May 16th Eternit bis Hearing

by

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'Reporting the presence of asbestos means identifying **a hazard**, which is not necessarily the same as the **risk** of fibre dispersion, nor of exposure'. This is what Danilo Cottica, former president of the Italian Association of Industrial Hygienists, a defence expert witness said as he illustrated his hypothesis at the hearing on 11 April in the Eternit Bis trial, in the Court of Assizes in Novara, against the defendant Stephan Schmidheiny, for the death of 392 people from the Casale area diagnosed with mesothelioma. He continued on Monday May the 16th .

What did Cottica mean? He meant that 'one cannot accept the simple equation that the presence of asbestos and materials containing asbestos equals exposure to asbestos fibres'. More simply said, if there is asbestos or there are asbestos-containing materials in an environment, it does not mean that you are exposed to them. To understand his assumptions, one has to dwell on the distinction between the notion of '**hazard '** and **'risk**'. In practice, the presence of asbestos or asbestos-containing materials is a **hazard**, because asbestos is known to be carcinogenic; however, the potential hazard only becomes a risk (of breathing in asbestos fibres), Cottica stated, '*in relation to the frequency, timing, and manner in which each worker is (was) exposed to asbestos'*. In other words, asbestos is a potential danger if it is present, but it is only a risk if you breathe it in.

How can one avoid it? Several hundred people (the 392 victims named in the indictment are about one-fifth of the Monferrato people who have died from asbestos in recent decades), despite themselves and unwittingly, just failed to avoid the risk. The expert witness explained in more detail : '*Nobody can deny that there was a lot of dust at Eternit in Casale,' nor that there was asbestos in that dust, since it was raw material for the production of manufactured products (roofs and pipes)'. 'However* - he added - *one must classify the fibres': for asbestos fibres to become a risk, 'they must not only be inhalable, but breathable'*. In this regard, the expert witness classed fibres on the basis of their diameter size and said that '***inhalable*** *fibres are those that can be inhaled given the time they remain in suspension in the air, but they are deposited in the upper airways because their aerodynamic diameter is such that they are intercepted by the respiratory system's defences and therefore do not reach the pulmonary alveoli'.* Instead, '***breathable fibres***, *once inhaled can penetrate deeply into the respiratory system and also deposit in the pulmonary alveoli because of their aerodynamic diameter'.* Now, Professor Cottica points out that it was only in 1984, with the advent of electron microscopes, that it was possible to distinguish between the two; previously, only estimates were available , and therefore, in his opinion, the dust measurements carried out previously were not accurately reliable.

The defence expert added that, in addition to size, in order to calculate the amount of '*Breathable fibres to which one is actually exposed to*, samplers have to be placed on the workers, to have a weighted average over a period of at least eight hours of exposure and to take into account the workstation.

Prof Cottica insisted on the fact that, from 1973 onwards, Eternit had invested resources to improve the dust situation, with the replacement of more modern equipment and technology. Recalling the

report of the defence expert before him, engineer Giuseppe Nano, he points out that the investments had produced '*beneficial results in terms of exposure'*. He recalled the switch from dry processing, which was certainly more dangerous, to wet and closed-loop processing, implemented in 1974; the replacement of jute bags with paper ones, then synthetic jute and then plastic, which were more protective. He admits that, '*the operations that could give rise to dust formation were those of fixing shaping elements, essentially consisting of the removal of burrs from the ends, which could be carried out manually on semi-fresh material or mechanically on dry material, using machine tools'*. One example: the cleaning of pipe burrs, from which came the 'powder' containing crocidolite, the dreadful 'blue asbestos'. But the consultant does not see a great risk even in these operations, because 'the lathes were manned by localised suction'.

In any case, Prof Cottica recalls, Schmidheiny sent Dr Klaus Robock, Head of the Neuss laboratory and the Swiss entrepreneur's trusted scientist, to inspect the Casale plant. Prof Cottica documented that visit between 29 January and 2 February 1976. Dr Robock went to Casale, observed, took dust measurements and stated the goal of self-regulating the concentration to 0.5 asbestos fibres per cubic centimetre, lower than the 2 fibres per cubic centimetre required by internationally proposed standards. Where, then, he found critical points, he provided indications to correct them, even with explicit drawings or with the precise indications, for example, of more protective masks than those already adopted. In a report dated 23 February 1976 and sent to the then plant manager Luigi Reposo, Robock pointed out, as we learnt from a slide projected by consultant Prof Cottica, that *'the values measured were on the whole good; results of the measurements indicated training and preventive activities as a priority to focus on, given the operational situations (maintenance and cleaning) that could be improved by making employees more aware'*. That was February 1976. One has to wonder why three months later, in May 1976, Schmidheiny felt the urgency to summon the top managers of the Eternit group to Neuss, to whom he represented a "*catastrophic*" situation (CEO Leo Mittelholzer's exact words) leaving them all literally "*in state of shock*". Did Robock provide Schmidheiny with a different report? If he had read the report sent to Reposo, what reason would he have had to frighten - '*shock*' - his top collaborators by the *'overall good values'* found at Eternit in Casale? Professor Cottica also pointed out that *'the main strategy of the Eternit Group was to replace asbestos in production as quickly as possible by placing new asbestos-free products on the market: therefore, in short, to completely abandon the use of asbestos fibres'*. He must have thought so, but unfortunately did not do so, despite having repeatedly suggested the intention with the Casale public administrators who, at one point, felt they were being taken for a ride. The defence expert concluded that *'all the data show a drastic decrease in the levels of exposure (to asbestos) in line with the improvements introduced at the Eternit plant in the period 1973-1982'*.

And yet, there have been deaths. Lots. The dead speak to us, lives marked by names and identities. One can guess the defence's line: the fault of those who fell ill, after a long latency period, lies with those who managed Eternit before 1976 (and who are now dead). One cannot precisely define the moment when an asbestos exposure proved fatal and triggered carcinogenesis in different individuals. It may or may not have happened during the Schmidheiny period, according to the defence consultants.

At the hearing on Monday 16 May, **expert witness Prof Pierluigi Nicotera, Professor of Neurodegenerative Diseases at the University of Bonn,** director and member of European

scientific academies, university lecturer and expert in toxicology at major institutes in Germany and Sweden, gave a very complex technical report to answer the question put to him by the defence lawyers Astolfo Di Amato and Guido Carlo Alleva: in the light of current knowledge what mechanisms lead to the formation of mesotheliomas in individuals exposed to asbestos,? With a long and complex explanation, the consultant stated that carcinogenesis, i.e. the process that leads to the development of mesothelioma, is not gradual and is not affected by prolonged and progressive exposure to asbestos fibres. According to Prof Nicotera's thesis, it occurs in a single catastrophic event; that is, a cell in our organism undergoes a genetic catastrophe, called 'chromothripsis' in one go, producing a shattering of our DNA'. In other words, the asbestos fibre arrives in our organism that hits a cell and alters it, giving rise to the so-called 'precursor cell' of the tumour that then reproduces and, over time, gives rise to the tumour mass. According to Professor Nicotera, 'exposure to asbestos fibres is undoubtedly a key factor that leads to the onset of mesotheliomas', in the sense that it can induce that catastrophic event called 'chromothripsis', but, in his opinion, this cell catastrophe could be favoured by a genetic predisposition. In any case, he pointed out, 'it is not possible to identify the moment at which the initial event in the development of mesothelioma occurs' and insisted that 'multiple exposures are not necessary'. This would seem to be inconsistent with what the other consultant Prof Cottica stated, as he stated that asbestos is carcinogenic precisely '*in relation to the frequency, time and manner in which each worker is (goes) to perform his or her duties'*. For Prof Nicotera, the initial exposure is meaningful and 'guilty' one. Subsequent exposures ones for those who continued to work or live in an environment where asbestos was present have no impact whatsoever.

There is another part of the scientific community, shared by the consultants of the public prosecutor's office appointed by the prosecutors Gianfranco Colace and Maria Giovanna Compare, who take the opposite view. At the recent conference held in Rome, in the Senate, on 13 May, the position of the Italian Association of Epidemiology was reported: that is, that a higher cumulative exposure entails a greater risk of developing cancer and anticipating its manifestation. "*The hypothesis according to which it is only the first fibre that counts to develop mesothelioma is no longer heard in any scientific forum, except in the courtrooms, where it continues to be re-proposed,*' was stated in Rome: '*Were one to uphold it in defending your University thesis, you would be sent down!* . Professor Nicotera then concluded by stating that the event of '*chromothripsis together with a genetic predisposition would explain the relative rarity of mesothelioma in subjects exposed'* (to asbestos).

Without wanting to undermine the concept of 'rarity' in the scientific sphere, let us simply refer the facts and figures of the Eternit Bis trial, because this is the substance on which the Assize Court will have to deal with: we observe that, in a community of just over 30 thousand residents (in the main town, plus a few thousand in the surrounding villages), it is difficult to consider an incidence - for the moment unstoppable - of about fifty new cases a year as 'rare' . Let us reiterate what has already been pointed out on other occasions: elsewhere, where asbestos was physiologically present until the 1992 ban (old brake 'pads', fireproof clothing, the insulation of irons and other industrial equipment, building roofs, piping, chimneys), deaths from mesothelioma have occurred, but not as many as in the Monferrato area of Casale.

Something different, has happened, or was caused in Casale.

FORTHCOMING HEARINGS

On Monday 23 March, the US defence expert witness Gary Marsh of the University of Pittsburgh, an expert in biostatistics and epidemiology, will be examined. At the same hearing, he will also be cross-examined by public prosecutors Colace and Compare, as well as civil plaintiffs' lawyers.

On Monday 30 March, the cross-examination of defence expert witnesses Giuseppe Nano, Danilo Cottica and Pierluigi Nicotera.

In the photo, a view of the courtroom where the Eternit Bis trial is being held in the Assize Court. President Gianfranco Pezone, authorised the public to attend the trial as the Covid emergency is over.

https://www.silmos.it/i-consulenti-della-difesa-insistono-schmidheiny-miglioro-molto-le-condizioni-di-lavoro-alleternit/