PROPOSED CLASSIFICATION OF OPHIOLITES DEPOSITS AND USE OF MATERIALS EXTRACTED ACCORDING TO THEIR CONTENT OF ASBESTOS

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As it is widely known and studied in ophiolites (ultramafic rocks of intrusive magmatic origin, partially altered or metamorphosed) asbestos fibres may be found in the form of pockets and small veins (those typical of alpine ophiolites, very rare in Apennines) and distributed within the fractures. Mining, quarrying and processing could release a number of asbestos fibers into the environment, that needs to implement preventative measures of workers protection and local population. The methods of control of the extracted materials are carried over from the Ministerial Decree (DM) 14/05/1996, which defines criteria for the classification and the use of "green stone" according to their content of asbestos. The excavation is allowed under a certain danger level as defined by the amount of asbestos released from the rocks, where the value of Release Index must be Ir <0.1. In addition to this law (exclusive to the ophiolites quarry sector) we can find the provisions of health and safety at work in Legislative Decree n. 81/2009. It stipulates specific analytical measures and controls over all work environments at risk for the presence of asbestos. The law identifies the permissible exposure limit (defined as "VL" Value Limit), beyond which they must take appropriate precautionary measures. Various objections were raised over the correct application of the Ministerial Decree 5/14/1996, in particular relate to the real meaning of Ir (Release Index). The real ophiolitic danger is related to the chance of rocking crumbler during extraction and subsequent work phases since it is during these activities that rocks can more easily release asbestos fibres. These considerations were already included in the studies carried out by the Emilia-Romagna Region (Il Progetto Regionale Pietre Verdi - 2004). It proposes a new classification of the ophiolites deposits based on a simple but direct measurement of the release index (called AR "asbestos free or releasable") taken before and during the mining activities related to the types of products produced by the quarry.

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