Eternit bis December the 12th, 2022 Hearing

By Silvana Mossano

The release of asbestos fibres from the extensive area of '*eternit'* roofs and the so-called improper uses of the material (attics, courtyard squares and playgrounds lined with compacted dust) in Casale exceeded those produced by the Eternit plant and the former Piemontese area where the open-air crushing of waste took place using a caterpillar. This is what the defence experts claimed at the trial taking place in Novara in the Court of Assize, where the defendant Stephan Schmidheiny is accused of the murder (with possible wilfulness) of 392 people from the Casale area, all mesothelioma victims. Claims were based on the scientific models and mathematical formulae, illustrated in past hearings.

Are the defence experts right?

Prosecutors Dr Gianfranco Colace and Mariagiovanna Compare asked the Court of Assizes to hear other consultants, in particular technical experts from the regional Arpa (The Environmental Agency) to assess the method and application of the models. Chief Justice, Dr Gianfranco Pezone, who considered these in-depth studies useful, granted the request, of a confrontation between opposing parties and theses.

As a result, at the hearing on Monday, December the 12th, 2022, engineer Enrico Brizio, current Director of Arpa for the southwest of the Region Piedmont, and an expert in modelling air flows and the dispersion of pollutants in the atmosphere, was heard; together with colleagues Luca Mingozzi and Angelo Salerno (Arpa technicians and already heard as prosecution expert witnesses), he analysed the work of the defence expert Andrea D'Anna, an engineer and full professor of Chemical Plants at the University of Naples. The professor's study was subjected to technical-scientific evaluations, on methods and ways that led the Neapolitan professor to the conclusions he had already set out and then reiterated in cross at the September the 21st hearing. Prof D'Anna had said: 'The pollution close to the Eternit factory comes from the plant, but in the city centre it is caused by misuse of the material'. The Prosecutor asked: 'In your opinion, does the crushing at the former Piemontese pollute as much as, or even less than, the dust fibres coming out of the cracks between the tiles of a roof?' The professor had nodded yes.

Challenged the method

However, engineer Brizio found it inappropriate that the defence expert witness had used different parameters when considering the sources of asbestos fibres referred to improper uses (attics, courtyards, roofs...) and the sources from "proper uses" specifically the Eternit plant and the Ex Piemontese crushing area.

The regional Arpa manager believes that, considering the range of improper uses the professor has maximised the parameters, while choosing minimum values when it referred to the plant. Prof D'Anna's results are thus '*immeasurable dimensions*'. If he had chosen intermediate parameters for both cases, it would be another matter, the fibre release referred to the improper uses would have been far lower, in the order of hundreds and thousands of times, than those of the proper uses. 'Arpa carried out specific monitoring on the improper uses, but found contamination values that are not comparable with Professor D'Anna's

results!' According to Arpa's staff, 'using the emission factors in a more realistic and plausible way, one would see a reversal of the results' indicated by the defence consultant.

Attics.

According to engineer Brizio, Schmidheiny's expert used a mathematical model that is specific for roofs (more exposed to winds and other atmospheric agents), but unsuitable for attics, where dispersion conditions are different.

And speaking about roofs

Public Prosecutor Gianfranco Colace recalled one of the arguments that the defence consultant had insisted on (the dispersion of fibres from the roofs of the five barracks, in two of which there was even some dust) and evoked a chilling statement (not by Prof D'Anna, but by another expert witness for the defence) that all 'asbestos roofs degraded a few months after installation'. The PP therefore asked Prof Brizio: 'Did these asbestos roofs exist only in Casale? "No, they existed everywhere, and still do". And yet, so many victims like this are in Casale and not elsewhere. Why?

Appropriate uses

According to the Arpa's assessment, in Professor D'Anna's work some of the sources of appropriate and expected uses such as the places where Eternit manufacturing took place, had not been considered or were underestimated. He examined the production plant, which was in the Ronzone district, and the crushing site, but ignored the warehouses in Piazza d'Armi, the dump along the river and the 'little beach' on the Po.

The Eternit warehouses

Why did Professor D'Anna not consider them as a significant source of the spread of asbestos fibres? The consultant, who was present at the trial on Monday, 12 December, after Arpa's objections, provided a justification: he had thought that the warehouses, mentioned in studies and surveys dating back to the late 1980s, were all inside the production plant at Ronzone and therefore assessed this are as one, without imagining that there were warehouses even kilometres away. Those in Piazza d'Armi, as a case in point.

On Monday, after having had a good look, he found them, but nevertheless rejected the Arpa's objections: according to the Piedmontese environmental protection agency, 'the Eternit warehouses had not yet been cleaned up in 1990 and were a significant source of asbestos fibres into the town air, contributing to the rise in the background value'. The professor insisted: 'Finished materials were allocated in those warehouses and no processing was carried out. That is to say: the roofs and attics of houses are a source of heavy asbestos release, while the piles of tonnes of unsealed manufactured goods in a facility with extensive 'eternit' coverage, would be so insignificant as not to be considered?

The timing of remediation

Had the warehouses in the Piazza d'Armi already been reclaimed in the '89/'90s? 'No, they had not yet been decontaminated,' said Brizio. The clean-up began in 1995. At the time Luisa Minazzi, a true Casalese, was the Councillor in charge of Environmental Affairs but she died in 2010 at the age of 58, killed by an asbestos related disease so could not be called. In 1994, the municipality had purchased the warehouses and had immediately arranged for the

reclamation work to be carried out, creating a multipurpose area for exhibitions, a cinema and commercial activities [nicknamed Casale's 'Lingottino' with reference to the conversion of Turin's Fiat plant].

In 1994, Casale took part in a European Union *Urban Project*, and was awarded a project which made it possible to find funding for remediation, including that of the manufacturing plant at Ronzone, the most demanding and complex intervention, completed in 2006.

Fewer Fibres

"Monitoring carried out by Arpa in 2007," stressed engineer Brizio, "showed a reduction of fibres in the air in the city of Casale, even below one fibre per litre. This means that after the reclamation of the plant area, the air improved, while roofs, dust and courtyards were mostly still there. That notwithstanding, Prof D'Anna persisted in his conviction, believing that the improvement in the air was also attributable to the elimination of improperly used asbestos. How? 'People,' he speculated, 'in private spaces had certainly already started to remove roofs, perhaps without waiting for the Town, and in any case, they had learnt to be more careful, all the more so after Mayor Riccardo Coppo's 1987 ordinance [banning the use of asbestos in Casale, pointing out its danger to health]. Thus, in the professor's opinion, greater caution on the part of community would have limited the spread of asbestos fibres resulting from that mass of improper use which, in his opinion, was the main cause of mesotheliomas.

Those who were there know that this was not the case. The ordinance signed by Mayor Coppo was a much pondered and suffered act, drafted with scrupulous care with the technical support of frontline doctors such as Angelo Mancini and Giampiero Bertolone, also considering the impact that the ban would have. The ordinance banned the use of materials containing asbestos, even residues from processing, for the first time in Italy, but unfortunately was not enough to convince most of the residents that the danger concerned everyone, because people were persuaded that it was only Eternit workers who developed the disease, that the *'puvri*', the *'malapolvere [*the bad dust] did not affect the community.

The awareness of the community and the subsequent reclamation was the result of a steady stream of deaths and tenacious work to increase awareness the institutions, which Afeva (Associazione famigliari e vittime amianto - Association of Asbestos Victims and Families), the trade unions, and schools carried out. Private reclamation arrived well after 1987, so it is realistic that the 1987 Arpa survey, which attested to a clear improvement in the air, was positively affected by the plant's closure.

Spiaggetta or paludetta (Beach or swamp)?

The '*spiaggetta'* or little beach on the banks of the River Po was sixty-seventy metres long, and was reclaimed between 2000 and 2001, recalled engineer Brizio. Not even this had been considered by the defence consultant as a source of asbestos fibres, and he explained why: it was a wet area close to the Po and it is known that humidity greatly reduces dust.

Prosecutor Colace tried to find a suitable definition: 'Was it a small beach or a swamp?' Professor D'Anna, keeping the point on the humidity thesis, replied: 'Even at the sea there are beaches lapped by water...'. In this case by the river. D'Anna added that the beach 'was also sometimes flooded...'. But then the sun comes out, it dries and the surface releases dust as it

cracks in the sun: that's what we had heard from eyewitnesses, those who evoked the happy summer Sundays spent on the local '*riviera'*.

Was there dust at the former Piedmontese Area?

Are witnesses to be believed? Are they to be believed when they recall clouds of dust rising from the crushing area at the former Piemontese?

The former (Ex) Piemontese was an area thus named because a previous industrial plant, a few tens of metres away from Eternit, which had acquired it and used it, precisely, to crush raw waste.

The defence lawyer questioned the dustiness of that area: it seems that the visual perception of dust can be an optical effect, he believes, linked to a material's light absorption properties.

Prof. D'Anna also raised doubts that there had been all the activity described by the prosecution. However, Prosecutor Dr Colace insisted: 'The bulldozer was on the move 24 hours a day, crushing scrap'. The consultant was puzzled: 'Is it possible that the Casalese plant was producing so much waste to justify that activity day and night?

He is absolutely right: there is a physiological percentage of waste in every production process, but so much waste... In fact, the Casale plant did not produce that much waste at all; but Professor D'Anna had probably not been informed, that the total amount of debris was brought together from various Eternit plants in Italy, concentrating all the crushing activity in Casale, in that area, for the subsequent reintroduction of the shredded material into the production cycle, through the Hazemag mill.

The skips (or dumpsters) dumped in the ditches

Speaking of witnesses, should one also question that of Rosalino Secreto, called to give evidence on Monday December the 12th?

"I worked for Enrico Bagna's company between 1978 and 1984/85," he began.

Bagna's company, which dealt in general with scrapping activities, had a contract with the Eternit company to dispose of the factory's waste. The owner had confirmed this in the first Turin trial.

"I was a mechanic,' Secreto told the Assize Court on Monday, 'I was mainly involved in vehicle maintenance but also in the processing of scrap iron. But there was a colleague, yes, that 'boy' there... Bartolo Occhipinti was his name, who must have died 15 years ago..., well, he used to go to Eternit and load the powder and scrap into a sort of skip or dumpster. And then he would dump them near the Po: there was a ditch, from which the gravel had been extracted, they said it was thirty metres deep, and he would throw everything in there. A lot of people went to dump them there, eh... even the building materials from the construction sites, everything'.

He explained how the operations took place: 'The skip was brought to the plant, filled, hooked to the truck and Occhipinti, who was in charge of those operations, would go and dump it in the ditch. Not just the powder, but also the mud from the tanks: they would let it dry, then hook it up with the 'spider' and take it away'. And how were the skips or dumpsters carried? 'Usually but not always covered, it depended on how full they were'.

Was the material thrown into the pit near Po treated? Treated, no; every now and then a bulldozer would come and level it. It would level everything'.

This dumpster business went on 'until around 83/84, a little before the factory was closed'. The factory was closed in 1986, when they filed for bankruptcy in June.

Since then, where did the waste, previously dumped in the ditch, end up? 'Well,' replied the former worker, 'there were rumours that they took them to Switzerland, France or Germany. There were rumours that they used them to make *'prismates*' or large prism shaped artificial barrages with which to strengthen riverbanks'.

Undeterred, Professor D'Anna, tenaciously defended his work and responded to the remarks made by the Arpa technicians and experts by insisting on the data, citing numbers and his own conclusions: namely that the sources from which the largest quantity of fibres was released in Casale were roofs and improper uses.

What about the winds?

How did winds and air currents affect the scattering and dispersion of fibres?

The Court raised the question: 'what can you tell us about the wind as a variable,' Judge Pezone asked, 'is it the same thing to have an area without obstacles compared to a more urbanised area, with buildings?'

The defence expert witness replied: 'The city centre of Casale has not very high buildings nor very narrow streets. He admitted that he had never been there, but had taken 'virtual walks using Google maps, such as Street View'. And he has seen 'buildings with a maximum of two storeys... and farmsteads with rural housing and large courtyards, but not big buildings that channel winds'. So, he insisted, he considered buildings to be insignificant... 'I imagined that there were not many tall buildings in Casale between 1970 and the 80s that would have forced the fibres to linger.' the expert witness insisted and stood firm: roofs and misuse were the main culprits, and the urban area as he described it confirmed it.

What does the city really look like?

Well, 'Street View' is undoubtedly an interesting, a useful and convenient tool, but trusting it blindly is a bit unwise. His eyes could have better guided him in the centre of Casale, in the maze of streets where local authorities have had to make streets one-way precisely because of their limited width: too narrow for two cars and sometimes dangerous. Walking along those streets, he would have been able to admire noble palaces of three, four, five storeys next to streets such as - to cite just a few examples – via Roma, Mameli, Benvenuto Sangiorgio, Saffi, Liutprando, Lanza, Garibaldi, Paleologi, Canina, Corso Trento or Indipendenza or Giovane Italia or Valentino where only the names have changed over time, because the urban layout has been the same for centuries. In the outskirts, then, the streets are a little wider but the buildings have six, seven, or even eight storeys.

A real visit to Casale is well worth it, to realise, without a virtual lens, that it is a beautiful city, with tall, ancient palazzos clustered on charming, narrow, and sometimes winding streets. This is the layout. A beautiful city, yes, and more hapless than others where, even

there, asbestos roofs were and still are, but mesothelioma is not at all so frequent, indeed it is even an unknown word.

There, in those picturesque streets, among those buildings and under the porticoes, the professor could meet some polite people who, with dignity and tenacity, and without anger, invoke only a cure and the recognition of a wrong suffered. For truth, without hiding it and without revenge.

NEXT HEARINGS

The last confrontation between PP and defence expert witnesses will take place at the hearing on January the 16th 2023.

Then, Chief Justice Pezone will declare the trial phase closed and open the closing speeches. On January the 30th , Prosecutors Colace and Mariagiovanna Compare are expected to begin.

https://www.silmos.it/amianto-nellaria-larpa-le-deduzioni-della-difesa-sono-basate-su-modelli-sbagliati/