



# ENVIRONMENTAL MONITORING RADIOLOGICAL PROGRAMS FOR THE NUCLEAR CENTRE AND THE LOW LEVEL RADIOACTIVE WASTE FACILITY IN MEXICO

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The National Institute of Nuclear Research of Mexico (ININ) has its Laboratory of Environmental Radiological Monitoring (LVRA) to assure the critical population and the environment they are not exposed to radiation doses greater than the limits established by the national and international legislation this laboratory carries out environmental monitoring radiological programs the Nuclear Centre and its surroundings and the Low Level Radioactive Waste Facility (CADER) and its around In order to carry out these programs the LVRA has rooms for evaporation drying grinding ashing of environmental and food samples and a laboratory for gamma ray spectrometry liquid scintillation alpha beta gross counting and computer room

Since the year 2000 the (ININ) has tried to implant the quality system ISO 9001 2000 including a its (LVRA) This quality system includes a Plan of Quality Quality Manual programs of technical and administrative document elaboration technical and administrative procedures technical and administrative qualification programmes for the laboratory staff maintenance and calibration programs for measurement systems and finally participation in national and international exercises of intercomparison The ININ counts with the management of quality assurance to verify these programs in addition our Nuclear Regulatory Commission (CNSNS) carries out periodic audits to authorize the of use and handling of radioactive and nuclear material licenses of these facilities

In this work we presented the advances and difficulties found in the implantation of the quality system also we present the benefits obtained with uses of this system, the samples analyses results and the calculation of the annual dose to the critical population for the last five years In addition we presented the calculation the radionuclides concentration tendencies in different sample types according to our (CNSNS) requirements In the same way the results of the calibrations of the systems of count of samples and of the national international intercomparison are presented

***Key words*** *Plan of Quality, Manual of Quality, Technical and Administrative Procedures*