

R.RIVAS, ASN; E.VIAL, IRSN

**TITLE:**

Assessment of exposure to ionising radiation in NORM industries in France.

**ABSTRACT:**

ASN worked in collaboration with IRSN to assess the exposure of workers and the population at large to the “technologically enhanced natural radioactivity”. Ten categories of professional activities are targeted by French regulations. The assessment is based on the examination of more than 80 reports filed by the companies concerned. Regarding worker exposure, it shows that estimated doses exceed 1 mSv/year for 16% of workplaces. More specifically, these exceedences are related to 4 categories listed in regulations: Treatment of tin, aluminium, copper, titanium, niobium, bismuth and thorium ores, Production of refractory ceramics and glassmaking, foundry, steel industry and metallurgical activities using refractory ceramics, Production or use of compounds containing thorium and Production of zircon and baddeleyite, and foundry and metallurgical activities using zircon and baddeleyite. Available data regarding general population exposure does not differ significantly from that found in the existing scientific literature, although it is true that little data was received. The assessment includes proposals for updating the national regulations currently in force. In particular, it suggests updating the list of categories of professional activities concerned by the regulations and defining a qualitative population dose assessment method.