

INAIL RISK INSURANCE FOR ASBESTOSIS IN ROAD AND RAIL YARDS IN BIANCAVILLA AREA

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At the end of the nineties, in the area of Biancavilla (CT), a village on SE slope of Etna volcano, it was observed an excess of cases of pleural mesothelioma in the population than the national average. Afterwards, survey of the Institute for Prevention and Occupational Safety (ISPESL) in Rome confirmed that cases of mesothelioma were related to an environmental exposure to asbestiform fibers of a mineral called fluoride-edenite, resulting from a metamorphic process on basaltic rocks outcropping in Mount Calvario; this material had been widely mined from the mount and other sites and used in civil engineering. The natural fibrous mineral has ideal formula $\text{NaCa}_2\text{Mg}_5(\text{Si}_7\text{Al})\text{O}_{22}\text{F}_2$, structure of prismatic amphibole and intermediate composition between tremolite and actinolite; it is not defined as “asbestos” although it has a similar potentially of health hazard when inhaled. During the 2000s, Italian Worker's Compensation Authority (INAIL) Sicily - Technical Consultancy Risk Assessment and Prevention (CONTARP) conducted some investigations concerning the potential occupational exposures to fluoride-edenite fibers into road and rail building sites in Biancavilla. The main issue was to assess the possible asbestosis risk to insuring purpose. The building sites regarded: urgent interventions to make an urbanized area safe and the works to renovate the railway Paternò-Adrano. Starting from the special regulations for the asbestosis risk (D.P.R. 1124/1965) and discussing about the interest of INAIL connected to building sites, in this paper the authors explain the technical-analytical method used in Biancavilla: from the characterization of sites in terms of location, type of work, tasks, equipment, organizational measures, prevention and protection of workers, up to the results obtained from the analytical detection (SEM - EDS) on bulk and dust samples, collected with personal sampler, compared with the analytical data of other Corporations engaged in the monitoring of airborne fibers in the territory (according to the program of ISPESL and ISS - National Institute of Health). INAIL's investigations led to say there were not concentrations of asbestos or asbestiform fibers so high to oblige to insure workers against the specific risk of asbestosis. However, a health risk from exposure to asbestiform fibers could not be excluded.

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