

A guide to good environmental practice

for trading estates, business parks and business clusters



Foreword

It gives me great pleasure to see that the demand for this 'Guide to Good Environmental Practice for Trading Estates and Business Parks' has been so great that a second reprint is necessary. The Environment Agency works with businesses to reduce their impact on the environment and to encourage more efficient resource management.

The Guide has proven to be an invaluable tool to the Investment and Industrial sectors and investors in industrial estates are realising that using this approach can help them protect their investment. The Guide's principles can also be applied to an individual company or clusters of businesses located adjacent to each other.

Achieving sustainable development is a challenge for us all. We need to work together to protect the environment in a manner that helps underpin economic growth. Cleaner industry does not mean pain but rather gain. Provided we think before we act and consider how to use fewer resources and create less pollution. The Environment Agency works with a wide variety of organisations who help towards this objective. The Guide helps not only different levels of the business sector but also those who own, invest in, or operate from either one or more industrial estates.

Experience has shown us that business success goes hand in hand with leadership in environmental management and that today's customers expect the highest quality of environmental protection from the commercial sector. We encourage this expectation but also wish to support you in meeting these worthwhile demands. Because of this, we have worked with Business in the Environment and Staffordshire University to produce this Guide. The Guide incorporates a Code of Good Practice which businesses on your estate can agree to adopt and use to work towards improving their environmental performance. It is designed to help the tenant, the landlord, the investment company and the regulator by showing companies how to minimise their environmental liabilities and impacts.

Together, I am sure we can make a meaningful contribution towards environmental protection and thereby create a better economy for all. I am also grateful for all the help we received from the various industrial estates in the Midlands where the Guide was developed.

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Chief Executive, Environment Agency

ENVIRONMENT AGENCY



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Why a guide?

This guide is part of a bigger plan for the small and medium-sized enterprise (SME) sector. We have developed it with Business in the Environment (BiE) and Staffordshire University. It is one of a series of documents on how to manage trading estates. There are over 1,200 trading estates or business parks in the United Kingdom. Much of the SME sector operates on trading estates. Over the years, the environment of many of these estates has deteriorated. Crime on the estates has increased, the image of the estates suffers, and they look as though they have been neglected. Many companies operating from these estates find it difficult to get information on laws or regulations about the environment.

The guide contains principles that the business world can follow. It will help tenants on an estate understand the effect they have on the environment and give them and their estate landlords some ground rules for working together to increase the efficiency of their businesses and protect the environment. It is a practical document for use by an individual business, groups of businesses and business improvement districts. The steps in the guide help estate managers encourage tenants on the same site to get to know each other, to think about the most effective way to use resources, to use both energy and water in the most efficient way possible, and to learn how to improve the way they work.

It tells you about current legislation and how different activities may damage the environment. It includes a code of good environmental practice. Companies on an estate may agree to follow the code. The code allows each company to make changes to its working methods at its own pace. It offers practical help and advice, but it is best if you use it with the support of an expert. **If you are charged with causing pollution or with another offence you may not defend yourself by saying that you have followed the guide.**

We tested the guide on three industrial estates in the Midlands. We worked with the estate manager or agent to identify an on-site champion who would promote the principles in the guide. We attempted to sell the benefits of working together to the estate's tenants, explained the *Guide to good environmental practice* and the code, set up a steering group for the estate and identified the issues and concerns of all. Businesses can benefit in many ways from working together. You can see this in projects that have saved money and become more efficient:

- Groups of companies used their combined buying power to get better rates for goods and services,
- Local waste exchange schemes have been set up,
- Businesses share ideas on how to reduce the waste they produce and save energy and water.

Our plan for the SME sector needs the support and commitment of landowners and investors in order for it to work. Without their commitment it will be difficult to encourage small businesses to consider the environment.

Introduction

All businesses have an effect on the environment. When thinking about climate change it is easy to imagine that only the effects of large companies count. But small companies, because there are more of them, can generate more pollution than large ones. Every business that reduces the harm it does to the environment can win an advantage over competing businesses and improve its reputation at the same time.

More and more businesses recognise that good environmental practice is good business practice. Considering the environment as part of you day-to-day work can help you:

- **save money** – reduce the costs of production by using resources more efficiently
- **obey the law** – avoid being prosecuted by working in a way that does not harm the environment
- **reduce risk** – control and reduce risks and liabilities
- **improve your position in the market** – increase your confidence in the supply chain and improve your relations with customers
- **improve the environment** – reduce climate change, ozone depletion, acid rain, air and water pollution which all come from local emissions.

Businesses have found that working together on trading estates, business parks and business clusters benefits all involved. They face the same problems, so joint projects can succeed where individual ones might fail due to lack of resources or knowledge.

The approach used here is:

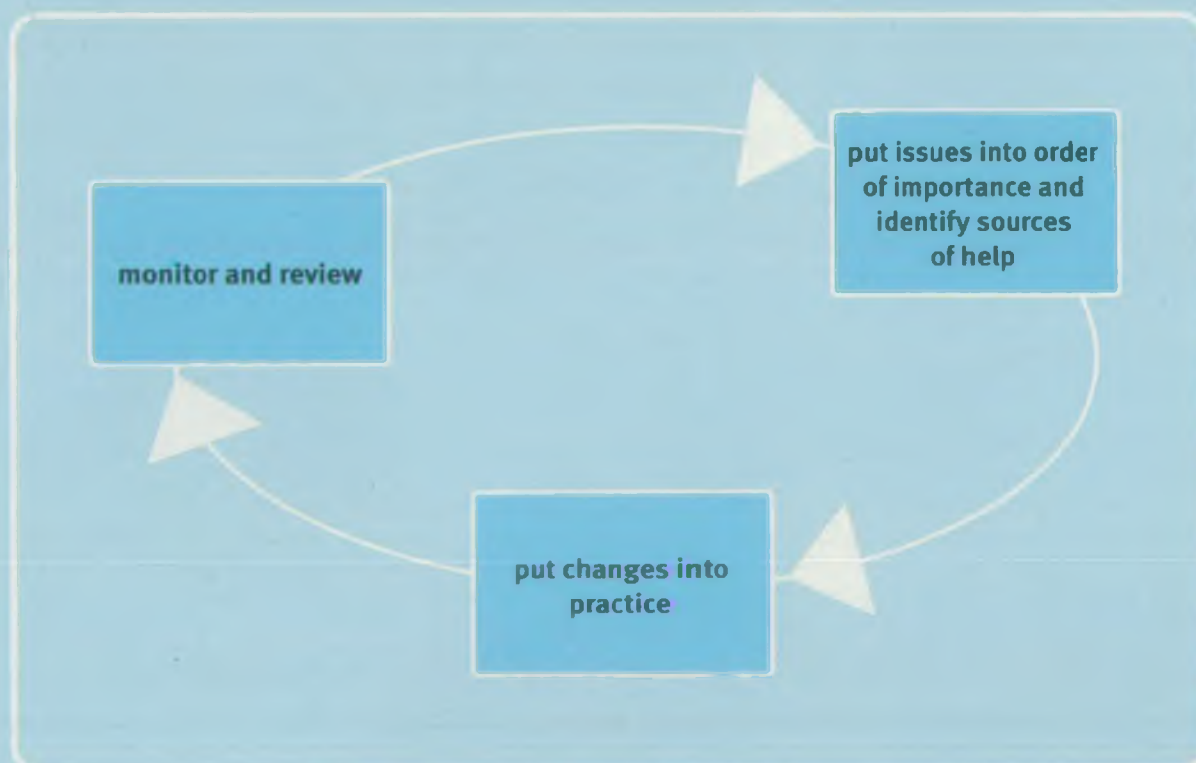
form a working group



sign up to the code



carry out a review



A code of good environmental practice

Working together on

.....
(trading estate / business park / business cluster) to improve business and the environment

The aims of the code are to:

- help tenants understand how their activities effect the environment
- reduce damage to the wider environment from tenants' business activities
- reduce the risk to tenants of future liabilities from environmental pollution
- help landlords manage their sites
- provide an opportunity for tenants, estate landlords and regulators to work together to improve their businesses by improving the way they manage the environment.

The guiding principles of the code are that:

- using businesses practices that protect the environment improves a business's competitiveness and saves money
- tenants working together on the estate can make more rapid progress towards good management of the environment than they would as individuals
- directors agree that their companies will work in a way that benefits the environment
- the company's current environmental performance is reviewed before attempting any improvement to the way it works
- people look at the estate's problems in an organised and positive way
- people agree to continue to look for ways to improve the way they work.

(Company name)

.....
agrees to adopt this code and its principles and commits our company to work to improve its environmental performance.

We will work with other tenants, regulators and the local council to reduce the negative effects of our business on the estate and the wider community.

signed: date:

position in company:

This scheme is supported by the Environment Agency, Staffordshire University and Business in the Environment.

Principle 1:

Good environmental practice is good business practice

Reducing the negative effect an industrial estate has on the environment is the joint responsibility of the owner / landlord and tenants. Tenants need to understand that good environmental practice is good for their business. There are sound business reasons why tenants should be working to improve their environmental performance.

1.0 Consider the following areas:

Legislation – Your company's profits may be seriously affected if you do not obey the law. You may have to pay fines, clean-up costs and suffer bad publicity.

Pollution prevention – Pollution happens when you work in an inefficient way, when your equipment is not in good condition, when you use dirty technologies, when spills occur, when staff are not well trained and when there are few or no procedures to deal with emergency situations.

Water use – Water is a valuable resource, which is expensive to obtain, use and dispose of. Most businesses can reduce their water costs immediately by introducing good housekeeping measures, and in the medium to long term, by recycling or installing water-efficient devices.

Energy – The use of energy adds to the running costs of the business. Most businesses can reduce their energy costs immediately by introducing good housekeeping measures.

Efficient methods – Many businesses make savings by looking at their business methods. Reducing waste cuts costs.

Land use – A well managed and landscaped site can improve the business image of a company and maintain or improve the value of the site.

Transport – the efficiency of vehicles and drivers, planning vehicle routes and sharing loads and staff travel can reduce journeys and save money.

Waste – Waste represents a loss of valuable company assets. Raw materials have been both purchased and processed before becoming waste. A great deal of waste could be avoided by improving the way you manage materials and processes.

Customers / market advantage – More and more major international and UK companies are asking their suppliers to demonstrate how they act to protect the environment. In a highly competitive world, companies must be able to add value and differentiate their products and services.

Community relations – Businesses need to be good neighbours. Local residents tend to be concerned about a company's environmental performance because they are concerned about any emissions or traffic congestion that may affect them. In many cases, company employees are recruited from local areas.

Corporate social responsibility – Companies now recognise that social responsibility is becoming increasingly important. It can help build trust and sales and attract employees.

Principle 2:

Work in partnership

It takes time to improve any area of business performance (including environmental performance) but by working together, sharing know-how and resources with other tenants and taking advantage of free help available (see appendices 1 and 2), you can make a great deal of progress in a short space of time.

2.0 Action points and guidance

2.1 Sign up to the code of good environmental practice

Tenants should support an estate-wide initiative by signing up to the code of good environmental practice. A senior company representative, ideally a director, should sign up to the code of practice as a statement of intent. This is a voluntary arrangement that will allow each company to set its own pace for change. Appendix 3 gives an example of a certificate that acknowledges a company's commitment to the code.

2.2 Form an estate steering group / use an existing network / forum

Once businesses have signed up to the code, they should form an estate steering group to help co-ordinate action, maintain progress and spread best practice. Where estate groups already exist, they should be used to promote good environmental practice.

Failing this, either the landlord, the property manager or one of the on-site businesses will need to take the lead on the project. They will then act as an estate champion and motivate the group. In some areas there are 'green' business clubs that can be a useful source of support, information and advice.

2.3 Identify common issues and concerns and opportunities for joint projects

The environmental strengths and weaknesses of each company that has signed up to the code need to be identified and shared with others. Each company's impact on the environment differs; some will be strong in areas where others need to make improvements.

These questions will help to identify strengths and weaknesses:

Is there potential to procure goods and services jointly?

Can you source goods and services locally?

Would using one waste disposal contractor or energy supplier to service the whole estate reduce costs?

Is there potential for waste exchange amongst the businesses?

Is there potential for using joint energy schemes such as combined heat and power, a centralised waste-fuelled boiler or importing energy from neighbouring sites?

Is there potential for procuring banking or insurance services as a group?

Would landscaping the site help wildlife habitats?

2.4 Consider an environment watch scheme for the estate

Some industrial estates suffer from a poor environmental image and tend to attract fly-tippers. An environment watch is similar to the idea of a neighbourhood watch because it relies on companies being vigilant and reporting fly-tipping or pollution incidents to the Environment Agency. The Environment Agency is not responsible for removing fly-tipped waste but can take enforcement action against fly-tippers. Signage on the estate would indicate that the estate is an environment watch area with the aim of deterring fly-tippers (see appendix 4). For more details, contact the Environment Agency's local office. Signage might require planning permission so check with the local district council.

Principle 3:

Gain commitment

To achieve effective environmental improvements you might need to change business practices and processes. This should be included in the company's business plan. Senior management involvement and support are critical to achieving the full business benefits from good environmental performance. Equally important is the commitment and involvement of the workforce.

3.0 Action points and guidance

3.1 Sign up to the code of good environmental practice

The 'environmental champion' will take responsibility for ensuring that measures are taken to improve the environment. The ideal candidate should have a technical background, understand the company's core business, have good communication skills and be interested in environmental improvement.

This is an ideal personal development opportunity for staff as they will obtain an overview of the entire business and a grounding in a wide range of disciplines.

3.2 Employee commitment

All staff should be involved in developing ideas and actions to help improve the environment. Long-term success will depend on their commitment. The knowledge and experience of the workforce and those on the shop-floor are invaluable in helping the company to decide on the action to be taken. Good ideas often arise from staff suggestion schemes or small working groups. They are often the most practical and original.

Principle 4:

Assess environmental performance

To improve environmental performance throughout the company, you need to know what's happening at the moment. The most effective way to do this is to conduct an environmental review (appendix 5).

4.0 Action points and guidance

An environmental review is a systematic, documented, periodic and objective evaluation of a company's performance on safeguarding the environment.

The review identifies strengths and weaknesses in environmental performance.

4.1 Form a review team

The structure of the team will depend on the size and type of company. For larger companies this may involve a team of people from accounts, purchasing, production and the shop-floor. In smaller companies, the review team may comprise just one or two people.

4.2 Conduct an environmental review

You have some options:

1. Do the review in house

This option will be the most cost-effective and will build up the expertise of company staff. See the environmental review and action programme in appendix 5. There are other self-help guides to help you – see appendix 8.

2. Use expertise from another company

Green business clubs provide opportunities for networking. A larger company might support a smaller one to look at its environmental impacts (see BiE appendix 2). With an estate-wide initiative, there may be opportunities for this kind of support.

The estate steering group should consider how best to make all tenants aware of the products, processes and skills of their on-site networks.

3. Employ an environmental consultant

This is likely to be an expensive option although it is perhaps the quickest way of getting the review done. Reviews can consist of a quick environmental 'health check' that lasts two to three hours, or a more detailed audit lasting one day to several weeks. Business support organisations such as, Business Links, Groundwork, Green business clubs, chambers of commerce and some universities offer this service or direct you to another organisation that might offer a free service such as Envirowise.

Principle 4:

4.3 Other sources of help

The Environment and Energy Helpline – 0800 585794. Free advice and up-to-date information on a wide range of environmental issues and legislation. At the discretion of the helpline manager, companies with fewer than 250 employees can have a free site visit from a specialist. The visit can help with a specific environmental problem, a technical problem on energy saving or a short review of the site to identify opportunities for reducing waste at source.

Envirowise programme – seeks to improve the environmental performance of UK industry whilst increasing its competitiveness by encouraging companies to take up good practice technology and techniques. The main themes of the programme are waste minimisation and the adoption of cost-effective cleaner technologies. Advice is free and can include a half-day environmental review from one of the advisors.

Regulators – The Environment Agency, water companies and local councils are willing to offer help and advice to their customers on how to reduce or manage waste and water, avoid pollution and develop an emergency plan. They will often provide free information and self-help guides on specific topics. You should identify and contact your regulator's local representative, invite him or her to come to the site if he or she doesn't regularly visit, and develop an ongoing dialogue with him or her.

Utility companies (gas / electricity / water) – Many utility companies offer free water / energy audits and advice. Large users of utility services are likely to attract the attention of the utilities' key account managers. Water companies often provide leak detection repair services.

Local colleges and universities – Might be able to provide students for specific projects.

4.4 Whichever option is decided, a review should cover:

(see appendices for further guidance):

Legal requirements

- waste management
- waste storage, handling and disposal
- water regulations
- waste water disposal
- surface water drainage
- air emissions
- nuisance – noise, odour, dust

Pollution prevention

- pollution assessment
- spillage risks policy defined
- emergency planning procedures

Resource management / waste minimisation

- water usage
- raw material usage
- packaging tonnage
- recycling / reuse
- transport

Corporate social responsibility

- community relations
- vehicle movements
- nuisance – noise, odour, dust congestion, visual impact
- encouraging investment into the local area
- recruitment from local community
- adopt 'buy local' policies

Principle 5:

Take action

The environmental review will have identified areas for improvements. The next step is to take action. Environmental improvement should be approached in the same way as any other business issue, accepting that not everything can be sorted out immediately. Many improvements are likely to be a matter of good housekeeping and can be introduced at no cost. You should build on early successes in order to tackle longer-term problems.

5.0 Action points and guidance

5.1 Compliance

Complying with legal requirements must be your starting point. You should also identify areas of risk that could lead you to break the law e.g. risk that you may pollute surface or groundwater or risks from what you release into the air. If in doubt, contact the local regulator for help and advice.

5.2 Quick wins

Look for early successes that save money or benefit the environment and publicise them. Quick wins are the opportunities that often require little or no investment and which save money and reduce environmental impacts almost immediately. They tend to be either good housekeeping measures or procedural changes. They might include:

1. Energy efficiency

- Use daylight if possible – do not over-light.
- Clean light fittings.
- Select slimline fluorescent light tubes during scheduled replacement.
- Fit reflectors.
- Don't obstruct radiators and ventilators.
- Consider installing radiator reflectors behind radiators on outside walls.
- Switch lighting / heating off when not required.
- Switch machinery off when not in use.
- Check the temperature of any hot water – 60°C is usually sufficient.
- Turn computers off when not in use.
- Check thermostats are set properly and working.

2. Compressed air

- Check for leaks / losses; listen for the tell-tale hissing sounds of escaping air.
- Ensure air is generated at the minimum required pressure.
- Switch off compressed air when not in use.
- Make sure staff are aware of the high costs of producing compressed air.

3. Water

- Check meters are installed and working correctly.
- Check the meter size to see if it is appropriate for your water usage.
- Carry out a 'night-flow test' if you suspect that there are leaks or if consumption is unusually high.
- Take meter readings at least once a week. Act quickly if there are sudden or unexplained increases.
- Consider fitting an automatic shut off valve where the service pipe enters the property. The valve closes when there is a continuous flow i.e. when a leak is detected.
- Introduce non-removable spray gun nozzles for hosing.
- Repair dripping taps or leaks in the water system as soon as possible.
- Fit either flush controls or waterless retrofits to urinal systems.
- Fit tap controls e.g. low flow taps, aerators.
- Consider collecting rainwater for gardening, cleaning operations and even toilet flushing (if the roof is large enough).
- Fit a displacement device into toilet cisterns (if this can be done without impairing performance).
- If you are replacing toilets, consider getting one of the dual-flush models.
- Outside – look for leakage, lush vegetation or continually boggy areas and check the proximity of these to supply pipes.

4. Production / processes / raw materials

- Maintain equipment to prevent down-time or re-work. Regularly maintained equipment is usually more energy efficient.
- Eliminate leaks and spills from the process or storage area.
- Ensure good stock control – use materials before they are out of date.
- Empty all bags and containers properly – significant amounts of residue are often left in drums.
- Keep solvents covered to reduce evaporation.
- Ensure products are stored and handled correctly to prevent unnecessary wastage.

5. Staff

- Appoint an environmental champion.
- Run a staff awareness campaign (see Environment Agency guide *Getting staff involved*.)
- Introduce staff suggestion schemes.
- Communicate regularly with staff on the company's goal to improve its environmental performance. Advertise progress.
- Make sure staff are adequately trained, especially in emergency procedures.
- Show staff Environment Agency videos or CDs on pollution prevention and waste minimisation.
- Form staff environmental action groups.

6. Transport

- Regularly tune and service all vehicles and check for tyre wear.
- Make sure drivers regularly check tyre pressures.
- Monitor each vehicle's performance and each driver's performance – measure the miles per gallon each uses.
- Ensure best possible use of vehicles and that they are fully loaded.
- Consider scheduling and routing of distribution.
- Train drivers in energy efficient driving techniques.
- Introduce and establish a Travelwise company scheme.

7. Water pollution prevention

- Obtain a drainage plan.
- Identify where drains go and colour code them.
- Eliminate leaks and spills.
- Separate and store hazardous waste materials safely e.g. bund storage areas provide drip trays for liquid containers.
- Ensure deliveries are supervised.
- Prevent detergents, disinfectants, degreasers or other cleaning agents entering a surface water drainage system or soakaway.

8. Waste management

- Check what is going into the skip / waste container regularly to make sure materials are not being wasted.
- Check that skips are full before emptying them – don't pay for 'fresh air'.
- Separate wastes for recycling or re-use.
- Ensure safe storage of wastes – that containers are secure and in good condition and that wastes cannot escape.
- Carry out regular clean-ups to remove litter. Clean the rear of premises, car parks and delivery and storage areas.

9. Routine maintenance

- Have a routine programme of checking oil separators, effluent treatment plants, storage tanks, pipework, drains, bund walls, notices and any pollution prevention equipment.
- Carry out remedial work straight away.

10. Demolition and construction

- Make sure oil tanks and pipework are empty before they are disturbed and that any temporary chemical and oil storage facilities are banded.
- Further information on pollution prevention measures is contained in a number of Pollution Prevention Guidelines and the Prevention Pays Guidance produced by the Environment Agency available free of charge. See listing in appendix 7.

5.3. Longer-term issues

The initial review will have highlighted areas for improvement. Some solutions will be straightforward e.g. changes to operating procedures or simple changes to equipment that can be introduced at low or no cost. Other projects may involve changing people's attitudes and behaviour. Capital investment projects will need planning and integrating into the business plan, taking into consideration when the capital and manpower to manage and implement the project will be available. Once started, the project must be monitored to ensure that the desired result has been achieved.

Environmental issues should be integrated into the business planning process e.g. you should budget for staff training on environmental issues such as waste minimisation to ensure cost savings in future years.

5.4 Working with the landlord

Certain actions, for example, control of heating, lighting and water, or actions with surface discharges may affect the fabric of the structure, the landlord's fixtures and fittings, or the schedule of conditions / dilapidations. In such cases, the landlord must be consulted. Consultation is also necessary regarding matters that affect the visual appearance of the site or buildings, such as the use of recycling bins, as they can enhance or spoil the appearance of the estate.

Comply with the requirements of the lease. A sound environmental practice is as much in the landlord's interests as the tenant's. Where improvements or changes are needed, the landlord should welcome such an initiative and be willing to amend the lease.

5.5 Develop an environmental policy that reflects the business's day to day activities

An environmental policy is a statement of an organisation's intentions and principles in relation to its environmental performance. It provides a framework for action, and for setting environmental objectives and targets. For example, a business may develop a policy to comply with environmental legislation, reduce consumption of natural resources and minimise polluting emissions.

A model environmental policy is in appendix 10.

5.6 Consider developing an environmental management system (EMS)

An EMS provides the framework for an organisation to address both the immediate and long-term impact of its products, services and processes on the environment. There are two main standards which offer accreditation – the International Standard for Environmental Management ISO 14001 and the Eco-Management and Audit Scheme (EMAS). SMEs should consider adopting BS 8555 or the Acorn Standard. Already many customers and consumers want to see evidence of environmental management so they know they are dealing with a supplier who respects the environment. Contact the British Standards Institution (BSI) for further information (see appendix 2).

Principle 6:

Continuous improvement

Finding and implementing solutions to the issues raised during the review is only the beginning. Once implemented, the project should be monitored to confirm that improvement is being achieved and to learn from any mistakes. A successfully implemented project helps to maintain momentum for further environmental improvements.

6.0 Action points and guidance

6.1 Monitoring

As part of the process of continuous improvement, measurement systems should be set up to identify opportunities for further improvements. Monitoring how much of a particular material is being used and comparing it to production output can help identify losses and improve efficiency.

For example, systems to record material / energy usage and waste / rework generation could be set up. Targets can be set e.g. kWh energy used per unit of production. Deviations from the target can be detected early and the reasons for the deviation investigated. Monitoring will also help identify other improvements.

6.2 Publicise success and reporting

Nothing breeds success like success. Companies concerned to be seen, need to be seen to be concerned. A successful project relies on two-way communication up and down the management structure to maintain momentum and commitment.

Publicise the improvements – to employees, customers, shareholders and the local community. The local press may also be interested.

Employees need to understand their role in controlling environmental effects and preventing pollution; they might be the first to notice inefficiencies in production lines so they need to be involved.

Regular feedback to management and employees will help maintain the momentum. A good way of reporting the progress is to use simple and relevant performance indicators such as:

- the amount of electricity used per item of product (kWh/item)
- the kilograms of fruit used to manufacture a tonne of jam (kg/tonne).

6.3 Remember, this code of practice is just the start

Committing the business to the code can only increase the chances of success.

Appendix 1:

Issues and primary sources of help

Issue	Primary source of help
Waste management Waste disposal, duty of care, licensing of exemptions and special waste	Environment Agency ARENA Network (Wales and Northern Ireland)
Waste management Recycling, reuse, recovery	Environment Agency Envirowise ARENA Network (Wales and Northern Ireland)
Waste contamination	Environment Agency Local authority
Water management Compliance with consents, trade effluent use, water regulations	Environment Agency Water company / sewerage undertaker ARENA Network (Wales and Northern Ireland)
Pollution prevention Oil / chemical storage, spillage control, emergency procedures	Environment Agency Local authority ARENA Network (Wales and Northern Ireland)
Air emissions Clean air technology	Local authority Environment Agency National Society for Clean Air Envirowise ARENA Network (Wales and Northern Ireland)
Energy efficiency	Energy Efficiency Best Practice programme Environment Helpline Utility companies ARENA Network (Wales and Northern Ireland) Carbon Trust
Transport efficiency	Energy Efficiency Best Practice programme Environment and Energy Helpline Freight Transport Association Transport 2000 Business in the Environment
Community relations Visual amenity, noise, odour, recruitment, corporate social responsibility	Local authority Groundwork UK Business in the Community
Environmental management Management tools, training guides	Environment Agency Business in the Environment Groundwork Environmental Business Services ARENA Network (Wales and Northern Ireland) Envirowise
Working with suppliers	Environment Agency Business in the Environment The Chartered Institute of Purchasing and Supply
Property management	Staffordshire University
Environmental legislation	Helps SMEs to understand the complex environmental regulations that can affect them and offers guidance on environmental law and good practice. www.netregs.gov.uk/netregs/

Appendix 2:

Sources of help and information

ARENA Network (Wales and Northern Ireland)

Tel: 01656 8688856 Fax: 01656 868887

Provides companies and business support agencies with advice on environmental issues. Services often highly subsidised through the use of grant aid. ARENA Network is sponsored by various private and public sector bodies throughout Wales.

Business Link

www.businesslink.gov.uk

Network of business advice centres that can supply advice and information on environmental management, as well as general support for small businesses.

British Business Parks

Tel: 01543 466155 Fax 01543 462822

Specialist consultants / practitioners on regeneration of industrial estates. Their motto is 'Regeneration through local business leadership'.

CBI Environmental Business Forum

Tel: 020 7379 7400 Fax: 020 7240 1578
www.cbi.org.uk

Provides a range of publications on environmental issues.

British Standards Institution

Tel: 020 8996 9000 Fax: 020 8996 7001
www.bsi.org.uk

Specifications and guidance on ISO 14001 and other standards.

Chartered Institute of Purchasing and Supply

Tel: 01780 75677 Fax: 01780 751610
www.cips.org

Provides information on building the environment into purchasing decisions.

Business Eye

Tel: 08457 969798 See Business Link.

Energy Efficiency Advice Centres

Tel: 0800 512 012
www.savenergy.org

Local centres which offer services such as employee training and energy auditing.

The BOC Foundation

www.boc.com/foundation

Environment Agency

24-hour incident hotline
Tel: 0800 80 70 60
General enquiries
Tel: 08708 506 506 (Mon-Fri 8-6)

Email: enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk
Netregs: www.netregs.gov.uk/netregs/

Business in the Community

Tel: 0870 600 2482
www.business-impact.org
www.bitc.org.uk

A unique movement of companies across the UK committed to continually improving their positive impact on society.

Environmental Services Association

Tel: 020 7824 8882
Fax: 020 7824 8753
www.esauk.org

Trade association representing companies providing waste management and environmental services.

Business in the Environment (BiE)

Tel: 020 7566 8703
www.business-environment.org.uk

BiE's aim is to inspire business to achieve corporate social responsibility by making continuous progress towards environmentally sustainable development an essential part of business excellence.

Envirowise
(formerly Environmental Technology
Best Practice Programme)

www.envirowise.gov.uk

Provision of free advice and good practice guides on an extensive range of environmental issues. Government programme to help businesses cut energy bills, reduce emissions and pay less climate change levy.

Envirobiz

www.envirobiz.co.uk

The web site signposts businesses to the most appropriate help on environmental issues. It also has a diary of events page.

**Staffordshire University Centre for
Professional Management**

Tel: 01782 294903/294251

Fax: 01782 294239

www.staffs.ac.uk

Provides environmental advice on property and estate management issues for landlords and tenants.

Federation of Small Businesses

Tel: 01253 336000 Fax: 01253 348046

www.fsb.org.uk

Offers members a range of benefits and services including free legal advice.

Environmental Campaigns

Tel: 01942 824620 Fax: 01942 824778

www.http://encams.org/home/

Provides information to businesses on how to keep premises clean.

Global Action Plan

www.globalactionplan.org.uk

The Freight Transport Foundation

Tel: 01892 526171 Fax: 01892 534989

www.fta.co.uk

Provides information and case studies on reducing the environmental impact of freight transport.

Groundwork UK

Tel: 0121 236 8565 Fax: 0121 236 7356

www.groundwork.org.uk

A not-for-profit environmental organisation with many local branches offering subsidised services to small businesses including environmental 'health checks', reviews and training.

The Stationery Office

www.the-stationery-office.com

www.legislation.hsmo.gov.uk

Supplies business information and UK environmental legislation.

Health and Safety Executive

Information line: 0845 345 0055

Waste minimisation clubs

To find out about clubs local to you, call:

0845 933 3111 (Environment Agency)

0800 585794 (Envirowise)

**Institute of Environmental Management
and Assessment**

Tel: 01522 540069 Fax: 01522 540090

www.iema.net

Provides information for companies wanting to participate in the Eco-Management and Audit Scheme.

Wales Waste Management Centre

www.arenanetwork.org

Set up under ARENA Network as a specialist centre for advice and information on waste management.

Working in partnership with the Environment Agency, Corus and various public and private sector bodies.

**National Assembly for Wales – Energy
and Environment Office**

Tel: 02920 825228 Fax: 02920 825129

www.wales.gov.uk

Provides advice on energy and environmental issues.

Welsh Development Agency

Tel 08457 775577

www.wda.co.uk

Various programmes designed to assist companies both within the environment sector and those wishing to improve their environmental performance.

**National Society for Clean Air and
Environmental Protection**

Tel: 01273 326313 Fax: 01273 735802

Promotion of clean air through reduction of pollution. Publishes a range of materials.

Carbon Trust

Tel: 0800 085 2005 Fax: 020 7170 7020

www.thecarbontrust.co.uk

Appendix 3:

Certificate

This company has pledged to work in partnership with other tenants, regulators and the landlord to minimise their environmental impacts on the industrial park and the wider community

signed date

position

Environment Agency, Staffordshire University and Business in the Environment support this scheme

Appendix 4:

Environment watch signage

.....
name of industrial estate

This is an environment watch area

To report pollution or fly-tipping incidents, call the Environment Agency

Environment Agency incident hotline: 0800 80 70 60 (24 hrs)

Environment Agency general enquiries: 08708 506 506 (Mon-Fri 8-6)

Environment Agency, Staffordshire University and Business in the Environment support this scheme.

Appendix 5:

Environmental review and action programme

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
Legislation – waste				
<p>Waste Management Licensing Regulations 1994 (& amendments): A waste management licence is required for the keeping, treatment, deposit or disposal of controlled waste. Certain activities are exempt from the requirement for a waste management licence – exempt activities must be registered with the Environment Agency. The temporary storage of waste on the site where it is produced is exempt from the requirement for a waste management licence and there is no need to register an exemption. However, activities such as on-site baling and compacting of wastes should be registered.</p> <p><i>Check that all activities on site are exempt from the need for a waste management licence and whether any activities need to be registered with the Environment Agency.</i></p>				
<p>Controlled Waste (Registration of Carriers & Seizure of Vehicles) Regulations 1991: Companies carrying waste are required to apply to the Environment Agency to register as a waste carrier. Certain categories of waste carrier are exempt from this requirement including a business carrying its own waste (unless it is demolition or building waste).</p> <p><i>Check that your waste carriers are registered – ask to see their certificate of registration. Note down the registration number and date of expiry of the certificate. This can now be checked online. Information on carriers and brokers at http://www2.environment-agency.gov.uk/epr</i></p>				
<p>Environmental Protection Act Section 34 The Duty of Care & the Duty of Care Regulations 1991: The Duty of Care places duties on all holders of waste, including material for recycling. As a producer you need to ensure that:</p> <ul style="list-style-type: none"> • the waste is safely stored • it is transported by an authorised waste carrier • an adequate waste description is provided • documentation i.e. a waste transfer note is completed by the transferor and transferee of the waste and kept for two years • reasonable steps are taken to prevent illegal deposit of the waste. <p><i>Complete and sign a transfer note for each waste stream and keep for at least two years. Regularly check the destination of wastes to ensure they are being taken to a licensed or exempt facility. Check that wastes are not escaping e.g. leaking drums, oil from swarf skips.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
<p>Hazardous Waste Regulations 2004 (as amended): Certain wastes pose additional risks and require special handling and treatment. Waste is classified as hazardous if it is flammable, toxic or corrosive. Examples of hazardous wastes are oily wastes, car batteries, fluorescent tubes, fridges, TVs, computer monitors, asbestos, solvents (including paints containing solvents). Any business producing hazardous waste has a duty to register with the Environment Agency the premises where it is produced or when it is moved. Hazardous waste movements are controlled and must be recorded using a five-part transfer or consignment note. This accompanies the waste when it is moved from the premises. Copies of consignment notes must be kept for a minimum of three years.</p> <p>When moving wastes, check to see if any wastes are hazardous. Make sure consignment notes are accurately completed, signed and dated.</p> <p><i>You can obtain consignment notes from the Environment Agency or from your waste management contractor. Your waste contractor should confirm that the waste has been disposed of correctly.</i></p> <p>Further information from: Environment Agency general enquiries: 08708 506506 (Mon-Fri 8-6) Hazardous waste registration line: 08708 502858 www.environment-agency.gov.uk/hazwaste</p>				
Legislation – packaging				
<p>Producer Responsibility Obligations (Packaging Waste) Regulations (1997 & Amendments): Businesses in the packaging chain with a turnover of more than £2 million and which handle and own more than 50 tonnes of packaging a year must:</p> <ul style="list-style-type: none"> • register annually with the Environment Agency (or an approved scheme) • recover or recycle specific tonnages of packaging waste • certify annually to the Environment Agency that the obligation has been met. Companies registered with a scheme do not have an obligation for bullet one and two. <p><i>If your company is over the turnover threshold, calculate each year quantities of packaging handled to see if the 50 tonne threshold is met. If you are over the 50 tonne threshold you will need to meet the obligations outlined above. If not, keep the information collected in case required.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
<p>The Packaging (Essential Requirements) Regulations 1998: Packaging specifications must meet certain essential requirements to minimise the impact of packaging on the environment. Goods may only be placed on the market if the packaging meets these requirements. The obligation is on the packer / filler or brand owner or importer of goods in packaging to make sure that the packaging meets the essential requirements. All businesses that use packaging are affected – there are no threshold criteria.</p> <p><i>Contact your local Trading Standards Office at your local authority for details and advice.</i></p>				
Waste electrical and electronic equipment (WEEE) directive				
<p>Under the regulations, new equipment needs to be marked.</p> <ul style="list-style-type: none"> • Retailers have to offer take-back or establish alternative collection networks. • All separately collected WEEE needs to be treated. • All treatment sites to be regulated. Recovery and recycling targets for various categories of separately collected WEEE. • Manufacturers / importers to fund treatment or recycling facilities. • Separate arrangements for WEEE, non-household producers need to be registered. <p>More information available from: www.dti.gov.uk/sustainability/weee</p>				
<p>Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment Directive (RoHS)</p> <p>Under these regulations, the use of lead, mercury, cadmium, hexavalent chromium and certain flame retardants in new electrical and electronic equipment will be severely restricted from the 1 July 2006.</p> <p>There will be a small number of exemptions.</p> <p>The National Weights and Measures Laboratory will be the UK's RoHS enforcement body.</p> <p>More information available from www.rohs.gov.uk</p>				
<p>Registration, Evaluation and Authorisation of Chemicals Regs. (REACH)</p> <p>REACH creates a single system to gather information, assess risks to human health and the environment, authorising and restricting the marketing and use of individual chemicals produced or supplied in the EU. It links with existing legislation related to the use of chemicals in medicines, pesticides and cosmetics and complements the existing framework of health safety and environmental legislation related to chemicals.</p> <p>More information available from http://europa.eu.int/comm/environment/chemicals/reach.htm</p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
Legislation - water				
<p>Water Industry Act 1991 Waste Water disposal Discharges to Public Sewers: Foul drains should carry all waste and contaminated water, trade effluent and sewage to a treatment works. Discharges to the public foul sewer require permission by the local sewage treatment provider and may be subject to trade effluent consent. In addition to process effluent, trade effluent includes compressor or boiler blowdown, steam condensates, cooling water, pressure testing liquids, air conditioning water, vehicle and plant cleaning effluent and yard washdown water. These should all be directed to foul drains. If discharges to the public sewerage system is not possible, a private treatment system will be necessary (see below)</p> <p><i>Check whether a trade effluent consent is required – contact your local sewer provider. Ensure all the above types of effluent are discharged to the foul drain.</i></p>				
<p>Water Resources Act 1991 Discharges to controlled waters: Consents issued by the Environment Agency are subject to conditions and are not granted automatically.</p> <p>Surface Water Drainage Surface water run-off generally discharges through surface water drains to a watercourse or to groundwater via a soakaway. Surface water drains should only carry uncontaminated rainwater from roofs and clean yard areas. A discharge of waste water to the surface water drain will result in pollution.</p> <p>It is an offence to pollute controlled waters either deliberately or accidentally. Consent might be required for discharges of surface water run-off to controlled waters, including both direct discharges and to soakaways.</p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
<p>Sewage and trade effluent discharges Any private treatment system must be specifically designed to treat all effluents draining to it. Consent will be needed for any treated sewage and trade effluent discharge to the environment under the Water Resources Act 1991.</p> <p><i>Identify and mark your surface water drains. Ensure existing and new installations producing waste water e.g. showers, sinks, laboratories, washdown areas, gullies etc, are connected to the foul drain and not just the nearest drain which is often the surface water system. Maintain an up-to-date site drainage plan and make it accessible to staff and contractors.</i></p> <p><i>Find out whether an oil separator is necessary to prevent oil discharging from the site. See the Environment Agency's publication PPG 3</i></p> <p><i>Work with the estate owner to use sustainable drainage schemes (SUDS) such as collecting and using uncontaminated rainwater (from roof and paved areas) to meet some non-drinking water needs and to use surface water for environmental enhancement initiatives.</i></p> <p>See www.environment-agency.gov.uk/suds</p>				
<p>The Control of Pollution (Oil Storage) (England) Regs 2001. Oil Storage Regulations: These regulations only apply in England. Oil containers of 200 litres of oil or more above ground in industrial, commercial or institutional sites must comply.</p> <p>Under the regulations, containers must be fit for purpose and be within a secondary containment system; they also apply to ancillary equipment (such as fill and dispensing pipes) and underground pipework.</p> <p>See www.environment-agency.gov.uk/OSR</p>				
<p>The Groundwater Regulations 1998: Under the regulations, the disposal of a large number of substances to land requires authorisation. The regulations cover the disposal or discharge to land. They give the Environment Agency power to take action to prevent pollution of groundwater from industrial and agricultural activities that manufacture, use or store substances listed under the Groundwater Directive. Codes of practice on petrol filling stations and other fuel dispensing facilities involving underground storage tanks and the use of solvents are available.</p> <p><i>Check that any of the substances on the proscribed list are not in use, manufactured or stored on the estate. If they are then they must be stored in line with the regulations.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
Legislation - air				
<p>Pollution Prevention & Control Regulations: Companies operating Part B prescribed processes and handling prescribed substances must by law obtain a permit. Part B processes cover a large range of industries including vehicle re-spraying, some abattoirs, metal painting, waste oil burning and a variety of other processes. Part B processes and some PA2 processes need a permit from the local authority and are controlled for emissions to air only. The Pollution and Control Act 1999 introduces a new regime of control for certain Part B processes – see section on Integrated Pollution Prevention and Control.</p> <p><i>If you suspect you have a prescribed process on site, contact the local authority in which you are situated.</i></p> <p><i>A range of process guidance notes set out the conditions that should apply for each process.</i></p>				
<p>Environmental Protection Act 1990 Part III – Statutory Nuisance: Statutory nuisance is defined in the Environmental Protection Act 1990 as:</p> <ul style="list-style-type: none"> • smoke emitted from premises so as to be prejudicial to health or a nuisance • fumes or gas emitted from premises so as to be prejudicial to health or a nuisance • any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance • any noise or vibration which is prejudicial to health or a nuisance. <p>The level above which noise is considered a nuisance varies depending on the time of day. Noise levels at the boundary of the facility should generally not exceed 70 Db(A) during the day or 45 Db(A) at night. But there are no legally defined limits and local authorities generally act at their own discretion. Local authorities, regardless of time or likelihood of occurrence, must investigate all complaints of nuisance.</p> <p><i>Keep a log of complaints and ensure that follow-up actions are taken whenever complaints are received. Record in the log the results of all complaints.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
<p>Clean Air Act 1993:</p> <ul style="list-style-type: none"> • Prohibits the emission of dark smoke from chimneys and industrial premises. • Places limits on emissions of grit and dust from furnaces. • Requires approval of chimneys, boilers and furnaces. • Prohibits the emission of smoke in smoke control areas. <p><i>Contact the local authority for advice if you have any process that gives rise to smoke.</i></p>				
<p>Greenhouse Gas Emissions Trading Scheme Regulations 2005. These regulations went live on 1 January 2005 and are concerned with combustion activity on an aggregated basis; the threshold is 20MWth input. Phase 2 rules, which will apply from 1 January 2008, might introduce a minimum boiler capacity (e.g. plant up to 3MWth do not need to be taken into account).</p>				
Legislation – integrated pollution prevention and control				
<p>The Pollution Prevention & Control Act 1999: Introduces a regime of control for certain industries – Integrated Pollution Prevention and Control (IPPC).</p> <p>It is designed to prevent, reduce and eliminate pollution at source through the prudent use of natural resources. Installations are covered where one or more of the following categories of activities are carried out (subject to certain capacity thresholds): energy industries, production and processing of metals, mineral industry, chemical industry, waste management industry, other activities – paper / board, tanneries, slaughter houses, food / milk processing, animal carcass disposal, intensive pig / poultry units, organic solvents users.</p> <p><i>For further information contact the Environment Agency or the local authority.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
Water pollution prevention				
<p>Most pollution incidents are avoidable: Careful planning of facilities and operational procedures can reduce the risk of spillage, and simple precautions can prevent a spillage becoming a pollution incident. Most of the measures needed to prevent pollution cost very little. In contrast the costs of cleaning up a pollution incident can be very high.</p> <p><i>Identify and control any pollution risks e.g. spillages, leakages, accidents, vehicle washdowns.</i></p> <p><i>Make sure tanks, drums and containers are sited on an impermeable base within a bund. The bund needs to be impermeable to the liquid contained within it.</i></p> <p><i>Ensure deliveries of oil and other hazardous materials are supervised.</i></p> <p><i>Ensure staff are familiar with procedures and know not to put any substances down the drains.</i></p> <p><i>See guidance on www.environment-agency.gov.uk/ppg or order a copy of the Environment Agency's Pollution Prevention Pays pack – Tel: 0708 506 506 or go to www.environment-agency.gov.uk/publications The guidance has a section on site drainage, deliveries and materials handling, storage, waste management, trade effluent, groundwater protection and training and emergencies</i></p>				
Emergency procedures				
<p>Pollution Incidents: In emergencies such as fire or spillage there is often a high risk of polluting the sewerage system or surface and groundwaters. Under the Water Resources Act 1991 it is an offence to cause or knowingly permit pollution of controlled waters: watercourses, canals, coastal waters and groundwater. Breaching this legislation can lead to a fine, prison sentence and paying for clean-up and remediation costs for environmental damage.</p> <p><i>To control the pollution potential in an emergency, an emergency plan needs to be in place. This should include emergency / incident procedures, including individual responsibility in the event of an incident / emergency along with points of contact with regulatory authorities. When a plan has been drawn up, all staff must understand the procedures and actions that they may need to take. It is also important that access to the plan is quick and easy in the case of an emergency. Further information can be found in the Environment Agency's publication PPG18.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
Resource efficiency in business				
<p>Resource efficiency is any technique, process or activity that avoids, eliminates or reduces waste of any kind at source. Resource efficiency begins with considering good practices in the storage, handling and use of materials, water and energy. It can lead to significant cost savings as well as environmental benefits due to more efficient use of materials and energy.</p> <p><i>Look at what is being thrown in your skip – ensure no unnecessary wastes are being produced e.g. off-cuts, rejects, out of date raw materials, tins not emptied properly. Check that no wastes are being lost to air e.g. evaporation of solvents.</i></p> <p><i>Ask employees if they are able to identify areas of wastage.</i></p> <p><i>Walk round the site at different times of day and different days of the week to identify spillages, bad housekeeping, equipment left on when not in use or taps running. Make a list of points identified on different occasions.</i></p> <p><i>Monitor your water and energy use to identify areas where efficiency measures can be implemented. See principle 5 for more quick saving tips.</i></p> <p><i>Conduct a 'scope to save' survey (see appendix 6) to identify priority areas to target for resource efficiency.</i></p> <p><i>There is a lot of advice available from other sources including Envirowise, Groundwork Trusts, Carbon Trust.</i></p>				
Community relations				
<p>Local residents tend to be concerned about a company's environmental performance. Business processes can adversely affect their everyday lives, particularly 24-hour business operations.</p> <p><i>Identify sources of noise, odour, late vehicle movements and litter.</i></p> <p><i>Make sure that shrub, 'soft' landscaping and noise abatement techniques are in keeping with the local area.</i></p>				

Appendix 5:

Requirements	Applicable (✓ or X)	Comments and actions to be taken	Target dates	Who should take action?
Corporate social responsibility				
<p>Does your company have:</p> <ul style="list-style-type: none"> • a poor reputation for honesty and trustworthiness? • customers with a bad opinion of your impact on the environment? • access to employees with skills you need? • problems in attracting and retaining good people? • problems attracting business partners? • a local authority with a negative view of your business, making planning expansion difficult? <p>These questions are essential to success. Socially responsible businesses can score highly on all these fronts.</p> <p>Being part of an estate steering group and supporting the code are good examples of corporate social responsibility.</p>				
Contaminated land				
<p>Part IIA of the Environment Act 1995 provides a statutory framework for contaminated land. Part IIA comprises sections from S78A to S78C.</p> <p>Special sites have been defined in the Contaminated Land (England) Regulations 2000. A circular issued by Defra provides statutory guidance on the regime. Copies of the Circular2/2000 Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990 are available from the Stationery Office.</p> <p>The statutory guidance directs local authorities to inspect their areas for contaminated land and then draw up an inspection strategy. The strategy will:</p> <ul style="list-style-type: none"> • identify those sites which are most likely to be contaminated, once the authority knows which sites could possibly be contaminated by reason of their past use; • identify those sites likely to present a risk. • Once the risk is identified, the authority must draw up a programme of remediation that is reasonable, effective, durable and practicable: the 'best practicable techniques'. The contaminated land regime is based on the 'suitable for use' approach. <p><i>Check that all waste materials are carried and disposed of by licensed organisations.</i></p> <p><i>Make sure that all spillages of toxic materials are reported and treated properly.</i></p> <p><i>Make employees aware of the need to protect soil from contamination.</i></p>				

Appendix 6:

An introduction to resource efficiency

Resource efficiency is the reduction of waste at source and involves identifying areas where raw materials, energy and water are wasted. It is also known as waste minimisation.

Resource efficiency involves action on three fronts:

People: Waste reduction can be achieved through better housekeeping. Employees must be aware of the issues surrounding any wastage and be motivated and trained to prevent it.

Systems: A systematic approach to measurement and control highlights wastage problems, enables targets to be set and maintains levels of efficiency.

Technology: Capital investments in new technology can improve productivity and reduce waste generation, giving very short payback periods.

Doing a 'scope to save' survey

(complete the table on the next page)

Begin resource efficiency in the organisation and identify priority areas by conducting a 'scope to save' survey. This involves collecting basic cost data for the principal resources used by the company (raw materials, consumables, ancillary materials, packaging, energy, water etc.) as well as basic cost data on the waste outputs. In most cases the best source of data is purchase / sales records and invoices. Material

suppliers may also be able to provide information about purchases if the data is not available in-house. The scope for savings can then be estimated using typical savings based on what other companies have achieved through resource efficiency. Achievable savings will vary from company to company. Some resources will be well managed and there will be less scope for minimisation so consider resources that are most likely to have high wastage. Conducting a 'scope to save' survey can help focus where reduction efforts will give the greatest savings. Compare the potential savings to the turnover and profit of the business. Are there areas where significant savings can be made? How much more product would have to be sold to put an equivalent sum on the bottom line?

Most companies who undertake this exercise find some surprises.

Further guidance on conducting a 'scope to save' survey is in the Environment Agency guide 'Waste Minimisation – An Environmental Good Practice Guide for Industry'. Other sources of help and information on waste minimisation can be found in appendix 7.

Resource efficiency costs assessment table

Column 1 Resources and services	Column 2 Quantity	Column 3 Cost per year	Column 4 Ranking of priority (highest = 1)	Column 5 Scope to save	Column 6 Your estimate of scope to save (£)
Raw materials:				1 to 5%	
• First most used				1 to 5%	
• Second most used				1 to 5%	
• Third most used				1 to 5%	
• All other materials					
Packaging				10 to 90%	
Ancillary materials				5 to 20%	
Consumables				10 to 30%	
Energy:					
• Electricity				5 to 20%	
• Heat for process and space heating eg: gas and fuel oil				10 to 10%	
Vehicle fuel				10 to 30%	
Water				20 to 80%	
Trade effluent				20 to 80%	
Solid and liquid waste				10 to 50%	
Total					

The percentage quoted in the scope to save column has been achieved in many businesses around the country. Evidence is available from demonstration projects and Resource Efficiency Clubs.

The true cost of waste has been estimated at 4% of turnover. The savings have often been 25% of this figure – i.e. 1% of turnover. Achievable savings will

vary from company to company. Some resources will be well managed and there will be less scope for savings – analyse which resources are most likely to have high wastage.

It is unlikely that you will be able to make the quoted savings in all areas.

Appendix 7:

Useful references

Pollution prevention

Pollution Prevention Guidance Notes (available free from the Environment Agency or web site www.environment-agency.gov.uk/ppg)

- PPG1 General Guide to the Prevention of Pollution of Controlled Waters
- PPG2 Above Ground Oil Storage Tanks
- PPG3 The Use and Design of Oil Separators in the Surface Water Drainage System
- PPG4 Disposal of Sewage Where No Mains Drainage is Available
- PPG5 Works in, Near or Liable to Affect Watercourses
- PPG6 Working at Demolition and Construction Sites
- PPG7 Fuelling Stations: Construction and Operation
- PPG8 Safe Storage and Disposal of Used Oils
- PPG11 Industrial Sites
- PPG13 Use of High Pressure Water and Steam Cleaners
- PPG15 Retail Premises
- PPG18 The Control of Spillages and Fire Fighting Water
- PPG19 Garages and Vehicle Service Centres
- PPG20 Dewatering of Underground Ducts and Chambers
- PPG22 Dealing with Spills on Highways

Resource efficiency

Available free from the Environment Agency on 08708 506 506

Waste Minimisation: An Environmental Good Practice Guide for Industry

Waste Minimisation: Getting Staff Involved

Pollution Prevention Pays – Getting Your Site Right
Guidance booklet and DVD.

Good Practice Guidance
Video and poster are available from
www.environment-agency.gov.uk/ppg

Available free from Envirowise on 0800 585 794

These are a selection of the numerous publications / case studies on waste minimisation in general and sector specific guides (e.g. food and drink, textile, foundries and many more):

GG25: Saving Money through Waste Minimisation:
Raw Material Use

GG26: Saving Money through Waste Minimisation:
Reducing Water Use

GG27: Saving Money through Waste Minimisation:
Teams and Champions

ET30: Finding Hidden Profit: 200 tips for reducing
waste

Energy Efficiency Good Practice Guides
Numerous publications on energy efficiency in general
and sector specific guides.

Waste exchange and recycling

Materials Recycling Handbook

Available from EMAP Business Publications on 020 8277 5000.

Waste Exchange Services – Unit 8, Douglas Close, Preston Farm Industrial estate, Stockton on Tees, Cleveland, TS18 3SB Telephone 01642 606055.

Waste management

The Duty of Care – A Code of Practice

(ISBN 0-11-752975-3) revised March 1996

From the Stationery Office, priced £7.50

Environment Agency leaflets

The Duty of Care

The Registration of Waste Carriers

Environment Agency Special Waste Guidance Notes 1, 2 and 3

Fly-tipping Guidance – Guidance for landowners, managers and members of the public on fly-tipping including steps to reduce the risk of fly-tipping. Available from Environment Agency web site.

A Guide to the Hazardous Waste Regulations June 2005 (incorporating the list of Wastes Regulations) – What is hazardous waste?

Defra leaflets

The Special Waste Regulations 1996 – How they affect you

Waste Can You Handle It – Defra publication
www.defra.gov.uk – admail 6000, London SW1A 2XX
08459 556000 DEFRA

Your Business, Your Rubbish and the Law.
Tidy Britain Group

Packaging waste regulations

The Packaging Waste Regulations User's Guide.
Available from Defra Publications Despatch Centre.
Telephone: 0870 122 6236. Fax: 0870 122 6237.

Guidance on Evidence of Compliance and Voluntary Accreditation of Reprocessors. Environment Agency.

The Environment Agency's Interpretation of Packaging.

Water management

Water Efficiency and Conservation publications.

Available free from the National water Demand Centre – Environment Agency.

Conserving Water in Buildings (set of fact cards)

Waterwise (a how to do it guide)

Water efficiency Awards (a series of case studies on water saving initiatives)

Cutting Water and Effluent Costs, John S. Hills.

Available from IchemE, David Building, 165-189 Railway Terrace, Rugby CV21 3HQ. Tel: 01788 578214.

Conserving Water: Advice for Government Departments. Although written for Government Buildings, the advice is applicable to other buildings. Copies from:
HYPERLINK

<http://www.defra.gov.uk/environment/greening/conservation/downloads/water/doc>

www.defra.gov.uk/environment/greening/conservation/downloads/water/doc

Environmental management

A DIY Review for Companies.

Business in the Environment

Eco-Management and Audit Scheme – A Guide for Participants, for UK Competent Bodies. Institute of Environmental Management & Assessment.

Managing the Environment the 14001 Way.
British Standards Institution, ref HB10164.

Winning with Integrity – A Guide to Social Responsibility.
Business in the Community

Money for Nothing – Your Waste Tips for Free. Uses examples from medium sized companies presented by staff from the companies (comes with 20 page summary guide).

WMIT – Waste Minimisation Interactive Tool. A software package to assist with the process of waste minimisation. Available from the Environment Agency or Envirowise.

BS8555 Groundwork an environmental audit scheme for SMEs

Acorn Standard and environmental review scheme for SMEs

Appendix 8:

Checklist of process indicators roundup

How do you put environmental management into practice?

Good management practice by leading UK companies shows that environmental impacts can be managed, risks reduced and bottom-line benefits delivered when proper management systems and processes are put in place.

The following are the essential components of good environmental practice:

Level 1 – companies beginning to review environmental issues

- Conduct an initial environmental review of:
 - legislation
 - main environmental impacts
 - information needed to draft an initial environmental strategy.
- Ensure a senior manager is charged with taking responsibility for driving progress in this area.

Level 2 – companies wishing to move beyond a basic commitment

- Write an environmental policy and publicise it, particularly to staff. This should cover:
 - an overview of company activities, the scope of the policy, and legal compliance
 - a commitment to environmental protection with reference to the business's main impacts on the environment
 - the resources required to introduce change and improvement
 - a commitment to train and develop staff for the new tasks.

- Establish priorities and set objectives and targets for improvement.
- Ensure the sufficient allocation of resources to this area to meet objectives and targets.
- Set up an employee programme to raise general awareness and provide support for staff.
- Start to communicate with other social and community bodies, keeping them informed and involved.

Level 3 – companies aiming at further improvements of their performance

- Commit to continuous improvement, systematic evaluation of data accuracy and process effectiveness. Benchmark against industry sector best practice.
- Ensure environmental impacts are properly considered in the development of your products / services, as well as in strategic investment decisions.
- Formalise the management system's documentation and seek external verification from a reputable third party using standards and awards where appropriate.
- Develop a supplier programme to make improvements in all parts of your production process.
- Communicate your achievements to all relevant stakeholders and develop a two-way dialogue with them.
- Share best practice with others and act as a leader and an advocate for business engagement in this area.

Environmental improvement and how you measure it

A business needs to be able to demonstrate both the business benefit and environmental benefit of its environmental management. These should be quantified wherever possible. Environmental measures should be related to the most significant environmental impacts of the organisation, which will vary depending on the industry sector.

The measurement of a company's impact on the environment is fairly well developed and environmental reporting has advanced over the last 15 years. Although environmental reports can now be quite detailed and sophisticated a simple framework is provided below for information. Taking legal compliance as read, the following are the essential impact indicators companies should measure.

Checklist of impact indicators

Level 1 – companies beginning to review environmental issues

Measure:

- overall energy consumption
- water usage
- quantity of solid produced (measured by weight / volume).

Consider things that may create environmental damage such as inappropriate procedures and accidental spillages. Reduce the risk of them happening.

Level 2 – companies wishing to move beyond a basic commitment

Measure:

- CO₂ / greenhouse gas emissions
- other emissions (such as low-level ozone and radiation)
- use of recycled material
- positive and negative media comment for environmental activities.

Consider alternative production processes to minimise environmental impact.

Level 3 – companies aiming at further improvements of their performance

Measure:

- what level of waste is reduced / recyclable
- net CO₂ / greenhouse gas emissions and offsetting effect
- the environmental impact over the supply chain
- the environmental impact, benefits or costs of products / services against best in class.

Reference:

Business in the Community

Winning with Integrity – A Guide to Social Responsibility

Business Impact Taskforce

Appendix 9:

The role of the landlord/property manager

Environmental considerations are best taken into account when an industrial estate is being designed. This is not always possible.

Landlords, particularly when they are freeholders, have a long-term interest in business parks and trading estates. Whilst legislation tends to follow the 'polluter pays' principle, it does have a fallback position whereby liability for environmental pollutions can lie with the owner. The landlord clearly has a vested interest in dealing with problems and encouraging good environmental practice. Poor environmental practice can result in a tenant having to pay remediation costs, fines and legal fees and might even result in a criminal prosecution. In some cases, the adverse publicity can damage a firm's public image and even stigmatise an estate. This could have an adverse affect on a tenant's ability to pay rent and affect the landlord's interest. In the UK the landlord or freeholder may be pursued by the relevant authorities for the costs of remediation when the polluter cannot pay.

Under Section 57 of the Environment Act 1995 polluters of contaminated land are known as 'Class A' persons and are liable for the resulting clean-up costs following the 'polluter pays' principle. However, where a 'Class A' person cannot be found, or is unable to pay, then 'Class B' persons might become liable. The landlord of an industrial premise would fall within the definition of a 'Class B' person. It is in his or her direct interest, therefore, to ensure that no contamination is caused to his or her land or to that of neighbouring land, by tenants.

A lease allows a landlord or agent to protect his or her property interest by including terms requiring the tenant to be a good tenant. It usually allows the landlord, or the landlord's agent, to enter the premises to make sure the covenants are being followed. If a pollution incident occurs, the landlord or agent could therefore become liable at law, under the heading of "knowingly permitting". This has the potential to make them responsible for the malpractice of their tenants.

This is a further reason why landlords and their agents should consider facilitating good environmental management practices on their estates.

Environmental activities have the potential to affect property investments both directly and indirectly. Direct effects have been defined as those that occur on, and affect, a particular site. So pollution by spillage might contaminate the site on which the spillage took place. This would be a direct effect. However, if the occupiers were fined and bore the costs of remediation, this could affect their ability to pay rent on all their other sites. This impairment might additionally affect their ability to comply with their tenants' covenants on those other sites. These are indirect effects.

The impacts of environmental activities and considerations on industrial estates can be positive. Firms with good environmental practices and procedures might be eligible for cheaper bank loans and / or insurance which are more attractive within the

supply chain, to companies with established environmental credentials, thus aiding their bottom line profitability. Estates with good environmental practices are more likely to appeal to ethical investors such as pension funds that have to report on their performance under Socially Responsible Investment criteria.

Environmental risks, particularly those relating to contamination are now given serious consideration and addressed by property investors and their advisors especially when purchasing or selling. This means that the tenants' activities need to be considered when assessing their environmental risk. Environmental risk assessments are increasingly undertaken during a property transaction; failure to have prudent environmental risk management procedures might result in an estate experiencing a reduction in value or even proving difficult or impossible to sell. Either case has an adverse effect on the goal of property management, i.e. maximising the investment.

Appendix 10:

Model environmental policy

The following template is a starting point towards achieving an environmental management system:

Model environmental policy

.....recognises its obligations to comply with the law, to carry out its business in as environmentally sound a manner as possible, and to meet its responsibility to customers, shareholders, employees, neighbours and the natural environment. We are committed to promoting and maintaining an environmental policy that makes sure that the impact of our operations on the environment is reduced to as low a level as is practically and economically feasible.

Our environmental policy is that we will:

- regularly review all stages of our operations to minimise our impact on the environment
- make sure we comply with the spirit and the letter of national legislation and local regulatory controls, as well as meeting industry standards and operating to relevant codes of practice
- try to reduce the amount of waste produced and dispose of such waste in a safe and responsible way, reusing or recycling whenever possible
- monitor and measure all environmentally significant emissions and discharges to water, air and land as a step towards reducing them to minimise their environmental impact

- establish procedures to prevent pollution and conserve energy whenever possible and take actions to continuously improve our environmental performance
- minimise the environmental impact of any process by employing the best available techniques not entailing excessive cost
- promote environmental principles by sharing and exchanging information of environmental importance with regulatory bodies, professional associations, customers, suppliers, contractors and employees
- establish environmental training needs within the company and maintain training programmes
- develop and maintain an environmental management system, setting objectives and targets, as well as reviewing this policy each year.

signed:

date:

Managing Director

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