

# EMAS INTERIM STATEMENT 2005

## INTRODUCTION

This is an interim statement 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 events and activities at DuPont EKC Technology, Ltd. in East Kilbride since the full statement was verified in January of 2004. 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)

## ENVIRONMENTAL PERFORMANCE

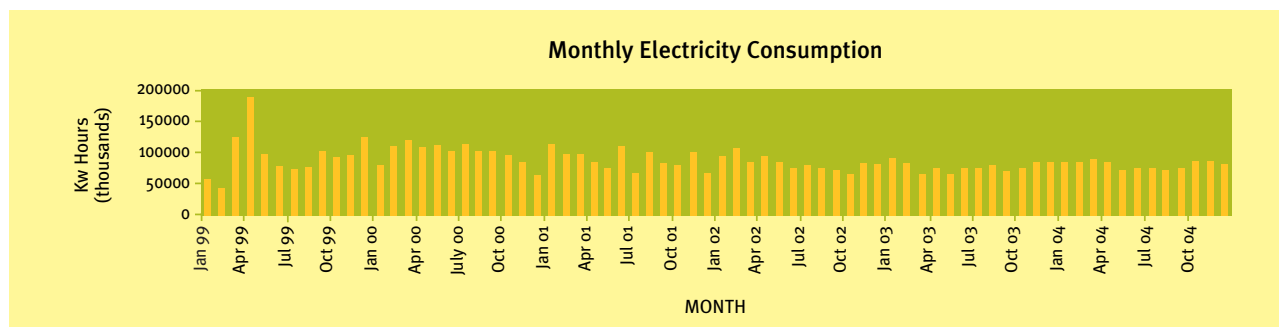
### Electricity Consumption

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

| 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%                       |

Note that after a continuing trend in the reduction of electricity usage there has been a 3% increase in the consumption this year. This is being carefully monitored. 10% of electricity obtained from Scottish Power through the green tariff ([www.ScottishPower.co.uk](http://www.ScottishPower.co.uk))

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



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.

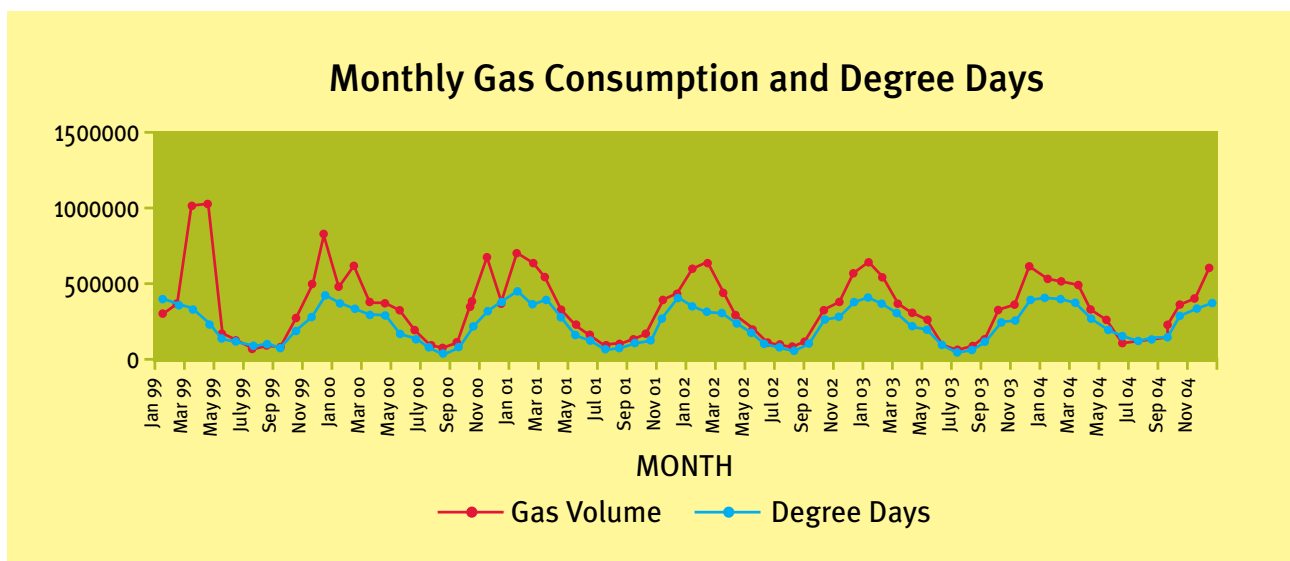
## Gas Consumption

| Year | Consumption in thousands of cubic feet | Consumption in GWh <sup>1</sup> |
|------|----------------------------------------|---------------------------------|
| 1999 | 4462                                   | 1.42                            |
| 2000 | 3670                                   | 1.16                            |
| 2001 | 3443                                   | 1.09                            |
| 2002 | 3570                                   | 1.13                            |
| 2003 | 3417                                   | 1.08                            |
| 2004 | 3257                                   | 1.03                            |

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 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.

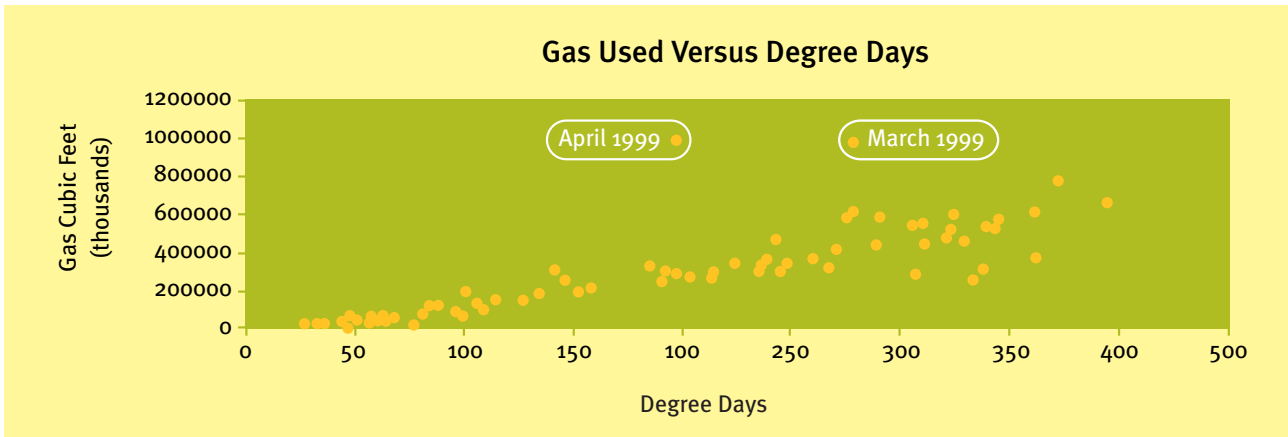


The values for degree days each month obtained from <http://vesma.com/ddd/history.htm>

<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 provided by the gas supplier to convert the figures into gigawatt hours.



Further statistical analysis of this information provides a correlation coefficient of 0.83 and the graph of the relationship between the parameters is provided below in which the two aberrant values are highlighted. This indicates a strong correlation 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.energy-efficiency.org](http://www.energy-efficiency.org)

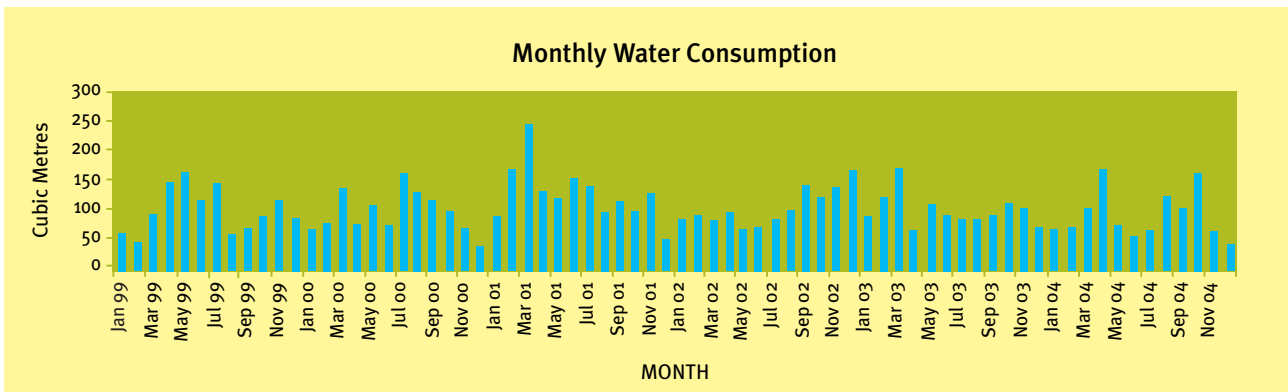


## Water Consumption

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

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. The following diagram shows the monthly variation in the usage of water in the company.





## 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. **58.11** Tonnes of packaging, means EKC will be obligated under the regulations during 2005. This total weight represents an **8% decrease in obligated packaging, based on total obligation in 2003 (63.4 Tonnes).**

| Calendar Year | Product in single trip containers | Product in returnable containers |
|---------------|-----------------------------------|----------------------------------|
| 2000          | 38.6%                             | 61.4%                            |
| 2001          | 26.5%                             | 73.5%                            |
| 2002          | 26.2%                             | 73.8%                            |
| 2003          | 20.1%                             | 79.9%                            |
| 2004          | 19.0%                             | 81.0%                            |

This table summarises the percentage volumes of our products dispatched in single-trip and returnable containers.



## Waste Arisings

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

# DISPOSAL OF WASTE MATERIALS

| WASTE MATERIAL            | ITEMS 2004                              | ITEMS 2003                        | OFF-SITE DISPOSAL ROUTE                                                 |
|---------------------------|-----------------------------------------|-----------------------------------|-------------------------------------------------------------------------|
| Wooden Pallets            | 1176 Pallets<br>(45% increase)          | 652 Pallets                       | Recovered for off-site recycling                                        |
| Shutz IBCs                | 330 IBCs<br>(11% decrease)              | 367 IBCs                          | Recovered for off-site reuse                                            |
| Clear Plastic IBCs        | 228 IBCs<br>(41% increase)              | 134 IBCs                          | Recovered for off-site reuse                                            |
| Metal Clad IBCs           | 10 IBCs                                 | 143 IBCs                          | Partial recovery and disposal<br>(use of this type of container ceased) |
| Steel (205 litre) Drums   | 74 Drums                                | 89 Drums                          | Cleaning and disposal                                                   |
| Plastic (205 litre) Drums | 638 Drums<br>(25% increase)             | 480 Drums                         | Cleaning and disposal                                                   |
| Special Waste Uplifts     | 4 Skips                                 | 4 Skips                           | Secondary fuel recovery or landfill                                     |
| Alkali Liquid Waste       | * Approx. 37.8 Tonnes<br>(53% increase) | 20 Tonnes<br>(exact weight)       | Off-site effluent treatment and sewer disposal                          |
| Acid Liquid Waste         | * Approx. 4.5 Tonnes<br>(62% decrease)  | 16 Tonnes<br>(exact weight)       | Off-site effluent treatment and sewer disposal                          |
| Polythene                 | 18 Bales (**Approx.<br>1.4 tonnes)      | 32 Bales (Approx.<br>2.56 tonnes) | Recovered for off-site recycling                                        |
| Cardboard                 | 14 Bales (**Approx.<br>1.1 tonnes)      | 34 Bales (Approx.<br>2.72 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).

## Effluent Discharge

All effluent discharged to the foul sewer has been within the consent conditions set by Scottish Water.



## DEVELOPMENT IN EMERGENCY PREPAREDNESS

One of the issues raised during this current year has been the potential for damage to the groundwater under the company site due to accidental spillage or leakage from pipework or vessels.

To address this concern the following has been carried out:

- A full assessment produced by the British Geological Survey with respect to the vulnerability of the groundwater in this area, has been obtained and considered.
- A procedure has been developed to ensure that the groundwater is adequately protected.

The BGS survey indicated that there are no aquifers in the locality from which potable water would be taken and therefore the protection that we should afford the groundwater is consistent with protecting the environment due to migration of any spilled materials. The groundwater protection procedure has, at its heart, a risk assessment based on the evaluation of all of the materials used and stored on site, the method of storage or conveyance of the materials and the containment systems in place. From this risk assessment action plans have been produced to deal with any possible spillages, although preventative action has been the prime focus.

## PROGRESS ON OBJECTIVES FOR 2004

The following objectives were disclosed in the statement for the year 2004. The text in blue indicates our progress on these objectives.

**Continue to investigate the possibility of generating electricity on site using a wind turbine. Concluding the project from 2003.**

*Project cancelled (as scheduled re-developments in the area are likely to make planning consents unlikely).*

**Continue to audit the suppliers of goods and services and encourage them to pursue the highest environmental standards.**

*No audits scheduled 2004. Continues into 2005. Primary waste management contractors were audited during 2004.*

**Equate the energy usage in the business to greenhouse gas emissions.**

*Energy consumed on site equates emissions of 612,800 kg of CO<sub>2</sub> and 167,294.4 kg Carbon. All figures apply to the UK and are based upon official Government figures from the Department of Environment, Food and Rural Affairs (DEFRA).*

**Investigate the feasibility of purchasing carbon sequestration from a third party.**

*Project cancelled because of personnel resource issues.*



