





TECHNICAL ADVICE

About the continued illegal use of asbestos at Dow Brasil in Candeias, Bahia

The Center for Studies on Occupational Health and Human Ecology – CESTEH, belonging to the National School of Public Health, a unit of the Oswaldo Foundation Cruz, located on its *campus* in Manguinhos, Rio de Janeiro, has a strong commitment and dedication to the cause of banning asbestos (synonymous with asbestos) in our country since the beginning of its activity in 1985.

The Brazilian Federal Supreme Court decided in 2017 for PROHIBITION

COMPLETE of the use of asbestos in our country, after many years of struggle by health and human rights sectors, parliamentarians, and all pro-health forces; Finally, Brazil became one of the 69 countries that have already banned the asbestos due to the severity of the diseases caused by this material, whatever whatever your variety. Mineral exploration, distribution, trade, export, import, in the processing industry, and any other without exception.

However, a sentence handed down by the Labor Judge Head of the Court Regional Labor Office of the 5th Region, in Bahia, Hon. Mrs. Maria de Fatima Caribe Seixas, on 10/11/2023, authorized the multinational Dow Brasil to continue using asbestos diaphragm technology until 10/31/2024, when the company should cease using this technology and the asbestos stock existing must be banned. The sentence mentions the existence of approximately 115 tons of asbestos, in March 2023.

The judge's decision follows from the proposal of the PUBLIC MINISTRY OF WORK on Incidental Precautionary Measure against DOW BRASIL

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INDÚSTRIA E COMERCIO DE PRODUTOS QUÍMICOS LTDA, for the facts and grounds contained in the initial (ID 442055c) in which the Public Ministry of

Work in Bahia requires the ban on Dow's asbestos stock

Brazil. "The present action" adds the MPT:

"results from civil inquiry No. 00102.2018.05.000/7 initiated based on the Notice of Fact brought by the **Brazilian Association of Those Exposed to Asbestos (ABREA)**, which reports that the defendant is the only

company in Brazil in the petrochemical sector that still uses asbestos diaphragm technology in its production process and that the collective agreement signed in 2017 creates a particular interpretation of the risks of asbestos, without any technical or legal basis, supported by a mere agreement between the company and the union, intending to legitimize

modulation of effects not foreseen in the STF decision that reaffirmed the unconstitutionality of article 2 of Federal Law 9,055/1995, of 11/29/2017, previously declared incidentally in the judgment of ADI 3937. It states that the stock of asbestos stored in the industrial plant of the defendant company does not have legal support capable of legitimizing its economic use, either by the authority of the decision of the Federal Supreme Court, or by the state law of

prohibition, or due to the lack of registration with the Labor Inspectorate. In summary, it states that the Federal Supreme Court declared article 2 of Law No. 9,055/95 unconstitutional on the basis of insufficient protection and violation of the constitutional principles of health and environmental protection, nullifying the authorization

legislation for the economic use of carcinogenic raw materials. It states that **Law No. 9,976/2000**, which "chancelled" the obsolete and polluting technology of asbestos diaphragms for chlorine production, is derivative legislation, subordinate and dependent on the device declared unconstitutional by the concentrated control of

constitutionality in charge of the Federal Supreme Court. Therefore, due to delay and attractiveness, Law No. 9,976/2000 must also be declared unconstitutional in its provisions that "chancelled" the obsolete and polluting technology of asbestos diaphragms for chlorine production. It emphasizes that the technological replacement of

asbestos diaphragms using plastic membrane technology, already successfully implemented in the chemical sector, is a mandatory requirement established by ILO Convention 162 and an international commitment made by the Federative Republic of Brazil before international society. Thus, industrial stocks and processes

developed using asbestos diaphragm technology in subnational entities that published state laws banning **CESTEH**

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use of asbestos, notably the State of Bahia, where the Ministry
Labor Public found industrial activities structured in
obsolete and polluting technology are characterized as a violation of
Rule of Law and serious and illicit violation of occupational health and the working

Judge Maria de Fatima Caribe Seixas repeats, in her analysis, the statement of Minister of the STF Rosa Weber, as Rapporteur in ADI 3470, "was also clarified that the prohibition of exploitation does not prevent, nor exempt, the carrying out necessary measures for the correct closure of activities, in compliance with relevant environmental legislation". Furthermore, and as expressly registered by the Minister Rapporteur on page 43 of your vote (ID 301326d) "exposure to asbestos in the activity of chlorine production by electrolysis method is carried out without exposing people to the material."

We might ask, reading the argument, whether exposure to asbestos does not occur toxic, because there would have been intense mobilization throughout the world, and even in Brazil, to replace this criminal technology? Including "both

Dow Química's largest competitors, in São Paulo and Alagoas, carried out the replacement in the production process without eliminating jobs. "That company has already had enough time, more than 15 years, to adapt to this law", stated Fernanda Giannasi on the ABREA website on 04/25/2018 – 6 years ago!!

The Honorable Judge adds that the company Dow proposed a schedule for the technology replacement by the year 2023. However, the company used of the COVID-19 epidemic to postpone the deadline by another 2 and a half years, i.e. until December 2025. It does not clarify why. Furthermore, Dow argues, which, according to Exma, has been operating in the activity for over 40 years "adopting strict measures to protect workers and, in this long period of performance, no case or record of illness due to exposure to chrysotile asbestos, not even in relation to retired employees.

Regarding this statement, we have a lot to say: Bahia is one of the states with the highest record of deaths from malignant mesothelioma, the so-called breast cancer

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asbestos, throughout the country, despite the immense difficulties under which the disease hide. We even found a death in Candeias, Dow's headquarters, registered in the Mortality Information System of the Ministry of Bahia; finding proof of this person's exposure in Dow activities is task that the SUS will undertake. Brazilian science has promoted great advances in revealing this iceberg of hidden diseases and deaths, whether because symptoms take 40 to 50 years to appear, or because workers and even doctors are intimidated into not complaining or informing the correct diagnosis due to fear of pressure of all types, or due to the precariousness of the care provided to patients. It is easy to understand that sick patients who live in places with few care resources, They seek medical help in often distant cities. But we are in action, and managing, as dozens of countries have managed, to fend off curtains, in some cases criminal, that conceal or contribute to concealing, the sick and those killed by asbestos. We are directly committed to this task, we and a group of excellent health professionals from SUS and of Brazilian science that unfolds in defense of the population.

At the international level, a solid consensus was also reached by all health agencies, such as the WHO, the ILO, the Specialty Societies Medical, work environment and environmental regulatory agencies in general, in the sense that asbestos fibers are confirmed to cause of some cancers, and other non-malignant diseases, AT ANY DOSE fiber that is vacuumed. That is, there is no safe dose for humans, as This is the case for all substances classified by the International Agency for Cancer Research (IARC, its acronym in French), a specialized institution of the World Health Organization, as belonging to Group 1A: **Substances**

¹ IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man. Volume 14. 1977.

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Proven to be Carcinogenic1.

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Such diseases are very serious, cause a lot of suffering, incurable, and in several cases, with very short survival, as is the case with mesothelioma malignant, the emblematic cancer of asbestos, which causes 90% of mesotheliomas, which reaches the lining membranes of the lung (pleura), heart (pericardium), and the intestine (peritoneum): death occurs only 12 months after the onset of symptoms and signs of illness, regardless of any type of treatment that is applied. Alone, asbestos is the main cause of cancers of work in the world.

The company claims, and the court ruling supports it, that **only 4** workers they act directly in contact with asbestos! Who would these candidates be? to cancer? The owner of the company, or someone in your family? An engineer or administrator? They even claim that they are outsourced!!! As if the lives human beings had different value. The "effectiveness" of the PPE used, if indeed it is, is precarious, as already documented. We doctors and other health professionals, we defend human lives one by one. Every life counts.

The sentence of the TRT-5th Region, Dow Brasil, and the then Minister Rosa Weber, if supported law no. 9,976, of July 3, 2000, which provides in its Article 2 "Stay technologies currently in use in the country for the production of chlorine are maintained by the electrolysis process, as long as the following practices are observed by producing industries." While in its Article 3, the installation of new factories for the production of chlorine using the electrolysis process with technology mercury and asbestos diaphragm.

The argument would be that law 9,976 is subsequent to law 9,055/95, considered unconstitutional by the STF, based on the "scientific consensus in relation to the health problems caused by exposure to asbestos" (cf. Minister Rosa Weber), but due to its publication after law 9,055 it would be outside the decision of the STF that completely banned asbestos.

It is worrying to think that something banned could be used with the argument that the work process, the product technology, or the product itself,

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have been created and even regulated by a new law, which did not exist when of the STF decision. The abusive use of asbestos in Dow's chlor-alkali plant Brazil in Candeias could be an extremely dangerous precedent for Brazilian public health, in addition to being dangerous for workers and residents of the place.

When deciding, the Judge highlights the text of the rapporteur's vote "In this context, I understand It is timely to record that the eventual recognition, by this Supreme Court, of the unconstitutionality of art. 2nd of Law No. 9,055/1995, which regulates the extraction, industrialization, commercialization and use of chrysotile asbestos, does not have the power to affect situations governed by Law No. 9,976/2000, which does not is the subject of this challenge. This distinction, considering "the frequency, the duration and level of exposure, as well as the type of work and conditions existing in the workplace", and, in particular, its transitory nature, seems at first to find support in article 1, § 3, of the" (ADI 4.066, Convention No. 162/ILO Report Min. ROSA WEBER, Full Court, judged on 08/24/2017, DJe dated 03/07/2018 — emphasis added)."

Asbestos/asbestos is being completely banned because its effects serious consequences for human health **do not depend** on qualifications such as frequency, duration and level of exposure, as well as the type of work and conditions you exist in it. People who inhale **any** amount of asbestos fibers may become ill from one of the diseases caused by the material. It may occur only variation in the time of onset of symptoms and their intensity. Five varieties of asbestos, called amphiboles, present risk to humans 300 to 500 times greater than the chrysotile variety, considering dose-response parameters. But this is completely different from justifying that human beings are exposed to such a serious risk, to favor the economic interests of the company.

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The Honorable Judge still insists on recovering the text of Minister Rosa's opinion Weber that "the prohibition of exploitation does not prevent, nor exempt, the carrying out necessary measures for the correct closure of activities, in compliance with relevant environmental legislation."

Until the definitive and universal ban on the use of asbestos in any part of the national territory and in any economic activity, Brazil was one of the five largest producers and consumers of asbestos in the world, being also an important exporter. As a result, products containing asbestos in its composition are widespread in buildings, houses, hospitals, companies, in short all types of construction, in addition to being rejected without any care, in virtually any type of public or private space when it is discarded. Places where the warning "Be careful, here is asbestos, carcinogenic product". We therefore have an immense environmental liability to be undone over the next generations, as it is truly a task too big for a single generation. This is also the experience of countries that began tackling the problem several decades ago.

How the diseases inexorably caused by these fibers can linger from 20 to 60 years old to manifest themselves, there is enormous ease for these cases go unnoticed by the health system, this is also a painful learning from countries that started using asbestos in the first half of the 20th century, and as a result, the first to suffer from epidemics of asbestos that began in the middle of the last century. Today is fine established that, after this interval determined by the biology of the diseases and of people, during which it is very difficult to catch the disease in progress silent, diseases will certainly appear unless those infected die from other causes, or die without asbestos diseases being diagnosed, which seems to be what happens most. Brazil has already passed this phase, and today we have documented more than ten thousand cases of diseases related to asbestos – DRA, which appeared in dozens of professions

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and economic activities. There are no exceptions: where there is asbestos, diseases will appear, and where mesothelioma exists, asbestos exists or existed.

When demanding an extension of the deadline for changing technology, Dow Brasil lists the changes that must be resolved. It is necessary that the public authorities monitor the progress of these stages. Because the history of industries that use asbestos in Brazil and around the world, is to go postponing indefinitely, while the money is coming in.

According to Abiclor data, in 2019: the chlor-alkali industry generated income 2.3 billion reais; employed only 1,440 workers, with a salary average of 7,500.00 reais, but each worker added to the GDP the value R\$1.6 million annually!!

Lives must be preserved. Asbestos must be banned

Rio de Janeiro, April 12, 2024

Center for the Study of Occupational Health and Human Ecology