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# Standards



Aylesford Newsprint's activities are accountable under the following recognised standards:

Standard reference	Scope/description
ISO 14001	Environmental Management System
ISO 9001	Quality Management System
OHSAS 18001	Health & Safety Guidance Standard
PPC Permits	Pollution Prevention & Control: Two permits held – for Papermaking and for Energy Production
Investor in People	Advancing business performance through investing in people and skills



# Executive Summary

- Water use on paper machines down 10%
- £0.6 million energy saving
- Secondary product sales doubled
- LTIFR reduced to 0.78
- 11% of employees in sponsored education

#### Contents

Chief Executive's Review	2
Aylesford's people: Our commitment	3
Where it all begins: Producing Renaissance newsprint	4
Making the news: Our customers and their world	6
Material issues: Views from the front line of reprocessing	8
Preparation is everything: Recycling paper – and water	10
Making it happen: Utilities – keeping the energy supplied	12
Waste not, want not: Secondary products	14
Values in action: Our people	15
People – not statistics: Health, Safety & Fire Prevention	16
All kinds of neighbours: Our community commitment	18
Transport: Reducing journeys – increasing payloads	20
Auditor's Report	21
Our Performance and Basis of Reporting	22
Safety, Health, Environmental and Fire Prevention Policy	24
Glossary	Inside Back Cover

# Chief Executive's Review







In changing times, consistency is the value that defines the Aylesford Newsprint commitment to our customers, to our staff and to the environment we all share.

Our customers can rely on Aylesford Newsprint's independently-audited environmental data when calculating their own environmental impacts. Our first verified environmental report was produced in 1995, and active research and development still supports our continuous improvement. We share our knowledge through close relationships with customers, aiming to fulfil their business needs.

As the longest-established maker of 100% recycled newsprint in the UK, we are best placed to advise local and national authorities on the paper quality requirements which are essential to maintaining the commercial and environmental viability of paper recycling. Our many years of experience are a valuable source of guidance, and help to save around half a million tonnes of paper from going to landfill each year.

There is now no doubt that material from co-mingled waste collections represents a problem for all the major reprocessing sectors. It also presents problems for reprocessors abroad, with export controls being tightened. Aylesford Newsprint seeks to increase understanding of this issue amongst policy-makers by maintaining continual dialogue.

Aylesford Newsprint is at the forefront of debate on utilising manufacturing by-products as raw materials for other industries. We doubled sales of our main secondary product in 2006, yet gaining further commercial outlets for this material is limited by its current classification as a 'waste' rather than as a useful secondary product. To encourage further recycling of such materials by business, to the benefit of the environment and the wider community, we encourage legislators to reconsider their present stance.

We strive to make the best use of all the resources we use, particularly water, which is becoming an increasingly scarce resource in hot summers in the south

east of England. We are particularly pleased to have reduced paper machine water usage by 10% in what was a very dry year for our locality.

To maintain a viable future, our industry needs to attract good recruits, and this starts with offering apprenticeships. Our Advanced Apprenticeship scheme continues to attract good quality candidates, and has high completion and retention rates. In 2006, we have also been involved in developing and piloting new UK paper industry qualifications.

We celebrated the achievements of existing staff during the year, and encouraged more local people to join the Aylesford Newsprint business 'family'. Continued emphasis on personal and colleague safety improved our 2006 accident statistics to their lowest level in many years. Our commitment is visible in every area of our operations.

Alan S McKendrick Chief Executive

# Aylesford's People

#### Our Commitment

Aylesford Newsprint's people are its greatest asset. This report, produced consistently for the past 13 years, demonstrates the commitment of Aylesford Newsprint people to our company's environmental and social performance. These pages have been compiled thanks to the expertise of all those listed below.



Anders Åström R&D Manager



Martin Atkinson Human Resources Manager



Rachel Bain Secondary Products Manager



Ian Broxup Finance Director



Stuart Chandler Utilities Business Manager



Marisa George Learning & Development Adviser



**Andy Gordon** Fibre Preparation Plant Operations Manager



**Andrew Perkins** Recycling Operations Manager



Roger Parker NVQ Co-ordinator



**Elizabeth Shaw-Rowlands** Safety & Systems Manager



**Karl Smedstad** Operations Director



Lee Smyth Logistics Manager



**Chris White** Commercial Manager



**Terry Worby** Marketing Manager



**Andy Younge** Environmental Scientist

We value your opinion...

Your feedback on this report, or on our environmental and social activities in general, is welcomed through our website at:

www.aylesford-newsprint.co.uk or through the e-mail addresses opposite. General enquiries:

info@aylesford-newsprint.co.uk

To contact Sales:

sales@aylesford-newsprint.co.uk

To contact Recycling:

recycling@aylesford-newsprint.co.uk

To contact Human Resources:

hr@aylesford-newsprint.co.uk

The loose, used newspapers and magazines are delivered to our store, which has a capacity of 10,000 tonnes. The suppliers include local authorities, waste management companies and community groups.

Through centrifugal cleaning the smaller contaminants, such as sand, grit and staples are screened from the pulp. The ink is removed from the pulp by flotation; this is achieved by adding soap and injecting air to the pulp creating bubbles, which help to collect the ink for removal.









In the two giant pulpers the newspapers and magazines are pulped in water and carefully selected chemicals to enable the release of the ink from the fibres. Here, large contaminants such as plastic bags, flip-flops and CD cases are removed.

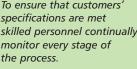
After further cleaning - a total of 14 stages - the clean pulp is ready to be manufactured into Renaissance newsprint.

# Where it all begins

Producing Renaissance newsprint



To ensure that customers' specifications are met skilled personnel continually monitor every stage of







Reels of quality, 100% recycled

Renaissance newsprint leave the

warehouse around the clock for

London, and across the UK, Europe

delivery to major publishers in

and further afield.



Renaissance newsprint is calendered to produce the optimum printing surface for satisfying customer needs, and is collected from the paper machine on jumbo reels.

Each year, manufacturing Renaissance newsprint diverts around 500.000 tonnes of newspapers and magazines from being sent to landfill.

As a newspaper is posted into a recycling bank, so the story of Renaissance newsprint begins....

From over 180 major sources of supply including many local authorities, and almost 2,000 of our own paper banks, an average of 1,300 tonnes of newspapers, magazines and printers' and publishers' waste comes into our Recovered Fibre Store (RCF) every day to feed our Fibre Preparation Plant (FPP) and paper machines. Our manufacturing processes run 24 hours a day, every day of the year.

Quality-checking of the incoming fibre is undertaken by the RCF team. In recent years we have introduced a load monitoring system, helping to filter out unacceptable loads, particularly those contaminated with glass which could damage our high-investment production machinery.

In the Fibre Preparation Plant the recovered paper is gradually turned into pulp, removing contaminants and printing ink in the process. It is then cleaned and stored in large pulp silos, ready for use on our two paper machines. See our special feature on fibre preparation on pages 10-11.

At this stage, as the pulp flows into the paper machines, it is ninety-nine parts water to one part paper fibre. The fibre is transferred onto the paper-forming wire and the remaining water is recycled back into our fibre preparation systems. This section of the paper machines is termed the 'wet end'. Throughout this part of the process, more water is removed and recycled until the fibre forms a continuous firm sheet.

The paper moves through steam-heated drying cylinders and then receives surface treatments such as calendering. This smoothes the surface to allow good ink penetration when printing takes place. The paper is finally wound into giant 40 tonne jumbo reels.

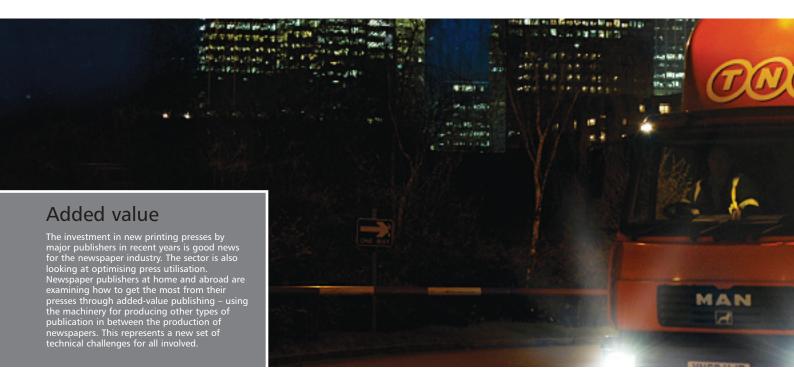
Once the paper has been cut and wound to customer specifications, it is wrapped and sent to our automated high bay warehouse in readiness for delivery. Finished reels can range in weight from 0.5 to 2 tonnes. One tonne of newsprint produces around 28,000 tabloid newspapers.

It takes minute fractions of a second to print each sheet of a daily newspaper. One reel of Renaissance newsprint at a national newspaper can last as little as 20 minutes on today's high-speed presses, so publishers have programmed their systems to change reels without stopping the print run.

The printed editions are distributed to shops, newsagents and news stands, providing today's news - and the ability to make tomorrow's newsprint.







# Making the news

Our customers and their world



### Offering an additional service

"The Kent Messenger Group enjoys an excellent relationship with Aylesford Newsprint. Using Renaissance 100% recycled newsprint on our presses reinforces our strong environmental commitment, supporting the use of sustainable products and our work within our Corporate

**Duncan Gray, Operations Director** 

The UK's local, regional and national newspaper industry is continually evolving. In addition to our national press, over 1,300 regional and local newspapers, both paid-for and free, and more than 600 related magazines contribute towards an industry value that stood at around £4 billion in 2005, according to The Newspaper Society.

Key to this continued evolution is the combination of editorial value with attractive presentation, including the wider use of colour. The use of colour in newspapers was first proposed in 1961 with the formation of the International Newspapers Colour Association (now Ifra - www.ifra.com). Its first British members were the Liverpool Daily Post & Echo and printers Hazell Sun. Benchmarking the rapid pace of progress today, the annual Newspaper Awards now feature a separate category for the Most Outstanding Use of Colour.

The close relationship between newspaper publishers and suppliers,

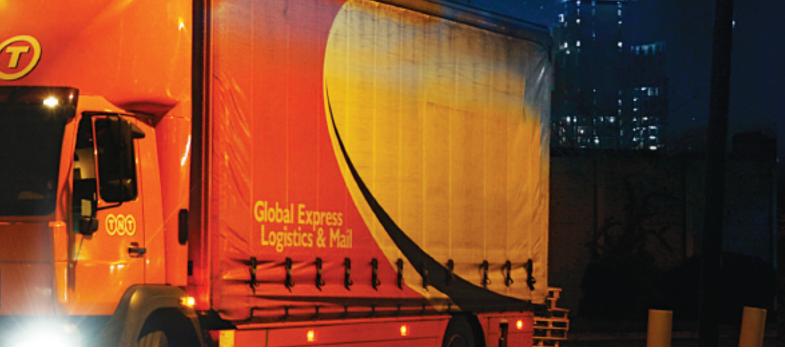
# 1,300

regional and local newspapers

# £4 billion

industry value





Early editions of national newspapers leaving West Ferry, London, for nationwide distribution

such as Aylesford Newsprint, helps to move the industry forward. One of our customers, Harmsworth Printing Limited, will be increasing its use of flexographic printing methods when it completes its press room expansion in mid 2007. Aylesford Newsprint is part of active research into a new formulation of ink which will allow easier de-inking of flexographically-printed newspapers when they enter the recycling process. The ink has been trialled in our de-inking process and results to date look promising, though more work remains to be done.

#### Terry Worby, Marketing Manager

"Working alongside our customers on technical issues gives us an opportunity to comment on developments which may have a dual business and environmental benefit. Taking an innovative and pro-active approach, during this year we have wrapped our reels in a lighter-weight wrapping for domestic customers and reduced the wrapping from 1.5 to 1.25 turns. This

has both economic and environmental benefits, helping our UK customers with their waste disposal.

"We are looking at the opportunities and problems of larger reel sizes, and the options on using different materials for inner reel cores to accommodate the larger reel sizes. We also continue to investigate the implications of Radio Frequency Identification tagging. None of these concepts are simple: they involve detailed input and involvement across our manufacturing and logistics teams and a continuing dialogue with customers. We seek cost-effective solutions that work for our customers and our company, and which offer relevant environmental benefits."

#### Today's news: tomorrow's newspapers

Journalists and editors work into the evening to keep current affairs reporting truly current. The high-speed presses turn overnight from around 10pm, each sheet coming into contact with the ink for only fractions of a second. National

daily newspapers are on the news stands as early as 4am the next morning. Those newspapers, often read on the way to work or during breaks, start their journey back to Aylesford Newsprint later that day. Paper received from collections in the London and south east area can be back in the pulper within 36 hours, and leaving our paper machines as giant reels ready for cutting to customer-specific reel sizes some hours later. The resulting Renaissance newsprint reels can be loaded onto customers' presses around 48 hours after the original newspaper was banked for recycling by the newspaper reader.

#### **Aylesford Newsprint's customers**

Renaissance newsprint is supplied to pressrooms throughout the UK - in London, across the south east and south west of England, in Wales, across the Midlands and East Anglia, across the north of England, and through Scotland. We supply to western Europe and in 2006 additionally exported Renaissance newsprint to the USA.



# Material issues



Views from the front line of reprocessing

Paper is one of the mainstays of UK household recycling. Over the last few years, increasing kerbside collections have significantly increased the amount of material being recovered.

Peter Seggie, Recovered Paper Sector Manager at the Confederation of Paper Industries, comments: "There has been growth in the collection of recovered paper in the UK in 2006 of around 3-4%, but this is a significant slowdown from growth in 2004 (13%) and 2005 (9%). Exports have increased rapidly due to the closure of a number of UK mills in 2006." Britain now recovers more than enough material to feed its paper recycling industry, with home markets reaching saturation. By the end of 2007 more paper will be exported than can be used for newsprint in the UK.

Increased recycling is a welcome achievement, but the recyclability of paper in the UK and abroad - depends on how it is collected. If paper becomes part of a completely co-mingled collection stream its quality declines. Collections that include glass are almost worthless to the UK's recycled newsprint industry. The export market is also beginning to understand the problems associated with

contaminated paper. China has revised its recovered paper specification and UK MRFs are struggling to meet their paper requirements. Those exporters who fail to supply to the specified quality run the risk of an instant licence disqualification. Several UK companies have been prosecuted for exporting paper sorted from co-mingled waste streams with unacceptable levels of contamination.

Many authorities still trying to achieve the 30% diversion rate required by the Landfill Directive are being attracted by the apparent simplicity and economy promised by promoters of co-mingled collections. Whilst co-mingled material may appear to be diverted, in reality it may have difficulty finding a market. While collection agencies are adopting the co-mingled route, reprocessors are seeking source-separated recyclate.

Inadequate sorting and storage methods can add to the quality problems brought about through co-mingling. "We are already experiencing increased contamination from poorly-sorted paper amongst co-mingled collections. Paper from these sources is also dirtier and needs more brightening chemicals," says Chris White, Aylesford Newsprint's

#### Why paper recycling makes a difference

- Around 20% of all the household rubbish we throw away is paper and card, and approximately half of this is made up of newspapers and magazines, most of which can be recycled
- Recycled paper produces fewer polluting emissions to air and water
- Paper is a biodegradable material. When sent to landfill it produces methane, a potent greenhouse gas

RECOVERY FACTS 2006 UK paper and board consumption 2.5 million tonnes Recovered paper and board collected 8 U million tonnes Amount recycled in the UK million tonnes Amount exported million tonnes

### A viewpoint shared

Aylesford Newsprint's views on source separation and material quality are shared by all of the major UK recovered newsprint manufacturers, and by many reprocessors of other materials.

"Aylesford Newsprint will not accept paper from any collection where there is a risk of glass contamination. Glass fragments can cause enormous damage to our plant, especially to our paper fibre cleaning and screening process, and this risk is unacceptable. The quality of paper resulting from co-mingled collections simply does not meet our minimum standards."

CHRIS WHITE, COMMERCIAL MANAGER, AYLESFORD NEWSPRINT

"The UK faces an enormous challenge in realising the potential environmental and social benefits of glass recycling. With growing levels of mixed collection these potential benefits are becoming much more uncertain."

BRIAN HEAD, SOUTHERN AREA MANAGER, BERRYMAN GLASS

"Aluminium is a highly recyclable, high value packaging material. Source-separated collection systems provide the proven high quality feedstock to operate our closed loop can-to-can recycling process."

ANDY DORAN, NATIONAL MANAGER, NOVELIS RECYCLING

Commercial Manager. "Authorities and waste management companies are guardians of the quality of materials handled at MRFs. The most vital message to understand is that glass and paper do not mix.

"We know that policy changes made today will have an enormous impact on future recycling activities. Quick fixes aren't always what they seem; a short-term gain could quite easily become a costly own goal," Chris White concludes.

#### Working together

Aylesford Newsprint has spent the last 10 years developing and maintaining excellent partnerships with its suppliers. Our contracts reflect the world in which our suppliers work, simultaneously providing security and practical advice on topics from marketing to educational support.

Aylesford Newsprint has built successful partnerships with many local authorities and consortia such as Waverley Borough Council and the Black Country Consortium, with social enterprise organisations such as the ECT Group and the Community Recycling Network, and with waste management specialists such as Accord.

### Building on success

In 2006, some 18 months of work with The City & Council of Swansea to design a new bulking facility for receiving its paper collections came to completion. Its dedicated area for paper minimises the cross-contamination that can occur when materials are kept together. The City & Council of Swansea are treating recovered paper and magazines as a resource, not a waste, and are therefore helping to maximise the use of the material collected from its citizens.

For suppliers that regularly meet or exceed Aylesford Newsprint's quality needs, a new financial bonus scheme has been introduced based on the tonnage of good quality material supplied over a given time span. ECT Recycling, which collects paper and other recyclables in the West Country, the Midlands and London, were the first to benefit from the new scheme during 2006, the prizes going to collection and yard staff who showed the highest level of understanding about the reasons for source-separation of recyclables at the kerbside.



# Preparation is everything

Recycling paper – and water



### 'Boil-in-the-bag' magazines

One of the keys to producing Renaissance newsprint lies in the quality of the raw material. Today, many newspapers and magazines are bagged in plastic and carry reader offers – which flip flops. The offer items, the cover glue that holds them in place, the staples and the printing ink must all be removed before the machines. "Some of the worst reader offers from our perspective are samples of shampoo, which can create unwanted foam," says FPP

Operations Manager Andy Gordon. "The plastic bags used by newspapers to wrap their supplements and offers come apart more easily than those used by magazines. Some magazine can be returned to pulp with the bag still intact – a sort of 'boil-in-the-bag' magazine! Seriously though, the whole bag, magazine

MILL WATER USAGE: PERFORMANCE 2006

PM 13

To use maximum: 11.0 m<sup>3</sup>/t paper Exceeded: 10.58 m<sup>3</sup>/t paper

PM 14

To use maximum: 9.0 m³/t paper **Exceeded:** 8.84 m³/t paper

**FPP** 

To use maximum: 1.8 m<sup>3</sup>/t paper **Exceeded:** 1.61 m<sup>3</sup>/t paper



MILL WATER USAGE: TARGETS FOR 2007

To use maximum: 10.6 m<sup>3</sup>/t paper

PM 14

To use maximum: 9.0 m<sup>3</sup>/t paper

**FPP** 

To use maximum: 1.7 m<sup>3</sup>/t paper

**Note:** During 2007, PM14 is scheduled for extended maintenance. The 2007 water usage target for PM14 therefore remains the same as for 2006.



It's no simple matter to change newspapers and magazines back into useable newsprint. The staff of Aylesford Newsprint's Fibre Preparation Plant are proud that they contribute to saving the UK around half a million tonnes of landfill each year by preparing this valuable resource for recycling.

The FPP team also look after the process water cycle. Using two separate systems to return water back into use, we are able to recycle some 93% of the water which flows through the paper manufacturing system before it is eventually cleaned and returned to the river Medway.

#### Filtration, filtration, filtration

In three hours, recovered newspapers and magazines are once again ready for the paper-making machines. Arriving at that point takes 14 different stages, each of which gradually removes contaminants and cleans the fibre.

In the drum pulper, the newspapers and magazines are tumbled with water and chemicals - similar to the process inside a washing machine - and returned to pulp. This takes around 20 minutes. A shower

of water then washes the pulp through the first level of screening, preventing large contaminants from going further. The next screen removes large pieces of plastic, nuts, bolts, and similar-sized objects. In the first de-inking process, the ink, floating on the top of the liquid, is removed and used for energy recovery in the combustor.

Centrifugal cleaning then removes small particles of glass, high density plastic, staples, sand and grit. A further screen removes the type of strong glue that holds some reader offers to the magazine paper. Water is gradually removed and recycled back to the drum pulper. The thickened pulp goes through a disperger, which reduces any remaining larger fibres still further before more water is removed for recycling through a press.

After bleaching with peroxide there is a final opportunity to remove any last traces of ink and to wash out the fillers - mainly calcium carbonate and clay - that are contained in many magazine paper coatings. Any resulting sludge removed is used for energy recovery in the combustor. The final

thickened, clean pulp is then added to the storage silos for making new paper on the paper machines.

Sludge must be compacted and dried before burning. We always seek to increase our process efficiency, and looking at different mixes of paper fibre in furnish trials during 2006 enabled Aylesford Newsprint to get the best economic balance between the production of paper and the production of rejects and sludge. Even the ash from the combustion process is re-used: see page 14 under Secondary Products.

#### Reducing water intake

The paper machines use clean water to help distribute the pulp across the wire that will eventually form the paper sheet. This water is treated in our effluent treatment plant at the end of the papermaking process. We have re-distributed responsibilities for water reduction targets in the last two years, bringing good results. We have reduced our water intake in 2006 by an average of 10%, through greater efficiency and through changes to the way in which effluent is treated in our increasingly warm summers.

<sup>\*</sup> The following symbol 🗹 indicates performance data reviewed by Deloitte, see page 21.

Increase thermal energy supplied by the process residue combustor to 27%

Target exceeded: 30% of energy supplied by the process residue (sludge) combustor





# Making it happen

### Utilities – keeping the energy supplied

Behind Aylesford Newsprint's environmental operations is our Utilities Department. The 35-strong Utilities team provide our water, power and steam to drive the paper machinery and to dry the paper as it is formed on the paper machines.

They re-use process residues to create energy through combustion and sell the secondary product – ash – for use in other industries. They also treat the water used in our processes, making sure it is clean, safe and the right temperature to return

to the river.

With climate change frequently in the news, the use of 'combined heat and power' is often mentioned by reporters. Aylesford Newsprint uses highly efficient combined heat and power (CHP) generation to get the very most out of the fuel used. The CHP plant provides electricity to run the paper machines and recycles its own process steam to generate further electricity. This steam also passes into the drying section of the papermaking machines to complete the drying of the paper.

#### Use of Resources 2006

The Utilities team additionally supply water, power and steam to other local businesses, as shown in the table. In 2006 one of our prior external customers closed their factory, while others became more efficient in their energy and steam usage. This accounts for the differences in comparison with our 2005 environmental report. These figures include losses due to transmission and leakage but do not include potable water.

		AYLESFORD	EXTERNAL	
INPUT	UNIT	NEWSPRINT	BUSINESSES	TOTALS
Water	m³	6.034.902	2,187,387	8.222.289
Power	MWh	328.110	139.023	467.133
Steam	tonnes	665,285	386,708	1,051,993

#### Valuable sludge

Fibrous material is left over from our papermaking in what we call 'sludge'. It may sound unattractive, but sludge is one of our key assets as we burn it to generate even more of our own power and steam. Our sludge combustor ran at a higher capacity during 2006 and enabled us to generate 177kte of steam, which

**ENERGY: TARGET FOR 2007** 

Maintain the part of mill thermal energy supplied by the sludge combustor to 30%



OMA: MANAGEMENT TARGET FOR 2006

Score to be at least 80 at the next Environment Agency OMA Audit in 2006

Result: OMA audit was deferred and will now take place in 2007



would provide enough heat for 6,000 houses. This gave us more steam for use in the papermaking process, and the ash produced is a secondary product which we sell to other industries.

In 2006 we produced less sludge than in 2005 due to better fibre yield from our processes. We also burned more sludge in the combustor. The net effect was a slight increase in ash sent to landfill but also a doubling of ash sales to customers in the cement block-making sector.

We reduced our need for fossil fuel by increasing the thermal energy obtained from the sludge combustor to 30%, exceeding our scheduled target for 2006. The amount of energy we obtain from the sludge combustor varies according to the quality and type of raw materials received from our suppliers, and our 2007 energy target is therefore based on related projections.

#### Gas and oil\*

In the early part of 2006, wholesale gas prices were still very high and we took the decision to switch from gas to burning oil in the CHP plant, with the agreement

of the Environment Agency. As gas prices peaked, we ran on oil for 10 days in total across February and March 2006. Our combined heat and power plant enabled the oil to be used with much greater fuel efficiency than that of normal power stations.

#### Water quality

The Ditton Stream, which rises in The Rocks near East Malling, flows through the Aylesford Newsprint site, and forms part of our water supply. We use, but not consume, large amounts of water. Water passes through our manufacturing processes and is cleaned in our treatment plant and cooled before being returned to the river. Our water abstraction is covered by appropriate licences.

During 2006 the environmental measurements, listed in the data tables, remained in line with our normal business operations. Process changes and differences in raw materials caused our water emissions to fluctuate slightly, but we remain well within all permitted levels. As an indicator of water quality, the Ditton Stream supports a healthy population of fish.



# £0.6 million energy efficiency saving

An investment in new software which allows a much higher degree of control over steam-raising has helped to bring Aylesford Newsprint a £0.6 million saving in energy costs during 2006. There used to be a time delay between the need for more steam being registered by the paper machines and the steam's production. This caused more steam than necessary to be produced whilst steam pressure was re-balanced. The new software monitors steam demand from the paper machines in real time, keeping a better overall balance of pressure and thereby saving gas consumption. Aylesford Newsprint is one of the few companies using this new type of technology.

#### £1.5 million investment

The Utilities operation received investment of £1.5 million to begin building a new ash reprocessing plant in anticipation of our being able to process ever-greater volumes of ash for sale as a secondary product to other industries.



# Waste not, want not

**Secondary Products** 

SECONDARY PRODUCTS: PERFORMANCE 2006

Target: Recycle 25% more process residues than achieved in 2005

Not achieved: Overall some 21% was recycled. Additional sludge was required at Margetts Pit to cover deposits of rejects, thereby reducing the total recycled sludge figure. However ash recycled to other industries was up by 122%, and some 21% more fibrous process residue was combusted to produce energy

SECONDARY PRODUCTS: TARGET FOR 2007

Recycle 50% of the **total** process residues volume

Aggregates, animal bedding, soil improver, cement replacement, 'plastic wood': these are just some of the potential uses for the by-products created through newsprint production.

Rachel Bain, Aylesford Newsprint's Secondary Products Manager, has spent 2006 investigating products and markets that could help us to recycle even more of the materials we cannot further use ourselves.

At present, we recycle some 86% of the sludge from our processes into the combustor. The outputs are steam, which helps the papermaking process, and ash, for which we are finding increasing markets. Our ash has similar properties to cement and lime. Using it to replace cement reduces the CO<sub>2</sub> emissions from cement manufacture and avoids the ash going to landfill.

Current regulations define ash as a waste and not a product. To make it easier for customers to use our ash, we also started the process of getting our ash classified

as a product, rather than as a waste. Companies handling the ash currently need a waste management licence and special handling facilities. This can inhibit the recycling of ash into useful products. While the cost of such facilities may reduce the potential customer base, in 2006 we more than doubled the sale of ash to customers in the cement block-making sector. We also began trials of ash pellets for use as aggregates.

#### Flip-flops and CDs

Rejects from the FPP are the most difficult to deal with since there is no easy way to sort the usable and unusable materials. Summer 2006 saw an influx of plastic flip-flops attached to magazine covers: all of these reader offers create their own problems when reprocessing the recovered paper. If a reliable method of sorting can be found, then some plastics, CDs and metals would be candidates for recycling to other industries such as the manufacture of 'plastic wood' for fencing and other uses.



## Balancing act

"To be a reliable supplier, we need material specifications for secondary products," says Rachel Bain. "We also need to have a constant supply of product to sell, and good administration and customer support systems to make sure waste regulations are met. At the same time our activities must complement the primary function It's a careful balancing act.

Values are an old-fashioned concept but one to which both Aylesford and its people are firmly committed to. Aylesford Newsprint is sometimes described as a 'family company' due to the large number of local staff, some of whose families have worked on this site for several generations.

In 2006 we piloted a new Staff Referral Scheme under which employees could receive a cash payment in return for successfully introducing a new employee to the company. With 25% of all vacancies during the trial through referrals, the scheme is now seen as an important part of our recruitment process.

A new Learning Committee was formed during the year to extend consultation on the annual learning and development cycle. Its members included our four Union Learning Representatives who will now undertake a Learning Survey across the workforce.

Three Aylesford Newsprint employees were among the first in the UK to achieve the new Certificate in Paper Technology, which replaces the former City & Guilds qualification, with many more eager to take the qualification in 2007.

#### Advanced Apprenticeship Programme

The number of trainees on our Advanced Apprenticeship Programme reached a record level in 2006. Six new recruits joined in September, making a total of 23 currently in training. Our Programme



### Goodbye summer: hello awards

attended Aylesford Newsprint's first Summer Party in September 2006. The informal event enabled families and colleagues to celebrate employees' achievements and enjoy an evening together. At the sell-out event, certificates for qualifications ranging from engineering NVQs to professional purchasing were awarded to 35 of those attending, including 40-year long-service awards to

has three streams: electrical engineering, mechanical engineering and process engineering. It operates to standards set by the Engineering and Marine Training Authority and the Process Awards Authority.

The four-year Programme comprises a year at Mid Kent College, followed by four days each week learning in the mill and one day at college in National and Higher National Certificate programmes. Progress is continuously monitored by internal assessors and NVQ Coordinator, Roger Parker; our scheme itself is formally monitored by an external organisation working with the awarding bodies. Apprentice retention is high, and since Aylesford Newsprint was formed in 1993 some 81% of apprentices have completed their training and 53% of former apprentices are still working with the company.

#### **HUMAN RESOURCES: LOOKING BACK 2006**

**372** 

Number of employees

#### 1037 tonnes

Production per employee

11%

Percentage of employees engaged in company-sponsored higher and further education and professional qualifications

### 5.1 training days

Average number per employee

£123

Average cost per training day

#### **HUMAN RESOURCES: LOOKING FORWARD 2007**



In line with government legislation on the smoke-free workplace, we will ban smoking on site completely to coincide with the 1st July deadline



Our triennial assessment as an Investor In People takes place in autumn 2007

INVESTOR IN PEOPLE

# Values n action

Our people

#### HEALTH, SAFETY & FIRE PREVENTION PERFORMANCE 2006

Target: Improve LTIFR to less than 1.0 Achieved: LTIFR reduced to 0.78

Target: Achieve certification to OHSAS18001 by December 2006

Achieved: Registration gained in November 2006

Target: Reduce the number of permit-related incidents by 15% Average not achieved: see text on this page for detailed review Target: Increase participation in Health Promotion Week 2006 by 50%

Campaign postponed in favour of Weight Loss Challenge, achieving 12% participation and

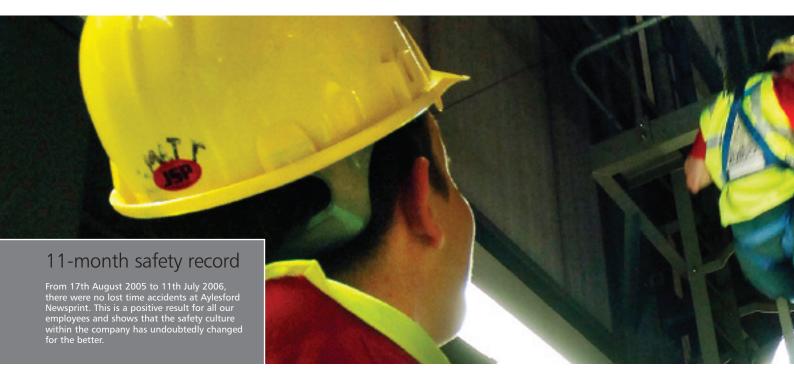
significant individual results

Target: Implement leading-edge fire prevention technology by introducing foam into the sprinkler systems in

specified hydraulic rooms

Preparatory work undertaken during 2006; installation budgeted for during 2007





# People – not statistics

Health, Safety & Fire Prevention

Behind all health, safety and fire prevention statistics are real people, with a commitment to looking after themselves, their colleagues, and the contractors and visitors who come to Aylesford Newsprint.

Safety is part of our collective caring for the community of people with whom we work. The culture of the Aylesford Newsprint workforce towards safety has changed dramatically in recent years, with active participation and input from all departments throughout the mill.

All statistics relate to people's understanding and action. In 2006 we looked at how we could reduce safety reports linked to 'permits-to-work', which allow essential maintenance to be carried out around the mill. We identified that reports had fallen into four main categories related to access to an area, to the possession of the correct permit, to the isolation of machinery, and to other procedures such as safety audits. When analysed against 2005 data, in 2006 we reduced the number of

2	006	2005	2004		
Lost Time Accidents Minor Accidents Incidents	4 91 1328	6 131 1654	10 70 1418		
Number of days lost through accidents Wrapline Fires	77 102	30 182	32 227		
Lost Time Injury Frequency Rate	0.78	1.6	2.59		
Incidents reported figures also include contractors					

### Targets for 2007:

Improve LTIFR in 2007 to less than 0.3 as part of building and sustaining an Incident and Injury Free environment.

Implement a policy to ensure the wearing of seat restraints in all applicable vehicles on site

Heat stress assessment to be completed in all relevant areas of the mill



reports related to obtaining the correct permit by 13%. Reports relating to access increased slightly, though this result also included widening the scope of reporting to include our offices and workshops as well as the main production plant. Reports related to isolation stayed the same, giving us a focus point for reduction in 2007.

#### **European Safety Week**

Young people at work was the

campaign's Europe-wide theme for 2006. Part of our focus in relation to young people was to encourage understanding about risk assessment, why it is undertaken, and the difference that a risk assessment can make. To demonstrate the point, a team of young professional acrobats gave a performance leaping over large reels, through scaffolding and over a car. Risk assessments are essential to their safety when performing.

#### Wrapline fires down 40%

Following the installation of camera equipment to monitor the functioning of the reel wrapping machinery, small wrapline fires were reduced substantially to 102 reports, down by 40% on the 2005 figure. Sustained focus on investigating reports and monitoring of this machinery will continue to reduce this potential hazard.

#### Consolidation and consistency

On-going work in 2006 included checks on the consistency of approach to safety rules and permits across the Aylesford Newsprint site. The profile of the Safety Representatives is being raised through increased communication and training around the plant.

Work started on checking the intervals between risk assessment reviews and updating procedure where relevant. Some areas within the mill need more frequent reviews of risk assessment procedures than others, where every-day processes and activities are less subject to change. This is a major undertaking and will continue into 2007.



## Staff health: Joining the losers

Modern life is hectic and for some of our employees, weight loss is a target for improving their general health. Some 12% of our workforce joined our 2006 weight loss challenge. A website provided calorie calculations, exercise advice and recipes, but peer pressure exerted the best influence. Over eight weeks, the total weight lost by the participants was 156 kilos (343 pounds). FPP Team Leader Kevin Vallance lost 15.9% of his starting weight, winning a health spa break.

#### Student visitors

As part of a Sixth Form Business Challenge, The Maplesden Noakes School in Maidstone sent a group of students to investigate how well we recycle our office waste and to make recommendations for improvements.





# All kinds of neighbours

Our community commitment

As part of the local community, Aylesford Newsprint engages with neighbours of all kinds throughout the year.

#### **Donations Committee**

Lordswood Youth Football Club, Lunsford Park Pre-School and the Kent Multiple Sclerosis Therapy Centre were among the local organisations to benefit from Aylesford Newsprint donations in 2006. Requests made to the company for donations are handled by the employees' Donations Committee, currently chaired by PM14 Assistant Superintendent Bob Hindlett.

Requests are considered at the Committee's monthly meetings. Separate donations are between £100 and £500 and around £6,000 is donated each year. Not all requests are successful: the Committee supports local rather than national charities and organisations.

The Donations Committee, which additionally comprises employees Lynne Powell, Sharon Jenner, Stephanie Miln, Richard Thompson and Mick Wells, also oversees our Give As You Earn scheme. During 2006, one in twenty of our employees made tax-efficient charity

donations through payroll deductions. The charities supported were: the Alzheimer's Society, British Heart Foundation, Demelza House Children's Hospice, Heart of Kent Hospice, Kent Air Ambulance and the South East branch of the NSPCC. Other activities supported by the Committee during 2006 included sponsored participation in the Demelza House 10km Fun Run, and practical and financial support for the Children's Christmas Pantomime trip organised by the Sports and Social Activities Club.

There is a clear distinction between local donations and Aylesford Newsprint's corporate charity support. For some 10 years, the company has supported Great Ormond Street Children's Hospital. It also supports two Welsh charities, the South Gwent Children's Foundation and the Noah's Ark Appeal, through its blue paperbank scheme.

#### Supporting local schools

Creating interest amongst local school children is essential to Aylesford Newsprint's future: many of our local staff began their careers with us from schools across the area. Learning &



### Flighty visitors

As well as the colony of rabbits that live here, some 67 different types of birdlife are known to have visited the Aylesford Newsprint site during 2006, the sightings being recorded by our staff. The range includes sea, river, woodland and field birds, 23 of which are on the RSPB's Amber conservation list, and nine are on the globallythreatened Red list. These include the Skylark, Linnet, Bullfinch, and Corn Bunting, and formerly common garden birds such as the Song Thrush and House Sparrow.



Development Advisor Marisa George arranged 34 visits by education groups in 2006, in which over 600 students visited from 21 different schools, colleges and universities. We take every opportunity to promote careers in the paper industry, and also to promote recycling in general. Occasionally, though, even Aylesford Newsprint can be taught a lesson. As part of a Sixth Form Business Challenge, The Maplesden Noakes School in Maidstone sent a group of students to investigate how well we recycle our office waste and to make recommendations for improvement. The students found that we are good at reusing envelopes, reasonable at recycling office paper, but rather poor at recycling bottles and cans. They made several innovative suggestions to encourage us towards improvement and practical suggestions to make recycling easier, many of which will be implemented in 2007.

In addition to the education groups, our Tour Guide Linda Hassall took 68 local authority and other interested groups around the mill, giving them an opportunity to see paper recycling in action.



### Being a Good Neighbour

#### Medway Valley Project

Aylesford Newsprint is one of six local companies and organisations involved in Kent Wildlife Trust's Medway Valley Project. Aylesford Newsprint's area of the project is Peter's Pit, a Site of Special Scientific Interest inhabited by a healthy population of endangered Great Crested Newts. The site is one of the best habitats in the UK for these amphibians. During 2006, our staff completed the excavation and re-lining of five of the ponds in Peter's Pit and significant winter rains are now refilling the ponds

naturally. Aquatic plants will be added in spring 2007. Willow coppicing adjacent to two of the main ponds has taken place to reduce shading of the water and the resulting logs have been stored to create more land habitats for the newts.

# Transport

# Reducing journeys – increasing payloads

REDUCING JOURNEYS - INCREASING PAYLOADS

Over 2,000 journeys saved

In ten years, payloads on deliveries of Renaissance newsprint have increased by 11.5%, saving around 2,171 delivery journeys.

Our aims are the same with both inward and outward transport: to increase payloads and reduce the number of journeys wherever possible. However, with the growth of co-mingled waste collections in south east England, we are having to go further afield across Britain to find the source-segregated material that is essential to our business. Normal variations in our yearly sales pattern can also mean that we supply newsprint to different locations in the UK and abroad, and this affects our transport data.

Aylesford Newsprint monitors the environmental impact of delivering our product to customers through our logistics partner, DHL, and takes the lead in trialling new transport technology. Supplies of recovered paper arriving at our mill are transported by numerous companies not contracted to Aylesford Newsprint.

#### Recovered fibre transport 2006

All of our suppliers receive our Safety, Health Environment and Fire Protection Policy and are asked to conform to its requirements with all deliveries. The safety of contractors whilst on our site is also of paramount importance. We are working with suppliers to increase the payloads coming into the mill and narrowly missed our 2006 target due to the effects of machinery problems in November.

#### Finished goods transport 2006

During the year, we were involved in our logistics partner's trial of Euro 5 Specification Mercedes engines, which aim to reduce emissions. We are also involved in an on-going 18-month trial of satellite tracking. This monitors lorry speed, minimising harsh use of the brakes and therefore reducing fuel usage and emissions.

Additionally we are making significant progress on increasing payloads by taking control of load optimisation. Pre-planning vehicle loads ensures that lorries carry the maximum appropriate weight, thus reducing the number

of journeys needed to transport Renaissance newsprint and the associated emissions. Our outward transport data is dependent upon the number and type of reels ordered by customers each year. Our target for 2007 is therefore allied to projected sales of our half-size, three-quarters and main (full) reel sizes.

#### Recovered fibre transport data

### Finished goods transport data



#### **Transport Performance 2006**

Reduce transport emissions by increasing vehicle efficiency

Recovered fibre target: increase payload from 19.8 tonnes to 20.5 tonnes Not achieved: payloads increased to 20.4 tonnes, see text above

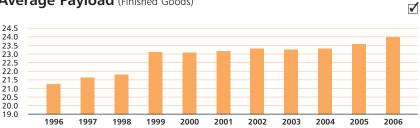
**Finished goods target:** increase payload from 23.5 tonnes to 23.7 tonnes ✓ Exceeded: payloads increased to 24.0 tonnes

#### Targets for 2007:

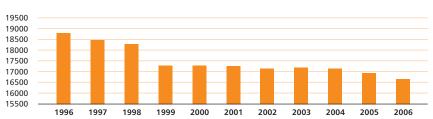
Recovered fibre target: Increase average vehicle payload efficiency to 20.5 tonnes

Finished goods: Maintain average vehicle payload efficiency at 23.9 tonnes despite smaller reel sizes.

#### Average Payload (Finished Goods)



#### Journeys required (based on target 400,000 tonnes per year)



# Auditor's Report

Independent assurance report to Aylesford Newsprint Ltd Board of Directors on selected environmental data and progress against targets within the 2006 Safety, Health, Environment and Fire Protection (SHEF) Report

#### Scope of our work:

We have been engaged by the Board of Directors to perform reasonable assurance\* procedures on the environmental data (indicated by the following symbol ( ) and associated progress made against targets reported, for the year ended December 2006. The environmental data is measured based on the criteria set out on page 22.

#### Our conclusions:

We carried out reasonable assurance\* procedures in accordance with International Standard on Assurance Engagements 3000 (ISAE 3000) on the disclosures in the 2006 SHEF Report relating to the information indicated in the report with a . This standard requires that we plan and perform the work to obtain reasonable assurance as to whether the environmental performance data and progress against targets is fairly stated.

#### Our work consisted of:

- Analysis of and obtaining explanations from management for environmental data trends;
- Analysis of evidence from external bodies, including the Environment Agency in relation to the site's environmental performance;
- Conducting interviews with people responsible for the data gathering and aggregation processes;
- Obtaining an understanding of the systems and processes used to collect, collate and aggregate the environmental data;
- Testing, on a sample basis the collection, collation and aggregation of environmental data for the 2006 report; and

Reviewing the representation of the 2006 environmental performance data in the SHEF Report for consistency with the findings of our work.

Certain source environmental data is obtained from automated readings taken from measurement systems. Whilst our testing includes an understanding of calibration processes around these systems, we have not performed any procedure to verify the accuracy of recording of these measurement systems.

#### **Our Opinion:**

In our opinion, the environmental performance data and associated progress against targets at the Aylesford Newsprint site identified by the symbol , are in all material respects, fairly stated.

#### Responsibilities of directors and independent accountants:

The Directors are responsible for the preparation of the SHEF Report, including the choice of indicators disclosed and the implementation and execution of systems to collect required data for environmental data. Our responsibility is to independently express a conclusion on the performance data for the year 2006 and associated progress made against targets set in 2005.

A multi-disciplinary team of Environment and assurance specialists performed the engagement in accordance with Deloitte's independence policies, which address and in certain places exceed the requirements of the Institute of Chartered Accountants in England and Wales. Each year, partners and staff are

required to confirm their compliance with the firm's policies. We have confirmed to the Directors that we have not supplied any other services to the group that would impair our independence and objectivity in providing this assurance report.

This report is made solely to Aylesford Newsprint in accordance with our engagement letter. Our work has been undertaken so that we might state to the company those matters we are required to state to them in an assurance report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Aylesford Newsprint for our work, for this report, or for the conclusions we have formed.

## Deloitte.

Deloitte & Touche LLP. Chartered Accountants London, 22.05.07.

Footnote \*: The types of assurance engagement are defined in the International Standards on Assurance Engagements 3000 (ISAE3000) issued by the International auditing and Assurance Standard Board. Reasonable assurance is similar to the audit of financial statements.

# Our Performance

### Basis of reporting

The environmental figures in this report have been prepared as indicated below and cover the period of January -December 2006. The statistics shown in the report for discharges to water, atmospheric emissions, waste and resource management relate to the papermaking site of Aylesford Newsprint, excluding our Margetts Pit landfill site, unless otherwise specified. The energy plant comprises a CHP plant owned by Npower and operated by Aylesford Newsprint and two back-up boilers owned and operated by Aylesford Newsprint. The site's combustor plant is also owned and operated by Aylesford Newsprint.

#### Inputs

#### Abstracted Water

Water abstracted is metered directly from the points of abstraction.

#### Total Mill Water Use

Total mill water use comprises all water used within the papermaking and utilities processes excluding water consumption for potable use. The water usage is metered throughout the production process.

#### Raw Material

Tonnes of raw material are reported as they are used within the production process. This figure does not include tonnage that has been rejected or sold.

#### Primary Energy Input

Natural gas is the primary energy input for the CHP and is reported via invoiced usage. Additionally Distillate Fuel Oil (DFO) is used as a substitute boiler fuel and consumption reported is metered usage.

#### **Combustor Production**

Steam produced from the combustion process is metered at source.

### Outputs

#### **Emissions to Water**

#### BOD, COD and Suspended Solids

Measurements of chemical discharges to effluent are calculated by analysing concentration and then multiplying by the metered water discharge flow.

#### **Emissions to Air**

#### NOx

NOx concentration is measured from the combustor and the energy plant using on-line meters, and the calculation of NOx load is undertaken by multiplying by the average flue gas flow over the year. NOx from the back-up boilers is estimated by applying a NOx emission factor, previously agreed with the Environment Agency, to fuel input.

#### **Particulates**

Particulate concentration is measured from the combustor using on-line meters and the calculation of particulate load is undertaken by multiplying the annual average particulate concentration by the annual average flue gas flow.

SO<sub>2</sub> is measured from the energy plant and the sludge combustor. The SO<sub>2</sub> concentration from the energy plant is estimated by applying the maximum allowable sulphur content of the fuel to the total fuel input. The SO<sub>2</sub> concentration from the sludge combustor is measured periodically but is typically below the limit of detection and is therefore an unreliable measurement. Consequently this emission has been disregarded in the total emission reported. The measured SO<sub>2</sub> emission from the sludge combustor is, however, well below the specified limit in our Permit.

#### CO<sub>2</sub> Energy Plant

Emissions are based on fuel used which is multiplied by a conversion factor supplied by the EU ETS. In accordance with the principles of the EU ETS, only emissions that Aylesford Newsprint is directly accountable for are considered for reporting disclosure. \*\* We have however included emissions generated from the energy plant in our reporting of the overall site CO<sub>2</sub> footprint.

#### CO<sub>2</sub> Combustor

These emissions are based on an estimation of the quantity of fibrous process residue delivered to the combustor, which is multiplied by a conversion factor. The conversion factor is supplied by the Swedish Paper Federation and is based on the fibrous process residue being 100% biomass. Currently our process residue is approximately 35% organic and 65% inorganic constituents.

The organic quotient comprises 15% of fibrous origin and 20% non-fibrous material originating from ink and binders used in papermaking. Although CO<sub>2</sub> from the combustion process is not reported as a directly accountable process for the mill, it is included as part of the overall site CO<sub>2</sub> footprint.

#### **Transport Emissions**

Road transport emissions are based on fuel used and distance travelled (for deliveries of finished goods only), which are multiplied by conversion factors supplied by the 'Handbook of Emission Factors for Road Transport'. Emissions for other transport operations e.g. recycled paper delivery, are excluded as relevant data is not available. Emissions from shipping are estimated from data received from the ship owners.

#### CO<sub>2</sub> Site Footprint

The Aylesford Newsprint total site footprint for CO<sub>2</sub> represents overall CO<sub>2</sub> emissions from energy, including generation from the CHP plant, backup boilers and the combustor. \*\* The CO, site footprint for 2006 is 499,000te.

#### **Emissions to land**

#### Ash Production

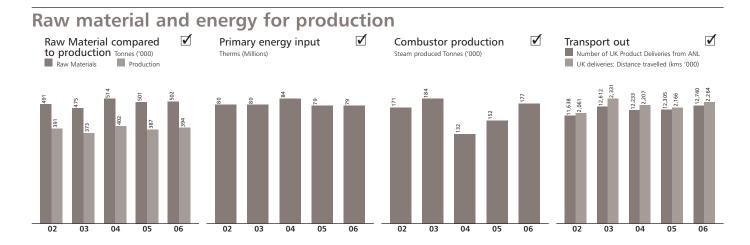
Landfilled combustor ash is weighed and independently analysed for moisture content, as agreed with HM Revenue & Customs, which is applied to calculate bone dry tonnes. Ash product is supplied for use within the cement and building materials industries and is weighed as a conditioned product before export to customer. The bone dry weight is calculated using periodic moisture analyses.

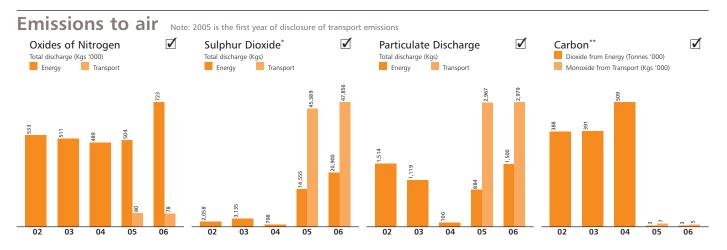
#### Fibrous Process Residue

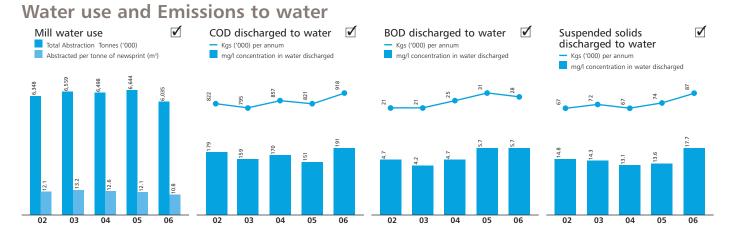
Landfilled fibrous process residue is weighed and independently analysed for moisture content, as agreed with HM Revenue & Customs, which is applied to calculate bone dry tonnes. The estimate of fibrous process residue combusted is based on measurements of the energy and ash produced by its combustion.

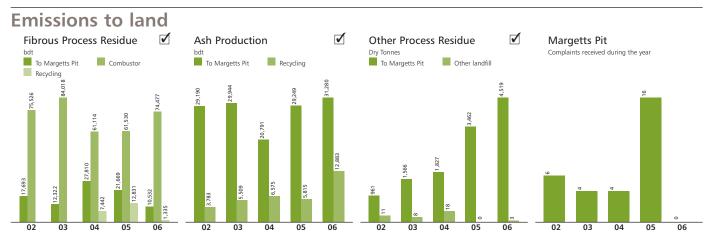
#### Other Process Residue

Other process residue is weighed and a moisture content, based on values as agreed with HM Revenue & Customs, is applied to calculate bone dry tonnes.









<sup>\* (</sup>Sulphur Dioxide) please see page 13

<sup>\*\* (</sup>Carbon) please see page 22

# Policy

### Safety, Health, Environmental and Fire Prevention Policy

Aylesford Newsprint manufactures and supplies 'Renaissance', a premium grade newsprint, for the printing of leading European newspapers. We provide an important environmental service to the United Kingdom by recycling a large amount of used newspapers and magazines

We recognise that our most important resource is our employees and we are conscious of the need to create a safe and pleasant working environment. We also seek to provide appropriate support to our neighbours and other communities with which we are involved.

The Company is committed to continual improvement, prevention of pollution and the highest standards in operating its Safety, Health, Environmental and Fire Protection Procedures. We have a Quality and Environmental Management System which is registered to ISO 9001 and ISO 14001. We are certified to OHSAS 18001.

The Company complies with relevant legislation seeking to reduce progressively the impact of the business on its environment by the training of all employees.

The Company recognises that we will develop the business in a sustainable way by employing the following methods:

#### Safety

- We will continuously improve the safety performance of the mill;
- We will further develop a systematic approach for the identification of hazards and risks to achieve improved control over the operation of the business.

#### Health

- We will improve our occupational health by prevention of accidents and the reduction of ill health associated with work. To achieve this, we will maintain First Aid Providers and: -
  - Health monitoring and access to private health care for all our employees;
  - Regular monitoring of the workplace to ensure possible risks to health and well-being are promptly identified.

#### Environment

- We will continue to operate a Registered Environmental Management System assessed by Third Party Auditors;
- We will look for ways to minimise the use of valuable resources and also, continue to reduce the production of waste.

#### Fire Protection

- We will operate a mill-wide Fire Warning and Protection System;
- We will ensure that all employees are familiar with the equipment and trained in Evacuation Procedures;
- We will continue to train some employees in Fire Control Procedures.

#### Social Responsibility

We recognise that, as an employer and owner of a large manufacturing site, we have a responsibility to our stakeholders. We are committed to making available appropriate information about the business and by producing a report about the key aspects each year. We will also support appropriate external and community activities.

### Adopted by the Board

15th November 2001

Alan S McKendrick Chief Executive

# Glossary

**Ash** An inert material resulting from the combustion of fibrous process residue.

BOD Biochemical-determined oxygen demand. Biodegradable organic material in water described by the requirement for dissolved oxygen in the aerobic microbiological breakdown of the material. The BOD measurement indicates its potential to pollute a waterway by de-oxygenation.

**bdt** Bone Dry Tonnes – a unit to measure a tonne of material with no moisture.

**CHP** The generation of combined heat and power.

**CO** Carbon monoxide, a gas formed during combustion, normally the result of incomplete combustion.

**CO<sub>2</sub>** Carbon Dioxide, a greenhouse gas produced from the combustion of carbon.

**COD** Chemical Oxygen Demand. A measure of the amount of oxygen needed to break down any organic content of water. This indicates the content of degradable organic matter present.

**DFO** Distillate fuel oil: a low sulphur fuel similar to diesel.

**Environment Agency** Regulatory body in England and Wales responsible for protecting and improving the environment.

**EUETS** The European Union's Emissions Trading Scheme.

**Incident and Injury Free** A programme of safety promotion within the mill.

**Kte** Thousands of tonnes.

LTIFR Lost Time Injury Frequency Rate An industry method of comparing the frequency of accidents. It is based on 200,000 hours divided by the hours worked by the business and multiplied by the number of lost time injuries.

MRF Materials Recycling Facility for the sorting of mixed recyclables into separate material streams.

**MW** Mega Watt - 1,000 Kilowatts of power.

**MWh** Mega Watt hour, a unit of energy representing one MW measured over one hour.

**NOx** Nitrogen oxides, gasses produced during high temperature combustion.

**OMA** Operator Monitoring Assessment. Review process/audit run by the Environment Agency to assess technical and management aspects of emissions monitoring.

**Pams** Periodicals and magazines, on coated (glossy) paper.

**PPC** Pollution Prevention and Control, an EU Directive implemented in October 1999 and applicable to the pulp and paper industry from December 2000.

**Particulates** Particles of combustion residue.

**RSPB** Royal Society for the Protection of Birds.

**Renaissance** Aylesford Newsprint's main product.

SHEF Policy Safety, Health,
Environmental and Fire Prevention Policy.

#### **Sludge (Fibrous Process Residue)**

A water-based material removed from the papermaking process, consisting of non-toxic, very small cellulose fibres and fillers such as chalk and clay, together with printing ink.

**SO<sub>2</sub>** Sulphur dioxide, which is produced from sulphur in the fuel during the combustion process.

Site of Special Scientific Interest (SSSI), an area protected for biodiversity under the Wildlife and Countryside Act 1981 (amended by the Countryside and Rights of Way Act 2000). SSSIs are under the governance of Natural England.

**Suspended Solids** Insoluble matter, which can be found in water. The material tends to form silt, causing a reduction in the availability of food for wildlife living in watercourses.









