

## SUCCESSFUL PARTNERSHIP BETWEEN VECOM INDUSTRIAL SERVICES & AVR-KGA SERVICES IN WASTE CLEAN-UP

In mid-2003, a large electroplating company based in Leiden (NL) closed due to bankruptcy. Well before the bankruptcy was announced, both the Municipality of Leiden and the Province of South Holland had taken legal action to try to force the company to process the large quantity of stored waste, especially the hazardous materials. After the firm went into liquidation, the provincial government, in close cooperation with the Municipality of Leiden, took action to prevent unsafe situations arising and to make a concrete start on the clean-up and disposal operation. The Province of South Holland granted the contract for disposal and processing jointly to AVR-KGA Services B.V. and Vecom Industrial Services B.V. These companies commenced the operation in mid-December.

When AVR and Vecom first visited the site, it became apparent that the premises contained unusually large quantities of hazardous waste and numerous chemical processing baths. The method of storing the hazardous waste gave the provincial government, AVR and Vecom great cause for concern. The packaging of the waste materials proved to be in very bad condition and the labels on the packaging were either incorrect or non-existent. In addition, no attempt had been made to separate the various waste substances which, if combined, could give rise to powerful chemical reactions and the formation of dangerous (even deadly) gases. These circumstances called for immediate action!



After Vecom and AVR had been approached by the Province and asked to bring out a quotation, they started drawing up a strategy for removing the chemicals in a safe, responsible way and for selecting the best processing technique for each waste stream.

The premises in which the hazardous materials were stored were in the middle of an industrial area and directly adjacent to offices, a residential neighbourhood and a busy road. Because they contained some extremely toxic substances, it was decided in consultation with the Province of South Holland that the most 'risky' waste substances should be removed as a first step.



Vecom sampled and coded all the chemicals that were present. The samples – 150 in all – were all analysed in the laboratory so they could be classified. This analysis was important for two reasons: firstly, to establish the chemical composition (based on the general inventory) and, secondly, to determine the best method of processing and recycling and the required fee for this.

In drawing up the detailed inventory, AVR catalogued all the packed waste materials, inspecting the packaging as well as establishing the chemical composition. This is particularly important with regard to the transport of chemicals by road, as all packaging and labels must comply with ADR legislation.

In December 2004, the operation commenced and took three weeks to complete. In total, Vecom Industrial Services removed 390,000 kg of hazardous waste from the site.

The majority of this waste consisted of electroplating baths:

- Cyanide baths
- Liquids for depositing or removing nickel plating
- Chromate-containing liquids
- Degreasing, pickling and passivating liquids
- Filter cake
- Laboratory chemicals
- Industrial waste
- Chemical residues

The operation was completed at the beginning of January and, following a detailed inspection by the Provincial Government, it was concluded that the location no longer constituted a threat to the environment or the adjacent residential area.

The combination of expertise in the electroplating industry, industrial cleaning, waste processing and logistics formed the basis for bringing this difficult task to a successful conclusion. The partnership between Vecom Industrial Services B.V. and AVR can justifiably be hailed as a great success.



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