



## CHEM AND OXYS-BRASIL BELONG TO A PILOT PROJECT FOR THE ECOLOGICAL MANAGEMENT OF MEDICAL WASTE

EUR 500 000 is the cost of the first waste management unit with low environmental impact in Europe.

Luxembourg, December 2019 - The Emile Mayrisch Hospital Center (CHEM) and OXYS SOLUÇÕES AMBIENTAIS, BRASIL Ltda announce the recent signing of a memorandum of understanding, including the launch of a pilot project involving the deployment of the first OXYSCLEAN® unit at Luxembourg, which will guarantee an ecological solution to an ever-increasing problem: medical waste.

OXYS SOLUÇÕES AMBIENTAIS, BRASIL Ltda, headquartered in Santa Luzía, Brazil, aims to "... a future eco-tec start-up be incorporated in Luxembourg to give access to OXYSCLEAN® technology to the European market, as well as in Asia and Africa." The inventors, Hiroshi AOKI and Anderson GUIMARÃES, patented the OXYSCLEAN® technology in 2012. Since then, waste management equipment has been developed and refined on a technical level to fully meet the operational requirements. 7 units are already operating in Brazil and are producing excellent results in terms of environmental and economic profitability.

OXYSCLEAN® reduces the amount of waste by up to 95%, with ultra-low emissions, including greenhouse gases, due to an accelerated decomposition process that requires no flames and generates dioxin levels and furans well below European standards.

Historically, over the last two decades, Luxembourg hospitals have sought to install a viable industrial solution for the disposal of their own infectious waste, but without success. Due to the relatively small quantities of waste produced in Luxembourg, compared to the high capacity requirements of most currently available disposal technologies, such investments have not been economically viable so far.

The OXYSCLEAN® device, on the other hand, offers adequate capacities in relation to the volume of waste produced in Luxembourg hospitals and OXYS-LUX, the company holding the patents in Luxembourg, has undertaken to finance the first unit in Luxembourg in the form of a pilot project with CHEM. Proponents of the new technology hope to launch the first operational unit as soon as they receive the necessary administrative authorizations.

Me Daniel Tesch, the representative of OXYS-BRASIL, declares: "We are very satisfied to present the OXYSCLEAN® technology in Luxembourg. Our cooperation with CHEM focuses on medical waste,





but we are seeing a global demand for local solutions for managing other types of waste that the OXYSCLEAN® system could solve. We also see the manufacturing potential of the equipment in Luxembourg to export to our target markets, which are Europe, Africa and Asia. "

The CHEM decided to take the step by making available its infectious waste for a period of 6 months to allow the equipment to prove itself. Dr. Hans-Joerg Reimer, Director General of CHEM, says: "We are very pleased to be able to participate in this experience. A recent report by L.I.S.T. confirms that the OXYSCLEAN® system is likely to be the definitive solution to our medical waste problem, and in particular to an ecological and sustainable solution that breaks down the non-recyclable infectious substances produced by all hospitals and constitutes a risk for public health."

## About OXYSCLEAN® technology.

The revolutionary technology uses the thermomagnetic decomposition process, which consists in creating a highly oxidizing atmosphere in a confined environment. All organic materials and composites, including mineral and derived oils (plastics, rubbers, paints, etc.), certain hazardous wastes (ie Pharmaceutical, chemical, medical infectious, but excluding cytotoxic or cytostatic chemicals) and all household wastes are decomposed, if necessary.

A key feature of OXYSCLEAN® is that the device operates without any external power source (other than a 220-volt power supply for electric motors) because it is driven by the oxidation process itself, the latter being induced by the very strong magnetic field inside the combustion chamber. The equipment is relatively compact and can therefore easily be deployed even in remote locations (countryside, small / medium municipalities, islands, etc.) either per unit or multiple units as needed.

From the financial point of view, the OXYSCLEAN® system enables a substantial reduction in the cost per ton of waste disposal. Indeed, in terms of investment, the price of each unit is excessively low, compared to other existing technologies in this area. This fact, combined with low operating costs, substantially lowers the cost price, calculated per measured unit of waste, for the equipment operator (municipalities, hospitals, industries, etc.).

For more information, please contact Mr. Daniel Tesch, 12-14, Avranches Boulevard L-1160 Luxembourg, phone: (00352) 26 64 84 -1, email: daniel.tesch @ oxys.lu