

Sustainable remediation of lamp recycling site in Aalst



The Aalst based lamp recycling company Ides was declared bankrupt in 2008. After the bankruptcy, the three warehouses proved to be full of mercury-containing lamps, fluorescent powders, waste glass and other materials contaminated with mercury, as well as clearance waste. A potentially hazardous situation which required safe transport and safe handling and processing. In 2012, the Public Waste Agency of Flanders (OVAM) issued an invitation to tender which was granted to Indaver because it offered a safe, sustainable and competitive solution.

Mercury is a volatile metal which, if released carelessly, poses a significant risk to humans and the environment.

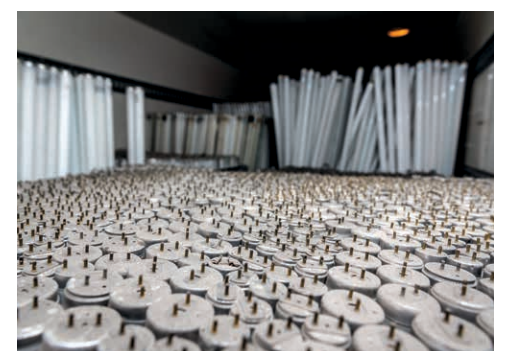
For this reason, Indaver started by working out a comprehensive health and safety plan to ensure that the work, scheduled to begin in the spring of 2013, would be carried out under the safest and most controlled conditions. Before the start of the work, the operators involved were well briefed and trained, while concerns pertaining to this plan were discussed at length with special focus on personal hygiene and wearing protective equipment.

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Indaver Relight, environmentally safe recycling of mercury vapour lamps

Most of the waste consisted of gas discharge lamps and mercury-containing processing residues. Indaver has one of the world's most innovative installations for the recycling of mercury vapour lamps. It processes 30 million lamps annually at its Doel site. Once the lamps have been crushed in a special way, a magnet separates the iron fraction. Afterwards, a screen is used to separate the other fractions, i.e. metals, glass and mercury-containing fluorescent powder. The glass and metals are checked and subjected to post-processing in the post-purification chamber to remove all traces of mercury. This allows 95 % of these lamps to have a useful application. And we are therefore able to make a significant contribution to the 'recycling society'.



Good project management ensures successful completion

Meanwhile, the clean-up project has been completed within the agreed deadline of two months, including the processing of all waste, about 240 tonnes. Good project management, as well as the expertise, motivation and flexibility of the various operators and services ensured that the project went very smoothly and could be completed successfully without safety incidents.

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Staff as key to safe waste management

In consultation with OVAM, the clean-up was organised in a phased approach, allowing for waste to be sorted, packaged and made ready for transport in an expert manner. Potential emissions of mercury were continuously monitored during the works thanks to a mobile detection and analysis device in order to ensure that hygienic working conditions would remain optimal. Access to the old industrial buildings was difficult. Special 'city trailers' were brought in to enable smooth evacuation. This approach allowed the on-site work to be completed within the strictly defined project period of 2 weeks.



i More information?
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