

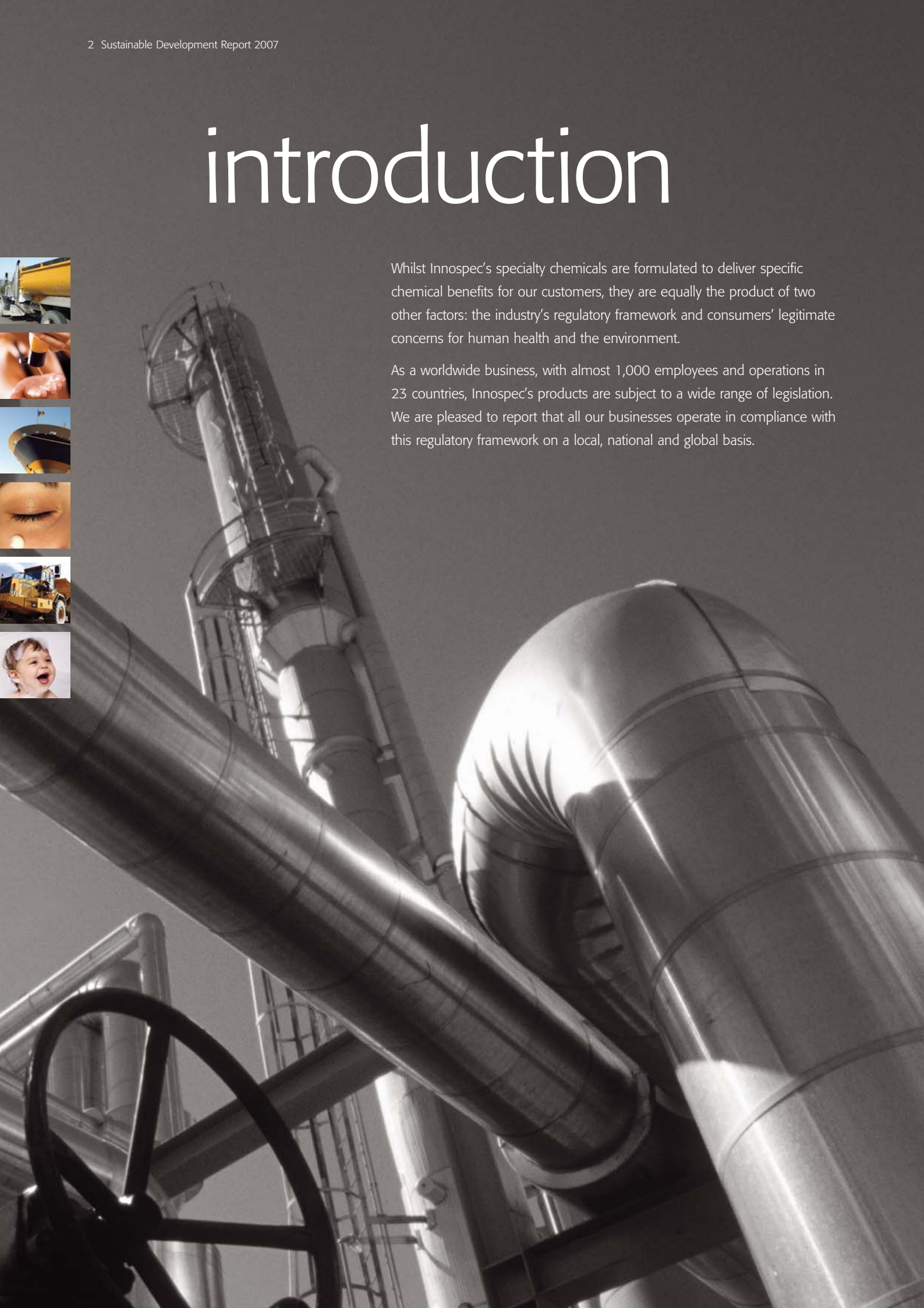
# sustainable development report 2007



# introduction

Whilst Innospec's specialty chemicals are formulated to deliver specific chemical benefits for our customers, they are equally the product of two other factors: the industry's regulatory framework and consumers' legitimate concerns for human health and the environment.

As a worldwide business, with almost 1,000 employees and operations in 23 countries, Innospec's products are subject to a wide range of legislation. We are pleased to report that all our businesses operate in compliance with this regulatory framework on a local, national and global basis.



# Innovation, imagination and confidence

**Many of Innospec's products are specifically formulated to help to protect the environment. In the following pages, we feature two such products: a biodegradable formulation for shampoos, detergents and household cleaners and a fuel additive which allows bio-fuels to function effectively.**

Both these products illustrate Innospec's key strengths. We are good at innovation, imaginative in the way we develop our ideas and confident in our ability to bring new formulations to the market place successfully.

In 2007, we were reminded that our safety performance is only ever as good as our last incident. We wish to extend our deepest sympathy to the families of the three contractors who lost their lives as the result of a major incident during the demolition of a redundant lead alkyls storage plant in Turkey. It is no consolation that the incident occurred because of a failure to follow laid down procedures and that the official enquiry



conducted by the office of the Public Prosecutor completely exonerated Innospec.

We continue to operate to the highest contemporary standards. In 2007, the period covered by this Report, our manufacturing facility at Ellesmere Port achieved the ISO 14001 international standard for Environmental Management Systems. The Product Stewardship system operated by our Fuel Specialties business in the United States was independently verified for the first time. In addition, as you will see from the data later in this Report, the safety performance of our individual sites is exemplary.



**Paul Jennings**

*President and Chief Executive Officer*

**Richard Shone**

*Vice President Safety,  
Health & Environment*



# Reward and recognition

This section of the Report features two of innospec's products which have been specifically formulated to offer positive environmental benefits.

## Recognition

In 2007, Innospec received a Certificate of Excellence from the UK's main industry organisation, the Chemical Industries Association, for demonstrating its commitment to sustainability.

## Award

Innospec's Ellesmere Port site was presented with the Gold Medal of the Royal Society for the Prevention of Accidents (RoSPA) in 2007. To qualify for this Award, a company has to win no fewer than five consecutive RoSPA annual Gold Awards for outstanding safety performance.



## Green Chemistry

The protection of human health and the environment is central to today's industrial chemistry. Like many of Innospec's products, the industry now formulates substances which not only deliver the required chemical effect but very often help to achieve specific environmental objectives. This process has become known as Green Chemistry. Its aim is to reduce waste, achieve a more efficient use of raw materials, reduce risks and hazards, improve energy efficiency, minimise the environmental impact of chemicals and, of course, lower production costs.

Innospec is at the forefront of these developments and this section of the Report features two of its products which have been specifically formulated to offer positive environmental benefits.



Innospec has developed an award-winning solution specifically formulated to provide an innovative, cost-effective, non-toxic, and sustainable alternative to non-biodegradable chelants.

### Offering biodegradability

Many household products, such as detergents, cleaners and shampoos, contain chelants - chemical compounds which help these products to work effectively by combating water hardness, preventing bad smells or discolouration, and protecting fabrics. Chelants are also used in commercial processes by the paper, water treatment, metal cleaning and agricultural industries.

Historically, the chelant used in many applications is known as EDTA. A risk assessment undertaken in 2003 by the European Union confirmed that EDTA did not present concerns for human, animal or aquatic life. However, it was shown to be poorly biodegradable and its residues can remobilise heavy metals from the river sediment during the waste disposal cycle. A risk reduction strategy has now been adopted by many industries using EDTA, but this has not solved the problem of its biodegradability.

Innospec has developed an award-winning solution specifically formulated to provide an innovative, cost-effective, non-toxic, and sustainable alternative to non-biodegradable chelants.



**ENVIOMET™** chelants which contain EDDS perform all the functions of other chelants and, for many applications, offer a higher level of technical performance. In addition, EDDS is readily biodegradable.

The positive environmental contribution made by EDDS was recognised by the UK Green Chemical Technology Award in 2003 presented by the Institute of Chemical Engineers, the Royal Society of Chemistry and the Crystal Faraday Partnership.



# Efficient biofuels

Innospec is one of the sponsors of the UK Government All Party Parliamentary Committee on Renewable Fuels.

*Pictured here are President and CEO, Paul Jennings with the Committee's Chairman, Paddy Tipping MP.*

Concern about climate change and the finite supplies of crude oil have led to an interest in sources of renewable energy. Biofuels are an alternative energy source which could help to prolong the world's stock of crude oil. They will therefore become an increasingly important component of the fuel used by motor vehicles. The European Union's target for biofuels is that they should represent 20% of the fuels used in all transport by 2020, and the USA has set similar targets in its Renewable Fuel Standard.

Biofuels are made from a variety of raw materials, such as sugar cane or wheat; vegetable, palm, peanut and coconut oils; tallow, or recycled cooking oils. Once processed from one or other of these sources, the biofuel is added to gasoline or to diesel in concentrations of up to 10%.

Before biofuels can function effectively, a number of technical problems have to be overcome.

Creating biofuels for gasoline involves the addition of ethanol. However, ethanol attracts water to the fuel and therefore increases levels of corrosion in the engine and fuel system. Innospec has researched and developed corrosion inhibitors which solve this problem and, when added during the ethanol manufacture processing, they ensure ethanol-based biofuels are able to deliver environmental benefits.



Blending biofuels to diesel creates two main problems: they have a tendency to oxidise and degrade, particularly in warm temperatures, and they contain substances which can cause filters to block at low temperatures. The nature and extent of these problems depends on the raw materials used. Two new products have been formulated by Innospec to provide a solution. **BioStable™** can be used in a range of formulations depending on the source raw material and is a range of anti-oxidants designed to prevent the fuel degrading and forming gum; and **BioWinterflow™** improves the handling and use of the biodiesel at low temperatures. Both these Innospec products are essential chemical components in biofuels. Without them, they would not provide an effective source of renewable energy.

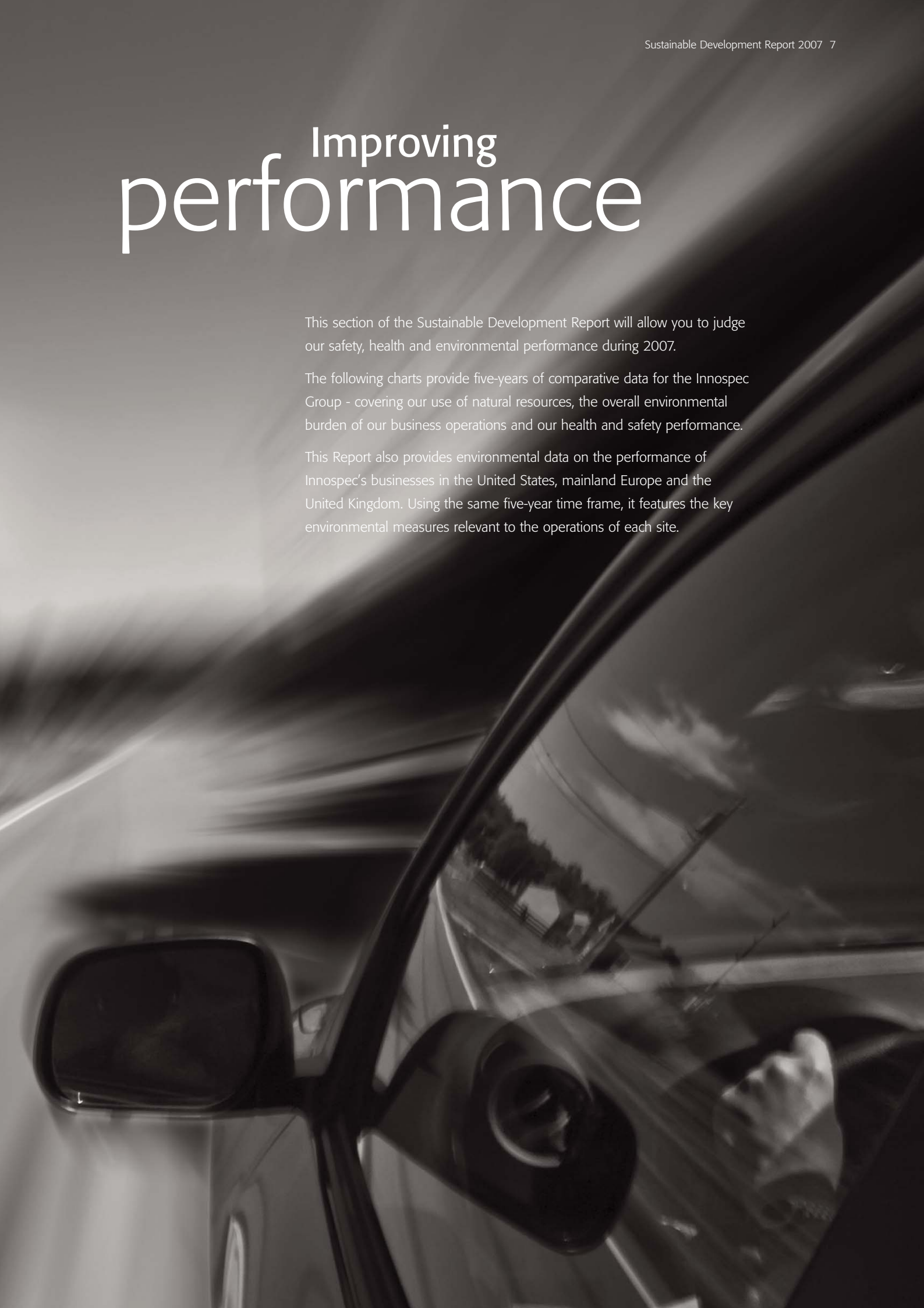


# Improving performance

This section of the Sustainable Development Report will allow you to judge our safety, health and environmental performance during 2007.

The following charts provide five-years of comparative data for the Innospec Group - covering our use of natural resources, the overall environmental burden of our business operations and our health and safety performance.

This Report also provides environmental data on the performance of Innospec's businesses in the United States, mainland Europe and the United Kingdom. Using the same five-year time frame, it features the key environmental measures relevant to the operations of each site.

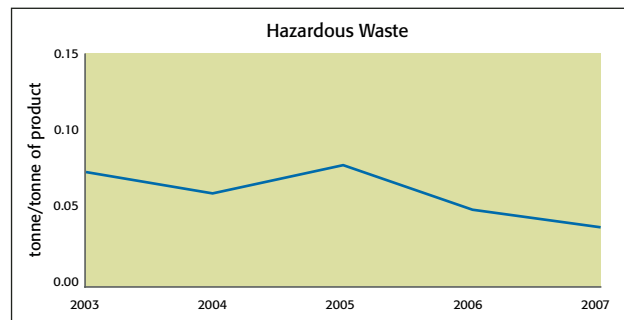
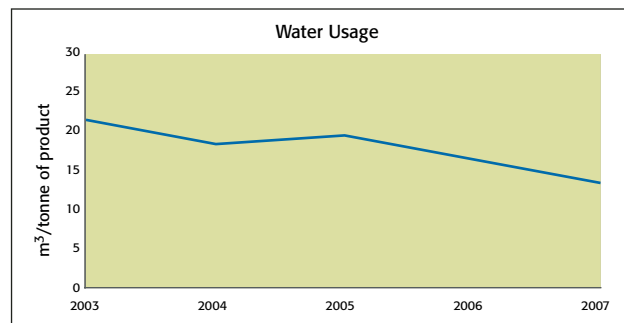
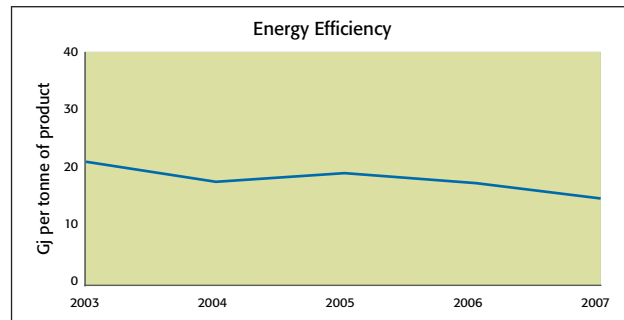


# Resources

Innospec carefully monitors the resources used by its business operations and has set ten-year objectives for energy efficiency, water usage and levels of hazardous waste. The following charts measure Innospec's use of resources for the period 2003-2007 for every tonne of product it produces.

## Summary:

In 2007, Innospec's energy efficiency improved by 16% and the company is now 30% more energy efficient than in 2003. Similarly, its water usage improved by 18% in 2007. Levels of hazardous waste reduced by 22% in 2007 and, over the last five years, have fallen by almost 50%.

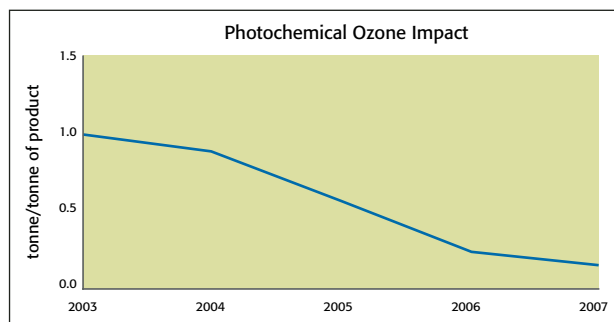
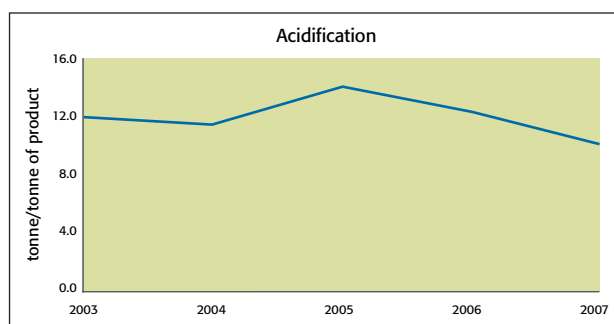
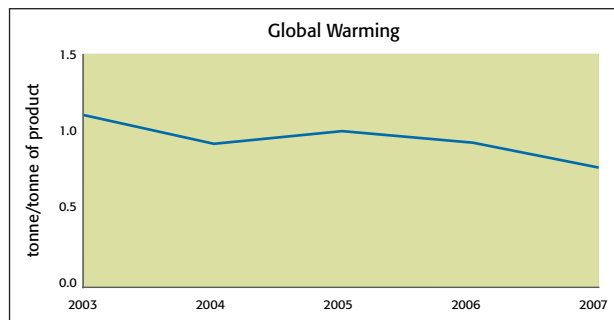


# Environmental Burden

Three further Innospec targets measure the impact of our business operations on the environment in relation to emissions of photochemical ozone, acidification and global warming.

## Summary:

All three measures of the environmental burden continued the trend of recent years - declining by between 17% and 38% in 2007. Most significantly, levels of photochemical ozone emissions are now 85% lower than 2003.

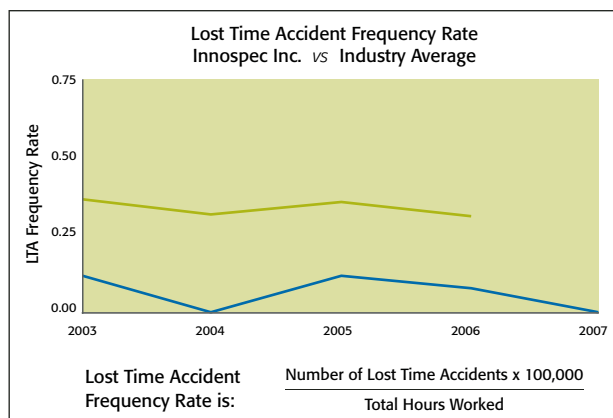


# Health and Safety

Innospec places the highest priority on the health and safety of its people. During 2007, the company inaugurated new Safety Awards to recognise company-wide achievement in accident prevention.

In 2007, the company's Bronze Award marking 250,000 man-hours without a Lost Time Accident (LTA), was achieved by the Vernon site in France and the Spencer site in the United States. The Silver Award, marking 500,000 man-hours without an LTA, was achieved by Herne in Germany and High Point in the United States. The company's Gold Award, recognising one million man-hours with an LTA was achieved by the Ellesmere Port site in the United Kingdom.

As the chart opposite shows, Innospec had no Lost Time Accidents (LTAs) in 2007.



*The Chemical Industries Association publishes its annual safety data in Summer 2008*

**Key** — CIA Industry Average — innospec



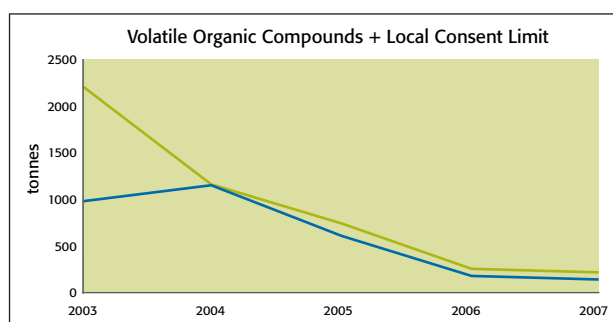
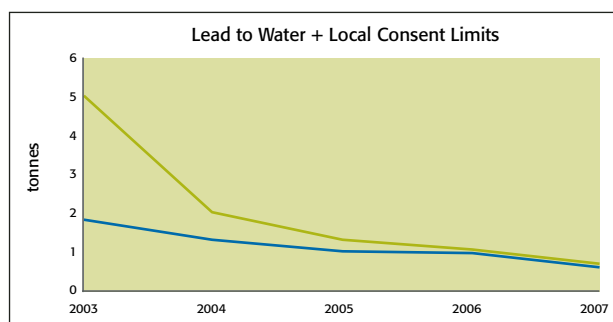
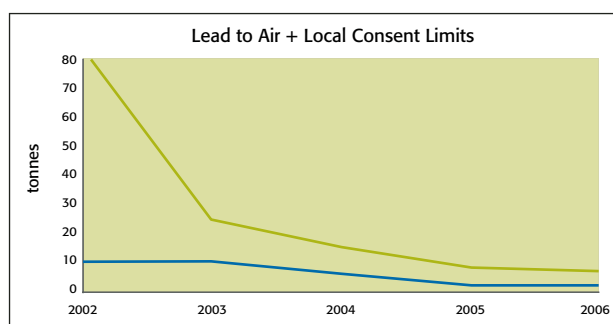
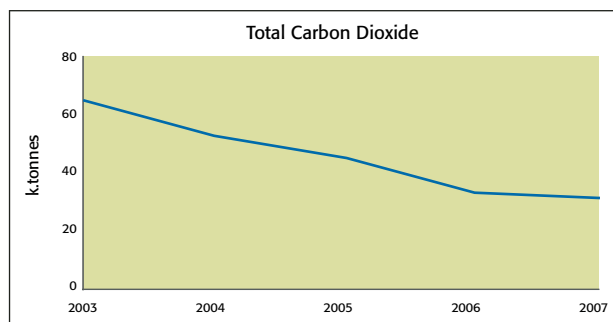
## Ellesmere Port, United Kingdom

A significant part of Innospec's portfolio of specialty chemicals is produced at Ellesmere Port in addition to its traditional manufacture of tetra ethyl lead. In 2007, the site achieved ISO 14001 - the international standard for environmental management systems. The Ellesmere Port site also saw the opening of a brand new manufacturing plant in 2007 to produce emollients for the personal care and cosmetic sector.

The following data charts compare the site's performance with the official Consent Limits imposed by the Environmental Agency, where appropriate.

### Summary:

The charts show continued falls in emissions and waste from the manufacture of tetra ethyl lead and, over the last five years, have declined by between 67% and 87%, which reflects improved controls and lower production levels. The site's emissions of carbon dioxide, a key greenhouse gas, have now more than halved over the last five years.



Key — Consent — innospec

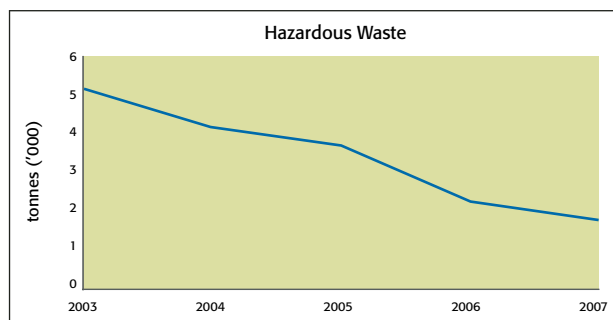


## Widnes, United Kingdom

Innospec's site at Widnes manufactures chemicals for perfumes, cosmetics and personal care products as well as producing intermediate fine chemicals which are then used as key components in other substances.

### Summary:

Almost all of the Widnes site's waste represents aqueous biodegradable material which, after treatment, is used as an energy source in the production of electricity. In 2007, the site's hazardous waste declined by a further 21% and has now fallen by 65% in the last five years.

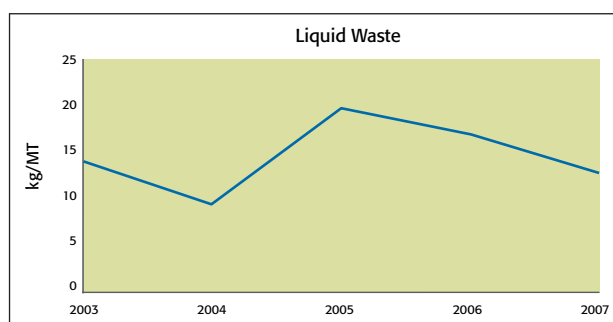
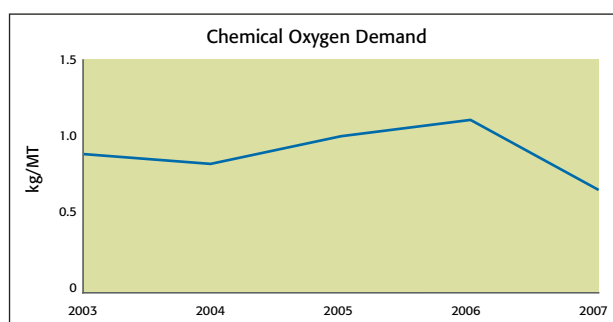


## Herne, Germany

The Herne site specialises in the manufacture of specialty chemicals based on Ferrocene - a compound which is used in fuel additives to aid combustion and reduce emissions in a wide range of fuels.

### Summary:

Levels of Chemical Oxygen Demand in the Herne site's effluent fell by 40% in 2007 and its total Liquid Waste decline by 23% over the same period.

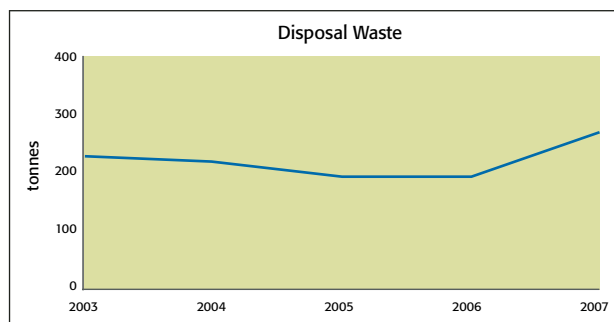


## Leuna, Germany

The site manufactures additive-free flexible thermo-plastic material used in injection moulding and in films, coatings, sealants and cables. Leuna also produces a range of specialised waxes for use in plastic processing, printing inks and coatings, textiles and polishes.

### Summary:

Levels of disposal waste generated by Leuna are proportional to the site's overall production volumes. In 2007, significant production increases resulted in a 40% rise in the level of waste.

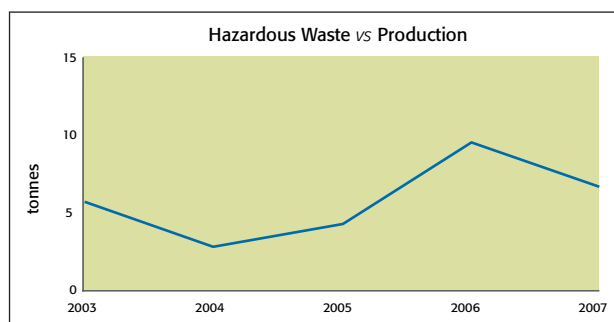


## High Point, United States

The production facilities at High Point are used by other chemical manufacturers to help to develop new products, provide supplementary manufacturing capacity, or to achieve lower unit costs.

### Summary:

Because production levels at the High Point site are governed by the business placed with it by other chemical producers, levels of hazardous waste generated can vary from year to year. In 2007, levels of hazardous waste fell by 30%.

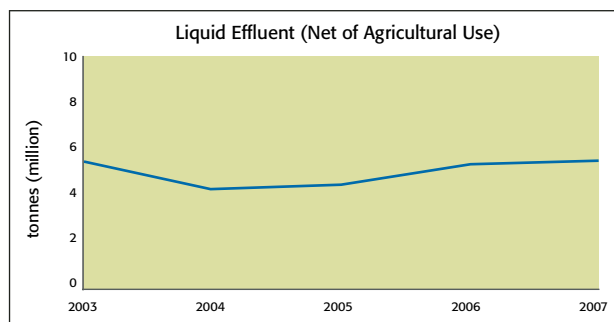


## Spencer, United States

The Spencer site produces state-of-the-art emollients for the cosmetic and personal care industries. Its products are used in sunscreens, fragrances as well as hair and skin conditioners.

### Summary:

Spencer's liquid waste is recycled and used as a fertiliser by local farmers. In 2007, the proportion of waste being used for agricultural purposes rose by 28% which served to reduce the site's net waste total by 25%.

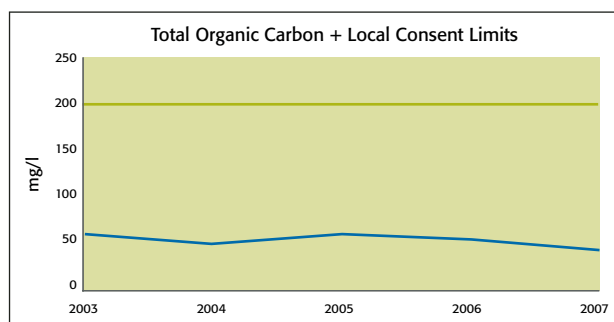


## Vernon, France

The heavy fuel oil additives produced at the Vernon site are used in boilers, furnaces and gas turbines. It also produces biological chemicals which protect against corrosion, reduce fouling and provide other treatments for industrial and municipal wastewater.

### Summary:

The Vernon site's total for Total Organic Carbon fell by 18% in 2007 and, over the last five years, has shown an overall reduction of 25%.



Key — Consent — innospec







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