Policy In Action

Environmental Protection Act 1990 and PPC Regulations

In England and Wales significant emissions into the environment are regulated by the Environment Agency (EA). Whereas those processes with less significant emissions are prescribed for air pollution control by Local Authorities. All Ibstock factories in England operate with Local Authority Authorisations. In the future these will be replaced by Pollution Prevention and Control (PPC) Permits under LA-IPPC where our sites will be regulated as A2 processes.

In Scotland all regulation is by SEPA, the Scottish Environment Protection Agency. Our factory in Scotland is regulated by SEPA who will administer the A2 PPC Permit.

Emissions to Air

Our continuous review in 1997- 1999 highlighted emissions to air as our main area for improvement. Ibstock has invested approximately £ 3 million in kiln flue gas scrubbing since this time to reduce emissions of Fluoride.

The use of “end of pipe” abatement technology, together with the associated additional energy consumption and the production of waste materials is used as a last resort.

Ibstock has been involved in initiatives both in the UK and as part of a European consortium to establish best practice in abatement technology in particular with sustainable techniques. In 1999 our Leicester factory received an award under the Environmental Technology Best Practice Programme (ETBPP) for the pioneering use of these techniques and is a model for others to follow.

Emissions to atmosphere are regularly monitored and, where relevant, programmes for improving these are negotiated with the Local Environmental Officer.

On the significant issue of Global Warming, almost all production is, and has been for many years, fired by natural gas. This is the cleanest and most controllable readily available fuel and efficient combustion results in substantially lower emissions of Carbon Dioxide than alternative fuels. Progress with our energy efficiency programme will result in a reduction in energy consumption of approximately 10% per fired tonne by the year 2010.

Use of Water

The use and discharge of water is closely monitored. In many of our factories we minimise the use of a precious resource by the recycle of process water from collection lagoons. Currently some 30% of the water required in production (throughout the whole of Ibstock) is recovered rainwater, we aim to increase this percentage substantially to 40% within the next 2 years (end of 2004). Almost all water consumed enters the atmosphere as harmless water vapour or steam during the drying of the product.

Discharges to Water

If a liquid discharge is unavoidable conditions specified by the Environment Agency are rigorously adhered to at all times. Shown below are details of our various consents throughout Britain.

QUARRY WATER DISCHARGE CONSENTS

FACTORY / QUARRY	CONSENT NUMBER	ISSUE DATE	GRID REF
ASHDOWN	NO/2024/1/1	25/07/77	TQ7220 0936
ATLAS	T/08/20539/T	04/12/90	SK0420 0153
CAUGHLEY	S/02/11109/T	07/06/88	SJ6983 0001
CHAILEY	P4020/S/P/91	05/12/91	TQ3920 1752
CRONTON	SFD/187/94	12/07/94	SJ466 891
DALTON	017091278	23/12/94	SD500 0293
DONNINGTON	T3815	03/02/75	SK305 170
DORKET HEAD	T/63/45041/T/D	27/08/96	SK591 475
ESSINGTON	T/03/21585/T	11/06/92	SJ9651 0491
HUNCOTE	017190413	09/07/92	SD779 297
KINGSLEY	T/32/30104/T	04/08/95	SK0010 4718
KNUTTON	T/01/30052/T	26/05/95	SJ8274 4670
LEICESTER	T/20/20810/T	11/12/91	SK4194 1102

LILLESHALL	S/04/20897/T	15/11/91	SJ7092 1158
MALTBY	WQ/7/746	28/02/79	SK50879283
NOSTELL	C4474	18/11/86	SE4026 1734
PINHOE	NRA SW 5456	12/03/93	SX9579 9465
REDHURST	T/3/21585/T	01/06/92	SG9651 0491
ROUGHDALES	SFD/187/94	12/07/94	SJ466 891
SEVERN VALLEY	012424	01/03/94	ST5364 8184
S. HOLMWOOD	1435	22/01/75	TQ1370 4250
SHORTWOOD	2225	22/01/75	ST680 768
WALLEYS	T/01/22393/T	11/12/89	SJ8316 4626
WEST HOATHLY	P4617/K/T/92	05/05/93	TQ3720 3310

Waste

Wet and dry scrap clay are produced in minimal quantities and are recycled within the process. Unwanted fired material is a usable hard-core which can be used for building or road construction. Ibstock are participating in studies to evaluate the use of such material as "secondary aggregate" in other construction materials. If successful this will have the advantage of reducing the future use of irreplaceable natural resources.

Paper, plastic and metal waste are collected and sent for recycle wherever a suitable arrangement can be established. Any disposal takes place under strict "Duty of Care" requirements specified in relevant Waste Management Regulations. Waste oils are carefully handled and passed on to reputable companies for recycling.

Quantities of metals and oils sent for recycle have increased dramatically within the last 2 years as shown in our environmental reports.

Packaging Waste (PRO Obligations)

All Producer Responsibility Obligations for packaging waste are undertaken by VALPAK on behalf of Ibstock. Our Registration Number with VALPAK is RM 00084.
Typical values for packaging materials consumed per 1000 bricks are:

2.38Kg of paper/board
0.65 Kg of steel banding
1.60Kg of plastics
1.76 Kg of wood.
We aim to be able to quote packaging waste figures (by product) in the future.

Potential for Nuisance Noise

Assessments of the potential for noise are made as part of any development plans for any site. Background noise is periodically monitored and controlled with the aim of containment within the factory perimeters.

Products

Ibstock facing bricks, pavers, terracotta and stone products are inert solid masses used in the construction of structures and buildings. By definition, inert substances do not react with other substances in every day usage and as such present no potential for pollution in normal use.

Energy Management Policy

Ibstock has a binding commitment to reduce specific energy consumption per tonne of saleable product by 10% by the year 2010 under our Climate Change Agreement (formerly Climate Change Levy).

Ibstock have plans to generate electricity from renewable resources using landfill gas, a potential of over 4MW is available. A feasibility study is currently being undertaken into the use of mines gas for similar purposes at 2 locations.

Energy management has always been a serious business for Ibstock since energy accounts for approximately one third of direct manufacturing costs in clay brick manufacture. The most energy intensive aspect of brick manufacture is the firing process, the Company is constantly monitoring consumption, comparing this to established best practice as well as reviewing and developing systems for reducing present and future energy requirements. In the last 6 years Ibstock has spent in the order of £38 million on projects involving modern kiln technology and combustion systems.

New technologies are constantly being evaluated either by local arrangements or by participating as part of a consortium where research costs are substantial. Current technologies being evaluated may result in energy savings of over 20% in parts of the process if successful.

As a regular feature of all Ibstock factories waste heat is fed back to drying chambers wherever practicable to do so. This recycling of heat replaces a considerable amount of precious fuel resource that would otherwise be required.

Transport

Internal traffic is operated in such a way as to minimise noise and nuisance to local residents. Particular care is taken on starting up operations in the early morning and at weekends.

Product distribution is via contracted hauliers who operate in accordance with an agreed policy using agreed exit routes from factories (where negotiated alternatives exist). The policy includes specifications on payload, off-loading equipment etc.

Wherever possible the Company operates a back-loading system on deliveries. This reduces congestion on our overcrowded roads, reduces vehicle emissions to atmosphere and reduces damage to roads and the environment in general which will contribute to a better and healthier environment for all.

Land Management Restoration and After Use

The first stage of our clay winning process cannot take place without the granting of Planning Permission by the Local Authority. In our application we provide a working plan over the expected life of the project and give our assessment of the site together with ways of keeping future environmental impact to a minimum. Particular skills are brought in from outside including consulting engineers, landscape architects and others, in order to help:-

- in the effective design of clay winning operations to ensure maximum environmental protection.
- in the formation of plans to restore land to the original or enhanced state whilst safeguarding natural resources.

- The Company has ensured that particular natural features of plant or animal life are protected during developments and will continue to do so whenever the need arises.

Environmental Authorisations

Factory	E.P.A. Authorisation No	Issue Date	Local Authority	Discharge Consent No	Trade Effluent Consent No
ALDRIDGE	Auth No 5	16 Jul 1992	Walsall M.B. Council		T/08/35004/T
ASHDOWN	Auth No 6/p7	17 Oct 2000	Rother District Council		
ATLAS	Auth No 6	16 Jul 1992	Walsall M.B. Council		
BIRTLEY	Auth No 6/91	01Nov 2001	Gateshead M.B. Council	047-756-062	
CATTYBROOK	Auth No E.P.A./4	30 Sept 1998	South Gloustershire Council	No 2225	No 12554
CHAILEY	Auth No MRC/009/V4	02 May 2000	Lewes District Council	P10032/1/1	
CHESTERTON	Auth No 005	29 Apr1994	Borough of Newcastle under Lyme		T/01/10870/T
DORKET HEAD	Auth No Mb/3.6/91	28 Feb 2000	Gedling Borough Council		
ELLISTOWN	Auth No H3/3/2	19 May 1997	N.W. Leicestershire Council		T/20/30030/T
FUNTON	Auth No La/EPA/5/VN1	07 Mar 1995	Swale Borough Council	P04056/1/1	K01553/1/1
HATHERNWARE	Auth No 92/009	11 Jul 2000	Rushcliffe Borough Council		
LAYBROOK	Auth No EPA/7	19 Oct 1993	Horsham District Council		
LEICESTER	Auth No 1/1/3/2	02 Aug 2001	N.W. Leicestershire Council		T20/07484/T
LODGE LANE	Auth No EPA 1/92	29 Jan 1999	Staffordshire District Council		T/3/22587/T

NOSTELL	Auth No 007	11 May 1999	Wakefield District Council	C4474	Wra 7081
PARKHOUSE	Auth No 003	01 Apr 1994	Borough of Newcastle under Lyme		
PINHOE	Auth No 3.6/epa/003a	16 July 2000	Exeter City Council	NRA-SW-5453	
RAVENHEAD	Auth No 0006	19 Nov 1998	West Lancashire District Council		
ROUGHDALES	Auth No 91/1/06E	25 May 1992	St Helens M.B. Council	016992042	
S. HOLMWOOD	Auth No Red.D(SH)D1	23 Oct 1992	Mole Valley District Council		
STOURBRIDGE	Auth No B1/26/V1	18 Jan 2000	Dudley M.B. Council		
SWANAGE	Auth No 3.6/R2/92	23 Jun 1992	Purbeck District Council	401171/TS/01	
TANNOCHSIDE	Auth No EPA1/sb-u	08 Jul 1993	Motherwell District Council		
THROCKLEY	Auth No Ef.08/9405	04 Aug 1994	Newcastle City Council		233/0965
WEST HOATHLY	Auth No EPA/AP/003/1	30 Nov 1992	Mid Sussex District Council		

Conclusion

Brick making is a long term industry carrying long term responsibilities.

Our interest in meeting the concerns of the public go hand in hand with our tradition of providing materials for prestigious buildings and family homes.

Alongside environmental compliance and best practice, is our aim for continuous improvement so that future generations can enjoy the traditional, visual and protective aspects of products made by Ibstock within environmentally friendly factories.