



Environmental Report

R u n c o r n 2 0 0 8

**INEOS ChlorVinyls**

# Towards Environmental Sustainability

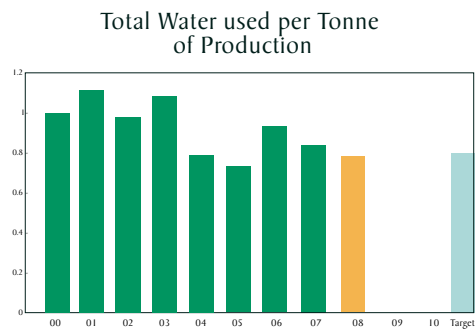
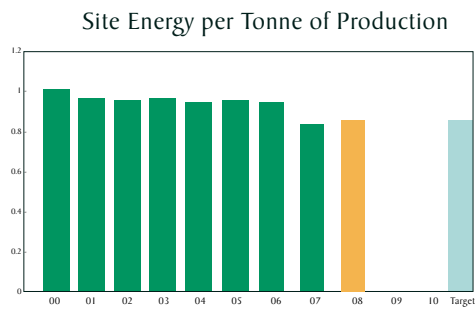
## Use of Resources

By 2010 INEOS ChlorVinyls will:

- reduce its energy consumption by 14%
- reduce its use of water for production purposes by 20%

per tonne of production based on a 2000 baseline.

Progress in 2008:



*Energy is an important resource for the Runcorn Site. In 2008 the gains in energy efficiency were masked by lower production volumes.*

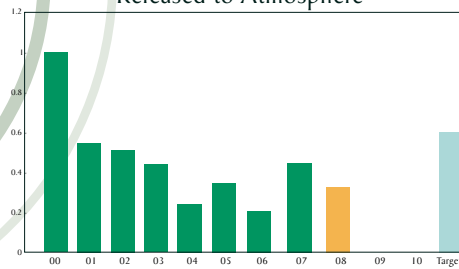
*Water usage continued to improve with recovery schemes coming on line associated with the new Boiler Plant.*

## Reduction of Releases – Environmental Burden

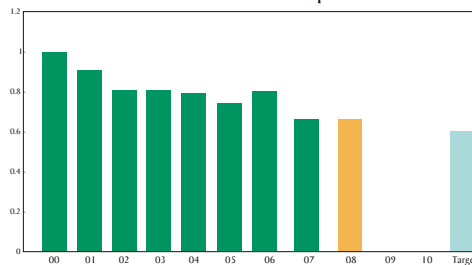
By 2010 INEOS ChlorVinyls will reduce its impact on environmental properties relating to atmosphere and water, based on a 2000 baseline in line with the CIA Sustainability Programme targets.

Progress in 2008:

VOCs with Potential for Harm Released to Atmosphere

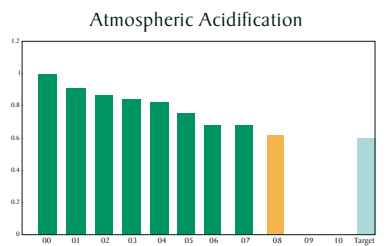
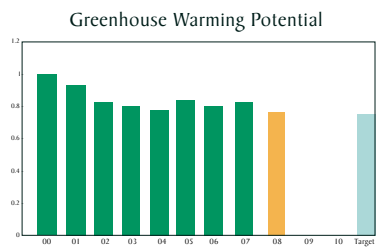
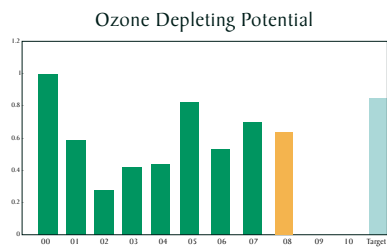
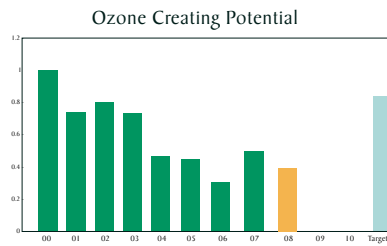


Inorganic Substances with Potential for Harm Released to Atmosphere



*VOC emissions reduced in 2008 as a result of improved availability of the main abatement plant. Further reductions are anticipated for 2009.*

*The downward trend in inorganic releases continues due to lower mercury emissions from the cellroom units.*



*Greenhouse Warming Potential is an equivalent measure to carbon footprint. Consumption of on-site generated hydrogen in the new Boiler Plant allowed natural gas usage to be reduced.*

*Atmospheric Acidification is a measure of acid rain potential. The new Boiler Plant is designed to give lower emissions of those gases that can form acid rain.*



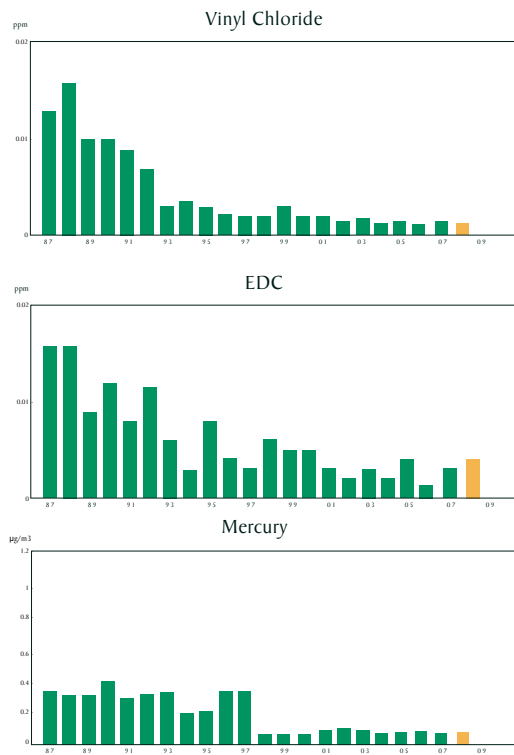


*The impact of the Site operations on the receiving water is relatively small. Exit concentrations of metals and chlorinated hydrocarbons are all sub parts per million/all in the parts per billion range.*

## Reduction of Releases – Measurement

INEOS ChlorVinyls will continue to measure the effect that its operations may be having on the environment local to its sites.

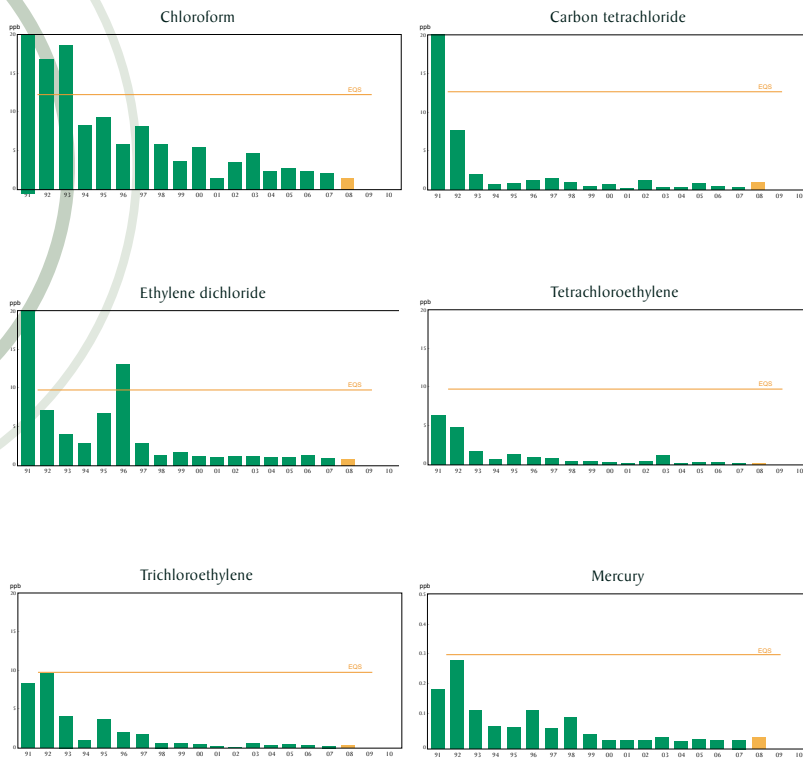
Progress in 2008:



*The concentrations of pollutants found in the air near to the Site are normally too low to be measured/detected even by the sophisticated monitoring equipment used.*

*Fluctuations follow the availability of the main abatement plant but remain less than one thousandth of the level set by the HSE for employees who work on the Site.*

Environment Agency data for the concentrations of key pollutants at the Environmental Quality Standard (EQS) monitoring point at Sutton Weir.



*The concentrations of key pollutants are typically less than one tenth of the EQS. Around one half of the results are below the limit of detection.*

## Reduction of Releases – Waste Hierarchy

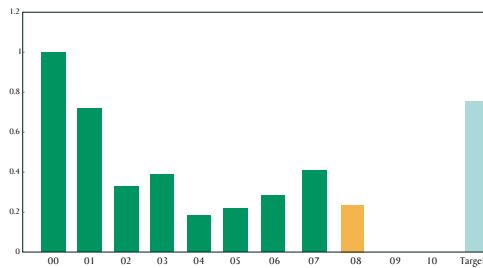
INEOS ChlorVinyls will manage its waste in such a way as to minimise its impact on the environment by:

- reusing or recycling waste materials where practicable
- when disposal is inevitable then, where practicable
  - treating the waste before it leaves our control
  - recovering energy from the waste
  - sending the waste to landfill as a last resort

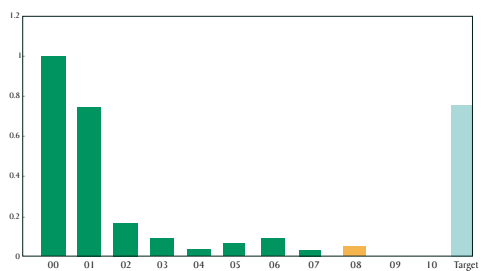
### Target

- to reduce the amount of waste for disposal by 25% by 2010, based on a 2000 baseline.

Land-Based Process Waste



Process Waste sent to Landfill



Data for Chlor only

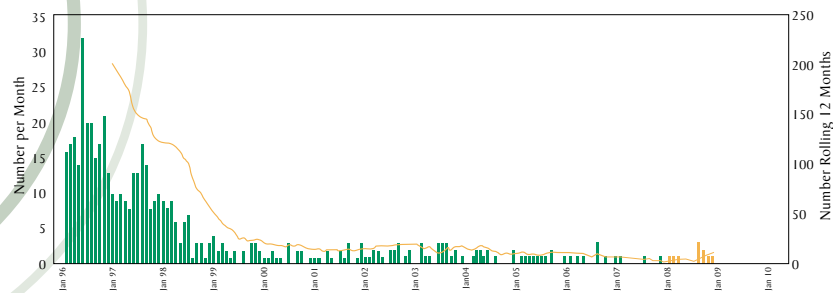
*Waste generation continues to be affected by the legacy of recent major projects on Site, as plants adjust to the new infrastructure.*

*Waste sent to landfill continues to be at a very low level.*

## Reduction of Releases – Towards Zero Incidents

As progress towards its objective of zero environmental incidents which either have a potential impact off-site or are a breach of our permits, INEOS ChlorVinyls will have an annual reducing target

Progress in 2008:



*It was disappointing to see an increase in Reportable Incidents in 2008 despite the high profile of our initiatives across the Site. The vast majority were small, technical breaches of outfall consents that had no impact on the environment.*

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## Protection of Habitats

INEOS ChlorVinyls will manage and conserve designated wildlife habitats that are located on its sites.

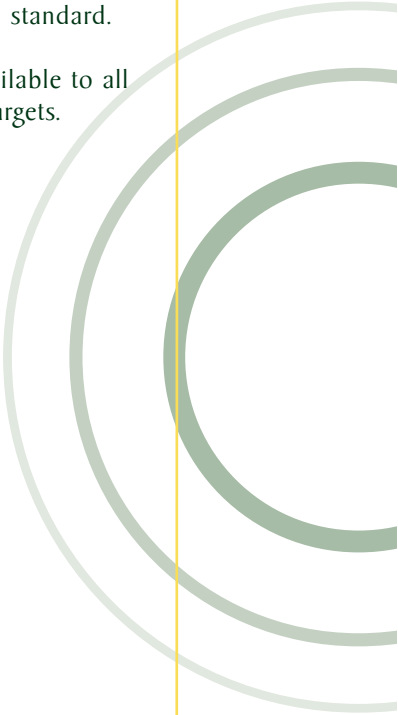
Progress in 2008:

*INEOS ChlorVinyls is continuing to support the work of local environmental organisations including: Cheshire Wildlife Trust, Weaver Valley Initiative, The Mersey Forest and Groundwork.*

## Environmental Accountability

INEOS Chlor & INEOS Vinyls will maintain accreditation of their Environmental Management Systems to the ISO 14001 standard.

INEOS ChlorVinyls will produce an annual report, available to all stakeholders, on progress towards the environmental targets.





**INEOS ChlorVinyls**  
[www.ineoschlorvinyls.com](http://www.ineoschlorvinyls.com)