements are in place, well maintained and exercised on assumption that such situations can occur at any time. Establishing gradually and sustaining a robust system capable of dealing at any time with any nuclear and/or radiological emergency, is a national strategic goal. Significant efforts are being deployed by relevant national authorities and stakeholders to achieve this goal, based on the recommendations of IAEA's guides GS-R-2, GS-G-2.1 and GSG-2.

Provisions concerning radiological emergency situations are contained in the Amiri Decree-Law 131 of 1977 on the Control of the Use of Ionizing Radiation and Protection from the Hazards Thereof. The Decree establishes the Ministry of Health (MOH) as the ministry which is responsible for the protection of the public against all radiation potential hazards. The authorities that are responsible for managing nuclear and radiological emergencies in Kuwait are the Ministry of Health and the Ministry of Interior – Civil Defense.

Amiri Decree 21/1979 assigned the Civil Defense (Ministry of Interior) as the legal responsible authority during all kinds of emergency in Kuwait, including radiological emergencies.

Pursuant to the Council of Ministers Decision 897/1997, the Emergency Committee of the Civil Defense is the highest authority during emergency and has the power to activate the emergency response plan to any accident on the nation wide level. The Emergency Committee

of the Civil Defense assigned the Radiation Emergency Committee to direct the response during radiation related emergencies.

Ministry of Interior's Decree 235/2013 updates and expands the membership of the Radiation Emergency Committee to include sixteen organizations as follows:

- Civil Defense
- Police Force
- Fire Department
- National Guard
- Ministry of Defence
- Ministry of Commerce and Industry
- Ministry of Information
- Ministry of Electricity and Water
- Ministry of Oil
- Ministry of Health
- Kuwait Institute of Scientific Resaearch
- Environment Public Authority
- Kuwait Municipality
- Public Authority of Agriculture Affairs and Fish Resources
- General Administration of Customs
- Directorate General of Civil Aviation
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Ministry of Interior's Decree 1094/2014 establishes the first responders team, consisting of members from:

- Civil Defense,
- Fire Department,
- Ministry of Defence,
- National Guard,
- Radiation Protection Department,
- Kuwait Institute for Scientific Research.

An Emergency Plan and emergency procedure drafts had been prepared for controlling public exposure hazards in cases of radiological emergency or accidents. These plan and procedures have been reviewed by IAEA experts. The plan takes into account categories III, IV and V for the local accidents and accidents abroad according to threat categories table in IAEA documents. Owing to the fact that Kuwait has no nuclear reactors, the plan takes into account the case of accident in reactors in the neighboring countries.

Both the Plan and the procedures are based on:

1. International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources , IAEA- Safety series No.115, 1996.
2. Generic Procedures for Assessment and Response during a Radiological Emergency, IAEA-TECDOC-1162, 2000.
3. Methods for Developing Arrangements for Response to a Nuclear or Radiological Emergency. Updating IEA-TECDOC-953, 2003.
4. IAEA Safety Standards No. GSR part 7, Preparedness and Response for a Nuclear or Radiological Emergency 2015.

The intervention and action levels in Kuwait are in line with the international generic intervention levels in IAEA- TECDOC-953.

A radiological emergency exercise was conducted in March 2014 and a draft plan was developed to guide local agencies during such exercises.

An IAEA Advisory Mission on Medical Response and Preparedness was implemented in May 2015. The medical aspects of the preparedness and response arrangements were analyzed according to IAEA safety standards, with special emphasis placed on Requirement 12 of the IAEA Safety Standards Series No. GSR Part 7.

Currently, the Ministry of Health is in the process of developing national sustainable capabilities for managing the medical response in a nuclear or radiological emergency. Based on Requirement 12 of GSR Part 7 (2015). To this effect, a Roadmap covering the 2016-2020 has been prepared with the support of the IAEA.