



# HEALTH, SAFETY & ENVIRONMENT REPORT 2007

## Botlek, The Netherlands

Nufarm bv Botlek manufactures the methyl range of phenoxy herbicides

### The plant

is located on the site of Akzo Nobel and was purchased by Nufarm in 1996. Several services and raw materials such as chlorine are supplied by Akzo Nobel.

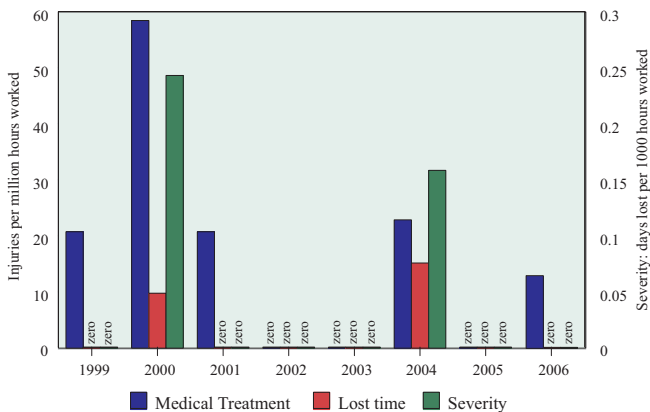
Since 1965, Botlek has been producing MCPA and CMPP. In 1991, the product range was expanded to include the optical isomers D-CMPP and D-2,4-DP. In 2001, the product range was again expanded to include the butyrics MCPB and 2,4-DB.

### Health and Safety Performance

The factory operated throughout 2006 without a lost time injury, the factory's performance over recent years is shown in the graph. There were two medical treatment injuries in the factory; one involved a person getting a small splinter in the eye while grinding, and the other was a broken thumb when the person fell on some uneven ground.

One of the people in our Benelux commercial operation was injured in a traffic accident and lost some time in recovering.

#### Injury Frequency Rates



Note: All lost time injuries are also counted as medical treatment injuries

### Health and Safety improvement initiatives

We continued our improvement initiatives relating to behavioural issues and safety culture. This is an ongoing focal point that will also be put on the agenda in 2007. The results are positively visible and encouraging.

Examples of topics addressed are:

- Leadership, behaviour models
- Culture characteristics, standards setting
- Just culture; management of rule-breaking
- Informedness, openness, trust
- Learning, stay close to hazards, UIR system
- Philosophy around Safety Management Systems
- Procedures
- On our yearly information days for all employees, we have shown the "Remember Charlie" DVD. This had a big impact on the employees thinking about safety at work, in traffic and at home.



Additional safety shower/eye wash



Training rig for confined space rescue

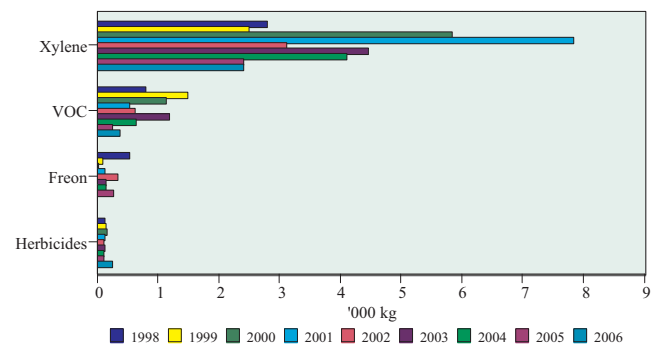
### Emissions to Air

In general, emissions in 2006 show a low and stable level and are similar to the 2005 emissions.

The higher herbicides emission is probably related to the higher production rate.

Freon emissions could not be measured because the Freon plant was not emptied and refilled in 2006 and therefore no mass balance could be made. However, because of the new cooling installation and the much reduced instances in which a small Freon leakage was found, the volume emitted is assumed to be lower than the 2005 volume. Also, no refill has been necessary. The next mass balance will be made after the maintenance shutdown in September 2007.

#### Emissions to Air



### Complaints

In 2006, no odour complaints were received, nor assigned by the authorities.

On 5 occasions, the environmental authority received odour complaints that were traced back (deducted from complaint locations and wind direction) to the Botlek industrial area where Nufarm bv is located, but after careful investigation

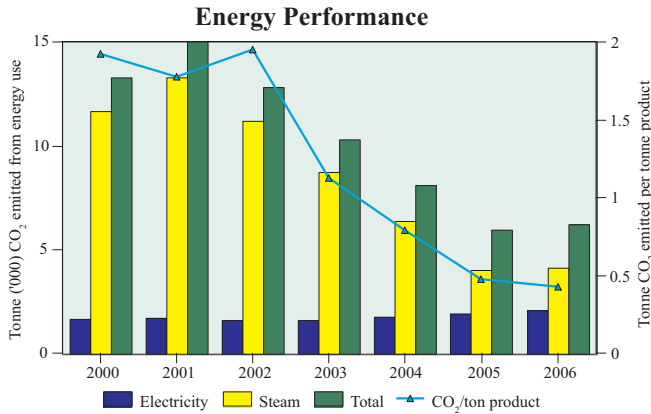
it was confirmed that Nufarm did not cause the odour emissions. The table reflects the performance improvement over the years, with regard to odour.

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	Complaints	Accepted	Doubtful
1998	2	2	0
1999	3	1	0
2000	3	2	1
2001	5	2	3
2002	0	0	0
2003	2	2	0
2004	1	0	1
2005	1	1	0
2006	0	0	0

## Energy Performance

The graph shows marginally higher energy consumption compared to the previous year. This is related to the higher volume of product manufactured. However, energy usage per tonne product has decreased, thus showing an improvement in energy efficiency.



## Expenditure

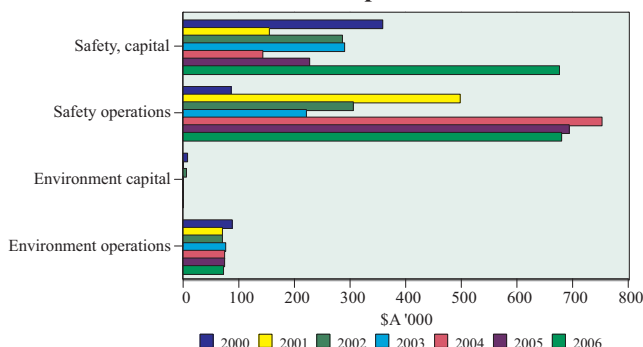
A selection of HSE related capital spent in 2006 (see photos):

- Replacement of the dust extraction system entirely: modification and addition of extraction points, new solid and flexible lines, increase in suction capacity and a whole new filter unit.
- Installation of a entirely new vacuum cleaner system for housekeeping purposes at the solid handling plant.
- A new big bag filling station was installed to significantly improve the safe handling of big bags.
- We moved forward with the safety eye shower improvement plan and added one into the chlorination plant.
- A safety cage was added to our tars loading station.
- Modification of the sulfur dioxide storage and unloading station.
- Design and purchase of a training facility for training rescue out of confined spaces. Prior to this, we have trained operators and maintenance employees on a third party safety center.



Big bag filling machine

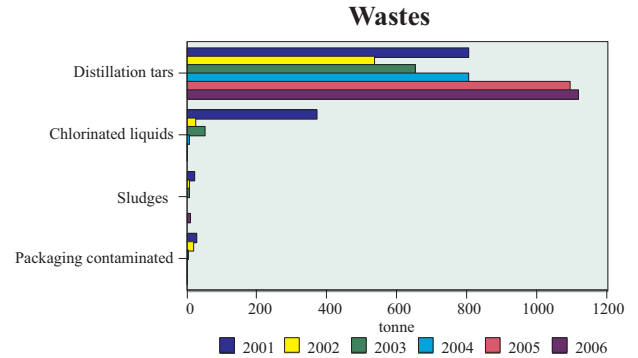
## Expenditure



## Wastes

Our waste is collected and administered by Akzo Nobel. Due to incorrect figures, low waste numbers are reported. It is assumed that the waste levels are similar to 2005.

Our effluent is treated in the biological effluent treatment installation of Akzo Nobel located on the Botlek site.



## Safety Management System and Major Hazards Control

The updated safety case, in accordance with modified regulatory guidelines, was submitted in February 2006. We are confident that the next COMAH inspection by the authorities (environmental department, labour inspection and fire department), scheduled for the first half of March 2007, will reflect our safety management system to be in good shape and the further improvements of the SMS since the last inspection in 2004.

In June 2006, our entire occupational health and safety system was audited by BVQI because the OHSAS 18001 certificate was due to be renewed. The re-certification was successful, without major or minor nonconformances.



Stack for new dust extractor



Safety cage for tanker unloading



Sulphur dioxide discharge station

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