RADIATION SAFETY ASPECTS

IN THE OIL AND GAS PRODUCTION FACILITIES IN EGYPT

G.M. HASSIB

National Centre for Nuclear Safety and Radiation Control,
Atomic Energy Authority,
P.O. Box: 7551, Nasr City, Cairo, Egypt

ABSTRACT

The applications of radiation sources of various types in the oil and gas industry became an essential part in the prodution and expansion programmes in the production companies. Among these applications, oil well logging with gamma and neutron sources and tube weld radiography with gamma sources are well known.

On the other hand, naturally - occurring radioactive materials (NORM) have been detected in varying concentrations in hydrocarbon reservoirs in different areas of the world. Such materials may induce radioactive scales, sludges or gases in the production lines.

In this report, radiation safety guidelines are proposed to be implemented in the oil and gas production facilities in Egypt.

These guidelines are based mainly on the international safety standards such as the ICRP recommendations as well as the guidelines set by other countries of well recognized radiological health practices such as USA, UK and Europian Community.