"RADIOIODINE REMOVAL FROM THE EXHAUST AIR SYSTEM OF THE OPEC 2 LABORATORY"

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Summary

The authorized discharge level of radioiodine in the area of the CSN Casaccia is very small, compared to the amount theoretically released in the hot cells of OPEC 2 Laboratory by a freshly irradiated fuel element. In order to avoid a penalization of the operating capacity of the plant, i.e. restrictions on the nuclear fuel quantity allowed into the cells, a radioiodine removal installation has been located within the hot ventilation system. The installation operates with charcoal filters: it is not normally in operation but is automatically inserted by a specific signal of the monitoring system, in case of high $J_{131}$ level detected in the exhaust air. This paper describes the installed monitoring system used to control the gaseous effluent streams, and discuss the reliability of the radioiodine detection instruments. A general presentation of the ventilation and filtration system is also given, with particular emphasis to the radioiodine removal circuit.