



# HEALTH, SAFETY & ENVIRONMENT REPORT 2009

## Linz, Austria

Nufarm GmbH & Co in Linz, Austria manufactures agricultural chemicals

### The plant

manufactures

- 2,4-D selective herbicide
- Cuproxat
- Urea herbicides
- CCC (Chlormequat chloride)

### Health and safety performance

Unfortunately we have to report two lost time injuries, both injuries were investigated and measures were taken to prevent any future occurrence. The circumstances of the injuries were:

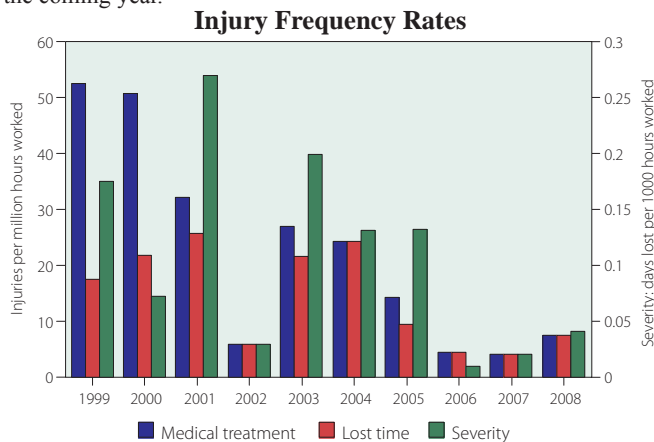
- An operator twisted his ankle when he slipped on a step in the plant, lost 4 days
- An operator was cutting straps on a bulk bag when the knife slipped, cutting his leg; 7 days lost

We are unhappy with our safety performance in 2008, so we will further strengthen our focus on health and safety on the plant during the coming year.



### Wastes

We have not made any significant changes to our processes during the last year. However, we have increased production. As a result, our wastes have increased, generally in line with increasing volumes of products. Significant increases in our synthesis processes have caused the increase in salt discharge. Unfortunately, the salt we generate is a direct consequence of the chemistry of the process and we cannot reduce it. Material sent to incineration is also fixed by our process with little opportunity for reduction. The remainder of our wastes is mainly packaging; we recycle as much as we can.

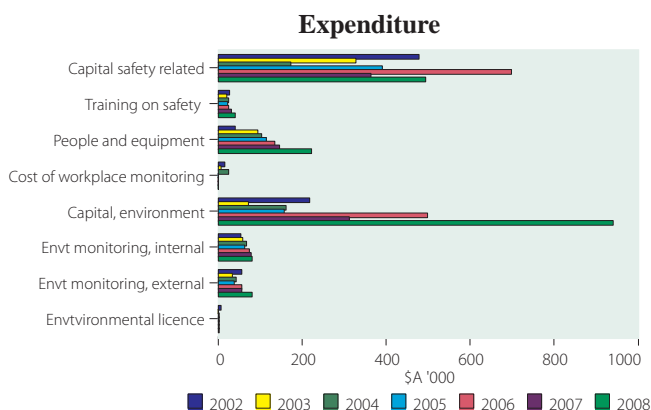


Note: All lost time injuries are also counted as medical treatment injuries

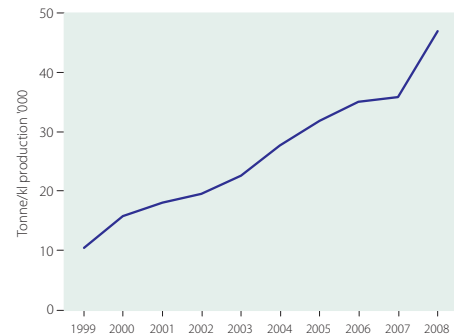
### Expenditure

During 2007, a lot of time and money was invested improving the labelling standard throughout the plant, involving switches, valves and pipe lines. This is a continuing effort.

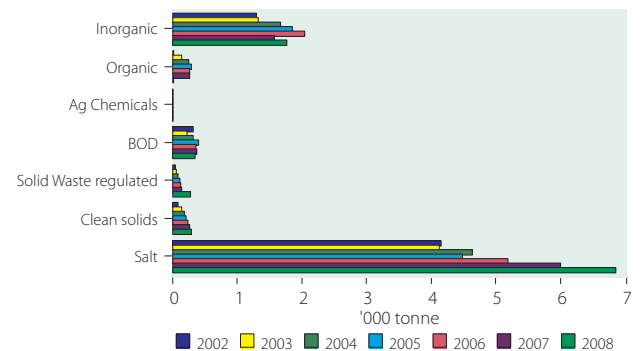
We also continue to invest in computer systems to control our plants. When our plants were designed, the control systems relied on instrument boards with mainly remotely controlled valves, with our operators controlling the plant. We are progressively changing to computer operated systems, with operator supervision. This not only improves the operations of the plants, but provides the capability of much more detailed recording of plant performance. As part of this program, we take the opportunity to improve the conditions of our control rooms.



### Production



### Wastes

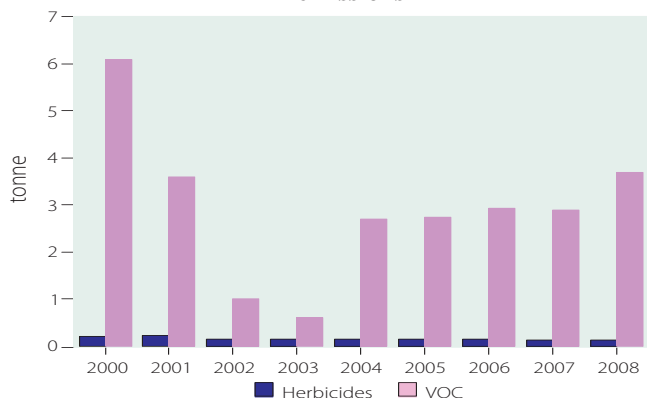


	tonne	2002	2003	2004	2005	2006	2007	2008
Incineration		73	229	353	422	403	423	351
Landfill		43	61	77	77	75	101	61
Recycling/recovery		95	362	464	497	585	597	660
Bio-treatment		5,741	5,387	6,267	6,370	7,180	7,515	8,521

## Emissions to air

CCC incineration: As reported last year, we had to search for another supplier of the off-gas incinerator that we needed to be able to meet the emission limits agreed with the authorities. We ordered the incinerator in 2007 and expected it to be installed in 2008. Following renewed discussion with authorities during the year, installation was postponed to 2009. Trials are now expected in August 2009. When this occurs, we can expect a substantial drop in VOC.

**Air emissions**



## Odour releases

Last year we received two odour complaints.

- A rail car of dimethylamine was being unloaded. A very small amount of dimethylamine was released as the unloading hose was being disconnected.
- Low levels of chlorotoluron and mecoprop were found in the Danube. Problems in the waste treatment plant were found and removed.

	Complaints	Accepted	Rejected	Doubtful
2002	7	0	5	2
2003	2	0	2	0
2004	1	0	1	0
2005	0	0	0	0
2006	1	1	0	0
2007	1	1	0	0
2008	2	2	0	0

## Support for emergency services

In support of our fire brigade, Nufarm donated a cup for the Upper Austrian fire brigade championship. The happy winners and the trophy are shown.



## Seveso II update

Nothing to report, the authorities did not carry out any audits during the year.

## Energy performance

The steam use has decreased for two reasons. We carried out a systematic survey of the steam system, with a detailed and accurate estimation of all demand in all sections of the plant. A mild winter also helped, reducing the demand for heating in our buildings.

	Electricity (MWhr)	Diesel (tonne)	Steam from waste heat (tonne)
2000	3,657	7.3	40,385
2001	3,970	9.3	36,200
2002	4,280	9.5	41,216
2003	4,331	9.9	38,830
2004	4,563	11.7	40,809
2005	4,603	12.0	37,327
2006	5,697	14.0	36,998
2007	5,780	15.8	27,881
2008	6,420	18.6	23,863

## Central observations of loading/unloading

As part of the computerisation of our plant, we have installed video surveillance of our loading positions. Our operators can view all these locations on their screens. Even though these loading/unloading operations are supervised by our own people, any problems in the operations can be spotted in the control room and appropriate action can be initiated.



## Community support

The public library of Niederneukirchen a village near Linz, is operated by unpaid volunteers. Some of our employees live in that area and are involved in the affairs of the local community. Nufarm supports their work and sponsored a printer (shown) for the library.



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