**NATIONAL STRATEGYAND PLANNING FOR THE SAFE AND SUSTAINABLE MANAGEMENT OF RADIOACTIVE WASTE AND SPENT NUCLEAR FUEL**

**Abstract**

Nuclear technology applications have been on the increase in Nigeria. The use of radioactive materials in the fields of research, medicine, industry, agriculture, commerce, education and defense; as well as the extraction, processing and combustion of raw materials containing Naturally Occurring Radioactive Materials are among the most prominent. Other emerging activities include the development of nuclear reactors for research and electricity generation purposes. These activities generate radioactive wastes, which contain materials that emit ionizing radiation, and have been recognized as a potential hazard to human health and the environment since the beginning of the 20th century. The safe management of these radioactive wastes is therefore, essential for the protection of human health and the environment, in the present and future.

The Nigeria Atomic Energy Commission has developed the National Radioactive Waste Management Policy as well as the Nuclear Fuel Cycle Policy to express the intent of Government to manage radioactive waste and spent nuclear fuel in a safe, secure and sustainable manner to safeguard public health and the environment. As a follow up to these policies, a set of strategies were developed for the management of radioactive wastes arising. The general viewpoint is that the management of radioactive waste involves the reduction to as low as reasonably practicable and justifiable. The most preferred approach in the management of radioactive waste are ‘delay - decay’, ‘dilute-disperse’ and to concentrate the waste and contain the radionuclides in it by means of a waste matrix and waste container followed by disposal in an appropriate disposal facility designed to provide adequate isolation from the immediate environment.

While the Policies describe intent, the Strategy describes the “how to” and provides the framework for how radioactive waste management will be performed in the country. It also provides for process development and identifies competencies needed and how they will be provided. It elaborates waste management methods for all waste types and prescribes use for communicating with the public and governmental authorities.

Among those, in terms of safety, security and environmental protection, one of the main requirements imposed by the Government of Nigeria to all waste generators, is to manage radioactive waste in a manner that protects human health and the environment, now and in the future.

The financial requirements for the implementation of the strategic plan for safe, secure and sustainable management of radioactive waste and spent nuclear fuel comes from the Radioactive Waste Management Fund.