



## **Environmental Statement Incorporating the operations of Orbit Digital For Year Ending 2010 for EMAS verification**

### **Introduction**

This is our fourth environmental statement reporting on The Company's environmental performance. It provides updated information on our activities in 2010 and comments on our future plans. It has been collated following the structure of our original environmental statement. We are proud to include our sister company Orbit Digital within our EMAS statement.

### **Managing Director's Statement**

A trend that began in 2009 continued in 2010, we saw a further reduction of use on our litho machines and an increase in our digital output, finishing and mailing in-house. This has also led to further investments into finishing equipment, an increase in temporary staff fulfilling the digital work and development of our mezzanine floor for storage. With the growth of the digital work it was deemed necessary to bring Orbit Digital officially into the fold and they are now successfully ISO14001, ISO9001, FSC and EMAS accredited.

Moving more into print finishing, fulfilment and mailing, it has become difficult to show environmental improvement as the number of impressions has decreased but our requirement for power and water has increased. Also we have been improving since 2002, so it does become harder.

Bringing a larger proportion of finishing in-house we have reduced the carbon emissions further of the works van and been able to give employment to the local community increasing the number of temps we use.

The Powerperfector installed in July 2008 has recorded a saving of 12.2%. We've engineered the heat to be extracted from the digital print room into the main factory, so we are hoping for a small improvement in our energy usage in 2011.

Our on going community projects continued; support offered to customers about how to reduce the impact of their print jobs and mailings, how they can pursue ISO14001 and EMAS accreditations and sponsorship of charity events and the Samaritan's Purse appeal. We've also hosted an event on Water and Energy efficiency in the work place and print sponsored the 2010 Green Awards.

Setting targets for the next five years has been challenging as we diversify into other areas, and after nine years of operating a successful EMS, room for improvement has diminished some what. However, we are constantly looking at new technology and hope to continue our investments in a sustainable future.

*Phil Sudwell, Managing Director*

*AJ Thorpe*  
07 April 11

## Environmental and Sustainability Policy

Park Lane Press Limited is a lithographic Waterless printing company operating out of Corsham, our main output includes brochures, reports, leaflets, direct mail, folders, greeting cards, stationery. Orbit Digital is the digital printing subsidiary of Park Lane Press and operates under it's EMS.

We recognise our operations result in emissions to air and water, the generation of waste and consumption of natural resource, we therefore realise the importance of environmental protection and sustainability. We therefore operate an environmental management system, we are committed to running our business responsibly and in compliance with all environmental regulations, legislation and approved codes of practice relating to the printing industry and our activities. It is our objective to operate with, and to maintain good relations with all regulatory bodies.

It is the Organisation's declared policy to carry out all measures reasonably practicable to meet, exceed or develop all necessary or desirable requirements and to continually improve environmental performance through the implementation of the following:

1. Assess and regularly re-assess the environmental effects of the Organisation's activities and integrate sustainability considerations into all our business decisions.
2. Assess and regular re-assess the Organisations environmental and sustainability objectives and targets
3. Assess and regularly re-assess legislation and regulation that apply to the Organisation's activities
4. Training of employees in environmental and sustainability issues
5. Minimise the production of waste
6. Minimise material wastage
7. Minimise energy wastage
8. Promote the use of FSC, recyclable and renewable materials
9. Reduce and/or limit the production of pollutants to water, land and air
10. Control noise emissions from operations
11. Evaluate paper suppliers to avoid using paper that has come from controversial sources such as illegally harvested forests, genetically modified forests, forests where serious social conflicts are occurring and forests with wood originating from uncertified high conservation value areas.
12. Evaluate all suppliers environmental performance before selecting as an approved supplier.
13. To be involved with educating and working with the local community on environmental matters.
14. Purchase electricity from a supplier committed to renewable energy.

This policy is communicated to all employees, suppliers and sub-contractors and is made available to the public. In drafting and reviewing the Environmental and Sustainability Policy all personnel involved ensure that it:

1. Is appropriate to the nature, scale and environmental impacts of its activities
2. Includes a commitment to continual improvement and the prevention of pollution
3. Includes a commitment to comply with the relevant environmental legislation and regulations, and with the other requirements to which the Organisation subscribes
4. Provides the framework for setting and reviewing environmental objectives and targets
5. Is documented, implemented and maintained and communicated to all employees
6. Is available to the public

Signed on Behalf of the Company:



..... (Director)

Date: 7th April 2011

AG Thorne  
07 April 11

## Site Activities, Products and Services, Legal Provisions

There was a further increase in production on the digital and finishing side.

During the year the Company re-registered the site with the Environment Agency under the Hazardous Waste Regulations. Our Premises Code Number is NXS478. The Company have also registered on the CRC Energy Efficiency Scheme as a half hourly electricity user below 3000 MWh for 2008, our number is CRC7721216.

There were no legal infringements in 2010, or has there been in previous years. No new laws introduced over the last 12 months have affected how the Company operate.

Please find in appendix A shortened version of our legal register holding details of relevant laws to our industry.

## Significant Aspects and Impacts, Environmental Performance Indicators

Significant aspects of the company include the usage of ink, paper, electricity, chemicals, aluminium plates and waste created. The main change for the company over the last 4 years has been a shift from just printing items to the finishing (folding and binding) of those items, a process that used to be outsourced. So although number of impressions has not risen, increased production in finishing has effected our environmental improvement indicators from 2008 onwards, explanatory notes have been included.

The following environmental performance indicators are considered to be the Company's significant aspects.

	2010	2009	2008	2007	2006	
Total impressions	17.099	19.426	24.769	24.007	23.878	
Impressions	14.534	16.853	21.503	21.733	23.587	
Excluding Cito and digital	<b>note a</b>					
	Per million Impressions	Per million Impressions	Per million Impressions	Per million Impressions	Per million Impressions	
Solvents used in litres	147	142	123	123	141	<b>note b</b> ☹️
Electricity in MWh	25.534	18.594	15.324	15.633	14.490	<b>note c</b> ☹️
Water used in cubic meters	64.88	28.8	26.44	20.79	18.6	<b>note d</b> ☹️
Liquid hazardous waste in litres	0	3.56	5.81	18.4	0	☺️
Waste ink in tonnes	0.082	0.041	0.053	0.064	0.061	☺️
Ink used in tonnes	0.27	0.26	0.25	0.26	0.23	<b>note b</b> ☹️
Fuel used in litres	452	465	513	550	680	☺️
General waste in tonnes	0.49	0.21	0.16	0.31	0.34	<b>note e</b> ☹️
Paper, Cardboard & Plastic Wrap recycled in cubic metres	63.28	44.53	33.36	33.45	34.68	<b>note e</b> ☹️
% of paper bought from FSC or recycled sources	97%	99%	93%	62%	15%	<b>note g</b> ☹️
Aluminium printing plates	726	530				<b>note b</b> ☹️
Isopropanol alcohol used	0 litres – Waterless print does not require this solvent					☺️
Complaints	0	0	0	0	0	☺️

Oil purchased 1769 litres for the heating system for 1 year. Not recorded previously as used electricity, and isn't related to production so not recorded per 1000,0000 impressions.

Approximate 57.5CO2 tonnes, 3.36 CO2t/mi (2009 2.99 CO2t/mi) calculated using Pure Trust Carbon calculator **note f.**

*AJ Thorpe*  
07 April 11

**Notes:**

- a) Total impressions includes the click count from our digital machines that takes a B3 sheet (the count for 2007 was 802,820, the equivalent of 401,410 B2 impressions, for 2008 1,846,561 = 923,281 B2 impressions, 2009 was 2,146,070 = 1073035, 2010 was 2,290,326 = 1,145,163). It also includes the count for the 2 colour press which no longer prints but creases through the Cito mechanism – the recorded impressions were 1,301,893 for 2007 and 1,419,260 for 2008 and 857,649 for 2009, 1,294,159 for 2010. Where the significant aspect doesn't involve digital print and finishing the digital and cito impressions have been excluded from the calculations as those purchases/waste streams are not affected by the digital press, or cito operations. The adjustment creates a true analysis.
- b) The amount in litres has not increased but gauged against the number of impressions the ratio is up, the Company handle far more multiple section work and shorter runs so far more blankets, plates, ink and cleaning products are used. I.e. plates purchased were up 18% from 8940 to 10550, even though impressions are down, highlighting the changing make up of the products produced.
- c) Electricity has increased in quantity MWh (2009 361MWh v 2010 436.6 MWh), however finishing activity has increased with the stitcher working 638 hours v 228 in 2009. Another set of data recorded was the money paid to finishes has decreased from £225,112 to £102,567. The highest half hourly recorded usage before the stitcher was 51kwh, after the stitcher (September 09) was introduced it went up to 69kwh.
- d) We have had a problem with the plate making machine, that has caused the excessive water usage. When October's bill was received we realised there was a problem. We switched the water off and checked there wasn't a leak, as the meter stopped turning we assumed the increase came from within the factory. After analysing data and looking at machinery we finally located the problem in February 2011. The equipment has had a new part fitted and we foresee a huge drop in water usage next year. We will also be reading the meter between bills.
- e) Landfill hasn't increased in volume, but due to a decrease in number of impressions relatively it looks like an increase. The increase of paper waste is from the higher volume of in-house finishing.
- f) 2010 and 2009 figures were calculated using The Pure Calculator which is based on site activities only, the electricity figure of 191.2 t/co2 (155 in 2009 and 163t/c02 in 2008) was excluded as we source it from Ecotricity providing natural renewable sources. The calculations include freight transport by works van, car transport, staff commute, water, home offices – 3 part time staff now work from home. We do not generate our own renewable energy.
- g) The decrease is because we've included the Mail lite envelopes this year, we will continue to monitor and look for greener options.

## EMAS STANDARD RATIOS

With EMASIII the introduction of new ratios has become a requirement, these environmental performance indicators will now be included in each report, with comparison to this the base year.

Material purchased / Waste = 388 tonnes of paper and 3.899 tonnes of ink and 1.704 tonnes of chemicals (White spirit, blanket cleaner and ink stripper) / general waste (50 collections x 80kg\* = 4 tonnes) + process waste (9.246 tonnes) + paper, cardboard and plastic wrap (168.31 tonnes) = 393.603 / 181.556 2.168 (2009 = 3.1135)

\* Average weight. Aluminium plates, blankets and toner cartridges weigh the same as an input, and output so they have been excluded.

Energy / Head count = 436.613mwh / 24 permanent staff (3 part time and off site) and on average 4 temp staff = 25 office based staff = 17.46 Mwh (17 Mwh in 2009) per person The company buys energy from Ecotricity on the New Energy Plus tariff which comes from 100% renewable sources.

Water / Head count = 1109 cubic metres / 25 = 44.36 (26.7 in 2009) Cubic Metres per person

Output in tonnes / number of employees = 388 x 60% = 232.8 tonnes / 25 = 9.312 (14.3 in 2009) tonnes per person (assuming 40% of paper is wasted in the production process, calculated by taking paper recycled divided by paper bought)

Emissions / Head count: 57.5t/co2 using the calculator provided by The Pure Trust – Emissions are calculated from freight transport by works van, car transport, staff commute, water, oil for heating, home offices – 3 part time staff now work from home. Electricity is not included (would be 187.74 t/co2) as it comes from 100% renewable sources. 57.5 / 29 staff = 1.98 tonnes per person.

Biodiversity of land plot measuring approximately 2000 m2 of which 900 m2 is occupied with the factory, 980 m2 of the remaining area is car parking and loading bay, 120 m2 is grass.

AJ Thorne  
07 April 11

## Environmental Management System (EMS) and Continual Improvement

During 2010 the Company saw a further reduction of 2.3 million impressions on the litho presses, if the Company hadn't adapted further to these circumstances staff would have been made redundant, and resources not optimised. No major leaps of environmental performance can be reported. However, our EMS procedures have followed through on the new equipment with careful management of overs, waste, training and maintenance.

As the scope of the business has expanded to include, finishing, fulfilment and mailing in future EMAS reports we will use 2010 as our base year to show a truer comparison. We hope with recent factory improvements and planned improvements including new double glazed windows, extracting heat from the digital machine room into the factory and roof insulation, plus a recycling of water from the plate making machine to the toilet cisterns we can again begin to show improvements.

### Environmental Objectives And Targets Update (using 2006 figures as the base year)

**Electricity usage:** A 10% reduction relative to production by 2011.

**Target: 13041 kwh/mi**  
**2010: 18594 kwh/mi**

The target is no longer achievable, since 2006 the Company have introduced 2 digital presses, 2 folding machines, 1 stitcher that are all in use everyday. In addition to this there is a perfect binder, a collator, a label machine that are in regular use. The head count has increased by 5. The relative to production figure is measured against number of impressions, and although the digital presses can record clicks the other machinery do not have a reasonable way to monitor usage, so until there is a like for like situation it will be hard to monitor and show improvement.

The half hourly data has been examined and before the Powerperfactor was installed the highest reading over the Jan 08 to Jun 08 period was 80kwh, an analysis of half hourly data from April 09 to Jan 11 showed the highest reading of 70.2kwh in August 2010. The Powerperfactor analysis showed a reduction of 12.2% usage in electricity.

**Increase the amount of recycled and FSC approved papers purchased:** Our target is to increase the tonnage bought by 75% by 2011 relative to production.

**Target (revised 2008): 95%**  
**2010: 97%**

**Carbon emissions:** The aim is to find a way to monitor and record our Carbon emissions and look at ways to reduce our carbon footprint, and offset it by 2011.

**The Pure Trust calculator has been used to monitor site emissions, and offset.**

**Reduction of landfill waste:** The aim is to reduce the amount of waste that goes to landfill by 10% by 2011, relative to production, based on tonnes per million impressions.

**Target : 10%**  
**2010: 28%**

**Reduce the environmental impact from transport:** Our target is to reduce the amount of diesel used by 10% by 2011, relative to production.

**Target (revised 2008): 24%**  
**2009: 33%**

**Reduce the amount of products with a hazardous end life:** The aim is to reduce hazardous waste by 10%, by 2011, relative to production.

*AJ Thorpe*  
07 April 11

Waste Ink	Hazardous Liquid Goods	Plastic Containers	Ink tins
Target: 0.055 t/mi	8.28 l/m	8.24 d/mi*	0.229 c/mi
2010: 0.082 t/mi	0 l/mi	21.053d/mi*	0.275 c/mi

\*d/mi = drums per million impressions

Every other year we will have hazardous liquid waste as oil is changed from the machines and compressor liquid. An extra collection in the year means next year the figures will show an improvement.

### Support Activities and Indirect Effects

The Company remain certificated to the ISO 9001:2008 Quality Management System, ISO 14001:2004 Environmental Management System and Forest Stewardship Council (FSC) Chain of Custody and registered to EMAS, and now incorporating Orbit Digital.

Work with the local community continued with the supply of 8000 pads to the Samaritans to put in their Purse Shoe Box Appeal at Christmas, these were distributed throughout poorer Eastern European countries. Park Lane Press supported the Green Awards by printing free of charge (FOC) the certificates, programme and judging guides. We also sponsored the print for Green Unplugged, a conference about communicating sustainability. In August last year we produced a book of Hyper Realism painting by Adrian Smart, 400 were given away at a garden party to raise money for Breast Cancer.

Orbit digital prepared FOC all the files for print for the above litho jobs, along with producing 50 A4 posters for a local event that was raising money for cancer research.

With regards to continuing our educational support Chris Pattermore, our Sales Director spoke to 26 delegates, at a jointly organised Wessex Water and TUC South West one day seminar, looking at ways to reduce water use in manufacturing. The organisers felt that our experience in this field would be of great interest to the audience and Chris's presentation was well received and provoked some good questions.

Additionally, Park Lane Press and Orbit Digital jointly hosted a half day seminar and workshop for the Wessex Environmental Business Group. This involved having 15 delegates on site for a workshop on environmental accreditations and a presentation on our companies's accreditations and efforts to maximise our environmental efficiencies

### FUTURE PLANS

We are fast approaching the end of our 5 year environmental targets, and we are thinking of the next 5 years. It is difficult to know where we will be in the next 5 years, what resources will be required and therefore what relevant targets to set for ourselves. Another difficulty we encounter is that as we have improved in most areas since 2002, leaving less room for improvement! However, we will endeavour to monitor and maintain our high environmental performance levels.

Our new targets are set on levels that we feel are appropriate for the changing nature of our business and hopefully more relevant than previous ones, that initially were fine but more recently become obsolete due to the changing nature of the business.

Our new set of targets are to:

- Reduce water usage to below 25 cubic meters per person. (2010 figure 46)
- Energy use reduction to below 17MHW per person. (2010 figure 18MHW)
- Reduce CO2 emissions per head to below 1.85 CO2 per person (Emissions are calculated from freight transport by works van, car transport, staff commute, water, home offices – electricity is excluded as is sourced from 100% natural renewable sources - 2010 figure 1.98)
- Waste reduction – to a target below 40% of input (2010 figure 45%)

*AJ Thorpe*  
07 April 11

## CONCLUSION

Although the data does not show many improvements I feel this is purely from the changing nature of the business, with a greater draw on in-house resource, as opposed to outsourced ones. Our new targets may seem simple and concise, but there are many elements and initiatives that will come under each one, and we hope if the company continues to alter it's production it won't render the new ratios ineffective.

Some of the ideas we plan to implement are to recycle water from our Screen PlateRite machine into the toilets, insulate and continue to upgrade the lighting to low energy bulbs. In addition to this we will look at monitoring water and electricity use more closely to learn how we can improve upon the efficiencies of individual operations.

## VERIFICATION

Further to consideration of the documentation, data and information resulting from the organisation's internal procedures examined on a sampling basis during the verification process, it is evident that the environmental policy, program, management system, review (or audit procedure) and environmental statement meet the requirements of Regulation 1221/2009 (The EMAS Regulation).

Done at Park Lane Press and Orbit's premises on 7th April 2011

Signed



AJ Thorpe  
EMAS Verifier

On behalf of: SGS United Kingdom Ltd (EMAS accreditation number UK-V—0007)  
Rossmore Business Park  
Ellesmere Port, South Wirral  
England CH65 3EN



Appendix A

<b>Register of Environmental Legislation &amp; Other Requirements</b>
<b>List Applicable to Park Lane Press and Orbit Digital of laws that are adhered to and monitored on a 6 monthly basis</b>
<b>Legislation</b>
Environmental Liability Directive (2004/35/CE – 21 April 2004)
Water Resources Act 1991
The Groundwater Regulations 1998
Environmental protection (Duty of Care) Regulations 1991 (SI 2839)
Special Waste Regulations 1996 (SI 972), as amended
Landfill Regulations 2002 (amended 2004 SI 1375, 2005 SI 1640 and including EU directive for non-hazardous waste 2007)
Hazardous Waste Regulations 2005 (England and Wales)
Waste Electrical and Electronic Equipment Regulations 2006 SI 3289, SI 3151
Environmental Permitting (England and Wales) Regulations 2007 (England and Wales)
Control of Asbestos in the Air Regulations 1990
Environmental Protection (Controls on substances that deplete the ozone layer) Regulations 1996
Control of Substances Hazardous to Health Regulations 1994, as amended (COSHH)
REACH Regulation (EC) No 1907/2006 of the European Parliament June 2007
The Management of Health & Safety at Work Regulation 1999
The Fire Precautions (Workplace) Regulation 1997
The Control of Noise at Work Regulations 2005
The Smoke-free (Premises and Enforcement) Regulations 2006
The Smoke-free (Exemptions and Vehicles) Regulations 2007
The Health and Safety (first aid) Regulations 1981. Revised 1st October 09 – changes
The Lifting Operations & Lifting Equipment Regulations (LOLER) 1998
Carbon Reduction Commitment 2008
Control of Pollution (Oil Storage) (England) Regulations 2001
<b>Other Requirements – Legislation to be noted as applicable to industry but not relevant to The Company's current activity level</b>
Prescribed Processes & Substances Regulations 1991
Environmental Protection Act 1990 Part 3: Statutory Nuisance
The Health and Safety (Young Persons) Regulations 1997
EU Regulation No: 2037/2000 on ozone depleting substances 2000
Water Industry Act 1991
Packaging (Essential Requirements) Regulations 1998 (SI 1165)?
Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (SI 648), as amended
Clean Air Act 1993, as amended

*AJ Thorne*  
07 April 11