



# EMAS INTERIM STATEMENT 2006

## 1. INTRODUCTION

This interim statement is provided, as required, under the EMAS Regulations EC/761/2001 and as further specified in the Council Decision EC/681/EC. It provides an update of the environmental events and activities at DuPont EKC Technology, Ltd. in East Kilbride since the last full statement was verified in January of 2004. The site has further published an interim environmental statement for 2005.

For full information with respect to the operations of the company, the reader is referred to this aforementioned full statement. Another full statement will be provided in January 2007. Note that for consistency, the information on the usage of utilities is provided in exactly the same format in this interim statement as in the main statement.

Anyone wishing to obtain further information with respect to the environmental performance of the company in East Kilbride should visit the website at [www.ekctech.com/eh-s.htm](http://www.ekctech.com/eh-s.htm) or for an electronic copy in Adobe Acrobat format of the previous EMAS statements at [www.ekctech.com/ekc-europe.htm](http://www.ekctech.com/ekc-europe.htm). You may also contact the Safety, Health and Environmental Resource during office hours for further relevant information, through the above web link.

## 2. ENVIRONMENTAL PERFORMANCE

### 2.1 ELECTRICITY CONSUMPTION

A huge amount of carbon dioxide (a greenhouse gas) is made when coal and gas is burnt to produce electricity. Saving energy by cutting down the amount of electricity used on site, we reduce the amount of greenhouse gases that are linked to Global Warming.

Global warming is causing higher temperatures which threaten dangerous consequences, such as drought, disease, floods and lost ecosystems. We know where most heat-trapping gases come from: power plants and vehicles. And we know how to curb their emissions by shifting the perception of global warming from abstract threat to pressing reality.

This is why at EKC we take very seriously our obligation to manage our plant with effective and efficient use of energy.

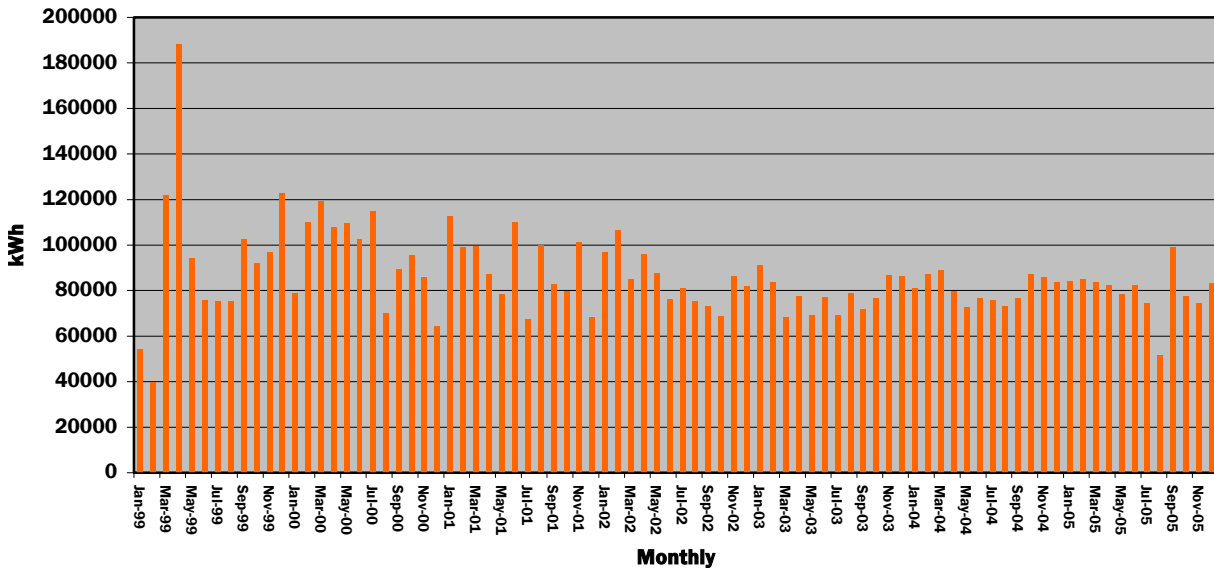
Electricity is used in the company for product manufacture and development, lighting, ventilation, office equipment, personnel facilities. Our consumption over the last six years is shown in the table opposite.

Year	Consumption GWh	Change from Previous Year
2000	1.15	-
2001	1.08	-6%
2002	1.01	-6.5%
2003	0.94	-7%
2004	0.97	+3%
2005	0.96	-2%



The monthly consumption of electricity is carefully recorded and this information is presented graphically below.

## Monthly Electricity Consumption



The stability of the current readings indicates the level of control that is applied, and further reductions are difficult due to the stringent requirements for quality control of the products.

## 2.2 GAS CONSUMPTION

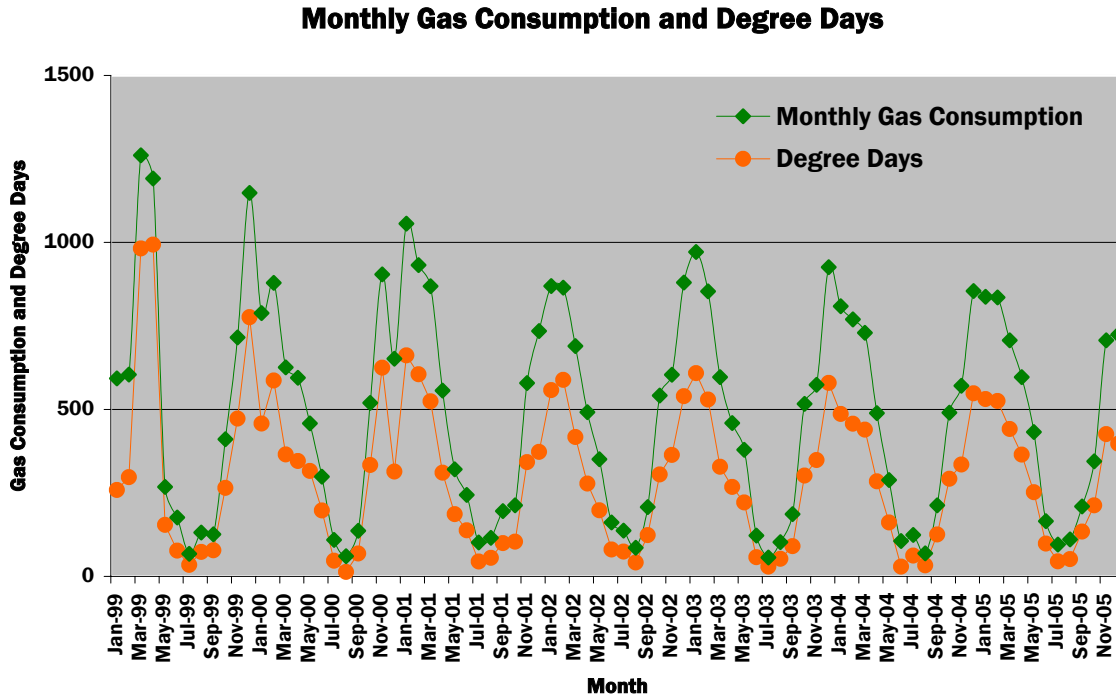
Year	Consumption in thousands of cubic feet	Consumption in GWh <sup>1</sup>
1999	4462	1.43
2000	3670	1.17
2001	3443	1.10
2002	3570	1.14
2003	3417	1.09
2004	3257	1.05
2005	3480	1.13

Gas is used for space heating in the production facility, the warehouse and in the office accommodation. It is important to maintain a suitable internal ambient temperature for personnel comfort and product quality. In order to monitor the effectiveness of the control of the heating system's, the gas usage is compared with the heating requirement as determined by the number of heating degree-days each month.

The values for degree days each month obtained from <http://vesma.com/ddd/history.htm>

<sup>1</sup>This value is calculated by converting the cubic feet into cubic metres and then using the average calorific value for the gas to convert the figures into gigawatt hours

The following graph indicates the usage of gas and the number of heating degree-days in each month over the data collection. The agreement between the parameters demonstrates the effectiveness of the control. Degree-days are a measure of temperature fluctuations that stimulate demand for heating or cooling.



Further statistical analysis of this information provides a correlation coefficient of 0.84 and the graph of the relationship between the parameters is provided below in which the two aberrant values are highlighted.

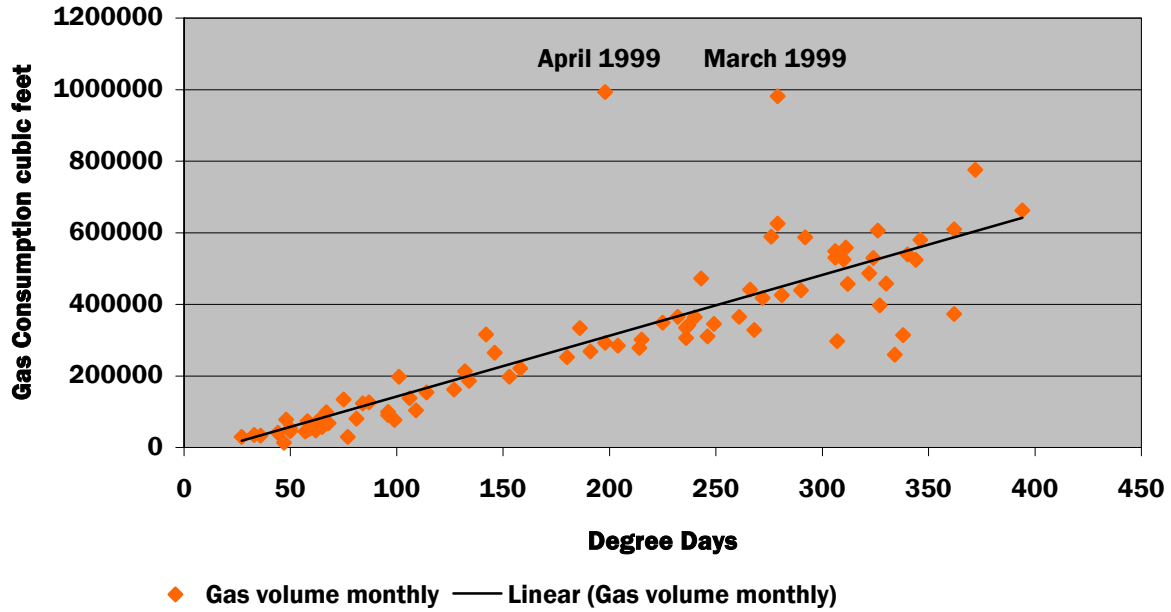
Year	Degree Day Correlation Coefficient
2003	0.81
2004	0.83
2005	0.84

*This indicates a strong correlation over the last three years and provides confidence of management of heating at the site. This technique of assessing the effectiveness of heating controls is recommended and help on this technique can be obtained from [www.actionenergy.org.uk](http://www.actionenergy.org.uk)*

The carbon dioxide emissions from energy consumed at EKC would equate to approximately **1, 539** tonne.



### Gas Consumption Versus Degree Days



## 2.3 WATER CONSUMPTION

Water is used for personnel services, in cleaning operations and as part of our water-based product range. Water usage is reasonably stable with some variations being attributed to different testing routines used in the development areas, and in general the increase in water consumption in direct relation to the increase in the manufacture of water based products.

Year	Usage in m <sup>3</sup>
1999	1189
2000	1116
2001	1511
2002	1265
2003	1103
2004	1123
2005	1236

## 2.4 USE OF PACKAGING

As a requirement of the Producer Responsibility (Packaging Waste) Regulations 1997, we keep a careful record of all packaging materials coming into the company and used in despatch of product in order to discharge our recovery obligations under these regulations. Additionally, the company is committed to the use of returnable containers in preference to single-trip containers wherever practicable.

Approximately 71 tonnes of packaging introduced into the UK waste stream, means EKC will be obligated under the regulations during 2006.

The table below summarises the percentage volumes of our products despatched in single-trip and returnable containers.

Year	Product Sold in Single Trip Containers	Product Sold in Returnable Containers
2000	38.6%	61.4%
2001	26.5%	73.5%
2002	26.2%	73.8%
2003	20.1%	79.9%
2004	19%	81%
2005	18%	82%

## 2.5 WASTE MANAGEMENT

A record is maintained of all wastes leaving the site for disposal or recovery. Information on these wastes is provided in the following table.

Waste Materials	Items 2005	Items 2004	Off-site Disposal Route
Wooden pallets	779	1176	Recovered for off site recycling
Shutz IBCs	117	330	Recovered for off site reuse
Clear plastic IBCs	340	228	Recovered for off site reuse
Metal-clad ***IBCs	1	10	Partial recovery and disposal
Steel (205 litre) drums	59	74	Cleaning and disposal
Plastic (205 litre) drums	784	638	Cleaning and disposal
Special waste uplifts	3 skips	4 skips	Secondary fuel recovery or landfill
Alkali liquid waste	*Approx. 28.5 Tonne	*Approx. 37.8 tonnes	Offsite effluent treatment and sewer disposal
Acid liquid waste	*Approx. 4.5 Tonne	*Approx. 4.5 tonnes	Offsite effluent treatment and sewer disposal
Polythene	24 bales (**Approx. 1.9 tonnes)	18 bales (**Approx. 1.4 tonnes)	Recovered for off site recycling
Cardboard	21 bales (**Approx. 1.7 tonnes)	14 bales (**Approx. 1.1 tonnes)	Recovered for off site recycling

(Due to lack of information from waste contractors, the site cannot provide exact weights on the following items; Polythene, cardboard, alkali and acid liquid waste).

\*Approximation is based on site waste tank volume and weight.

\*\*Approximation is based on average weight of bale (weighed on site).

\*\*\* IBC is an intermediate bulk container which holds a volume of 1000 litres.

## 2.5 EFFLUENT DISCHARGE

All effluent discharged to the foul sewer has been within the consent conditions set by Scottish Water, except for one breach of discharge volume by an additional extra 15 cubic metres, within the consent 24 hour discharge period.

Total volume of rainwater and drum washings water discharged by consent to the sewage system during 2005 was 667m<sup>3</sup>.



### 3. PROGRESS ON OBJECTIVES FOR 2005

The following objectives were disclosed in the statement for the year 2005.

- ◆ Secondary containment of service yard - **Objective Complete**
- ◆ Waste liquid water removal feasibility study - **Objective Complete**. Study has indicated that the removal of water from waste liquid would not be cost efficient or effective to the site's benefit.
- ◆ Align DuPont Corporate Environmental Plan to site environmental metrics - **Objective Complete**
- ◆ Feasibility study on energy savings by converting compressed air driven pumps used in the blending operations to electrically operated pumps - **Objective not completed due to personnel resource issues during 2005.**

### 4. OBJECTIVES FOR 2006

- ◆ Feasibility Study on energy reduction from compressed air to electricity driven pumps.
- ◆ Align business quality management system process change to incorporate environmental considerations.
- ◆ Review potential integration of site environmental and quality management systems.
- ◆ Key supplier – environmental management system review.

### 5. VERIFIERS DECLARATION

Further to consideration of the documentation, data and information resulting from internal procedures examined during the verification process at DuPont EKC Technology Ltd, it is evident that the Environmental Policy, Programme Management, System Review and Environmental Statement meet the requirement of Regulation 761/2001 (the EMAS Regulation).

Signed

Amanda Thorpe

Date

24th January 2006



SGS United Kingdom Ltd UK-V-0007  
Rossmore Business Park  
Ellesmere Port  
South Wirral  
England  
CH65 3EN

